STATE-SOCIETY SYNERGY

GOVERNMENT AND SOCIAL CAPITAL
IN DEVELOPMENT



Peter Evans, Editor

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STATE-SOCIETY SYNERGY: GOVERNMENT AND SOCIAL CAPITAL IN DEVELOPMENT

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INTRODUCTION: DEVELOPMENT STRATEGIES ACROSS THE PUBLIC-PRIVATE DIVIDE

Peter Evans

Summary. — Recent movement toward more comprehensive institutional perspectives on development has been stimulated by two distinct challenges to narrow development theories. Theorists of "social capital" have highlighted the degree to which norms of trust and the interpersonal networks on which they are based constitute economic assets. Revionist theories of the "East Asian Miracle" have emphasized the central role of public institutions in capitalist development. This introduction and the articles that follow attempt to bring these two disparate traditions together by examining the potentially positive role of relations which join state and civil society in shared development projects.

Contemporary development strategies focus attention on macroeconomic results without contributing very much to the understanding of the microinstitutional foundations on which they depend. Too often development theory has operated, de facto, on the premise that the only institutions that mattered were those directly facilitating market transactions. Narrowly focused theories fail to incorporate the importance of informal norms and networks that make people collectively productive. They also distract attention from "soft technologies" of institutional change, which can produce results well out of proportion to the resources required to implement them. Without denying the necessity of exploiting the incentive structures and flexibility that markets provide, it is clearly time for a broader definition of the institutional bases of improved human welfare and enhanced productivity in poor countries.

The beginnings of a broader institutional conceptualization of development are already well underway. New theories of social capital and revisionist perspectives on the role of the state constitute two

distinct challenges to the "market as magic bullet" view of development that was hegemonic for most of the 1970s and 1980s. Stimulated by disparate sets of empirical evidence and divergent conceptual visions, these two challenges still have the common consequence of expanding prior definitions of what institutions are relevant to development.

Renewed interest in the norms of trust and reciprocity and the networks of repeated interaction that sustain them forces thinking about development outside old molds. Such norms and networks operate interpersonally and within communities and obey a logic quite different from that of "arm's length" exchange. By labeling such norms and networks "social capital," contemporary theorists such as Robert Putnam (1993a, 1993b) project primary ties as potentially valuable economic assets.

Interest in social capital was provoked primarily by analysis of advanced industrial countries rather than poor developing ones. The acute consciousness of the globally affluent that not only were incomes stagnating, but their lives were somehow "poorer" in ways that could not be solved through increased consumption, begged for a response. Social capital was a good candidate for the lacking input. Once the issue had been raised, it was hard to contest its relevance to poor countries.

Informal ties do not necessarily promote improvement in material well-being any more than wealth or technology is necessarily used to promote human betterment, but if people cannot trust each other or work together, then improving the material conditions of life is an uphill battle. When sustainable improvements in the welfare of ordinary Third World citizens are the aim, social capital is a crucial ingredient. Without social capital, physical and human capital are easily squandered. Other features of social capital are even more intriguing from the point of view of countries where other sorts of capital are scarce: social capital does not necessarily require expenditures of scarce material resources in its creation, and its stock accumulates with use instead of depreciating.

The other push for a broader institutional theory of development came from a very different direction. By the beginning of the 1980s it was clear that East Asia represented the only twentieth-century example of capitalist industrialization sufficiently successful to rearrange the global hierarchy of nations. Over the course of a generation, Japan became the chief economic rival to the United States. In a similar time span, Korea and Taiwan had moved from African levels of per capita income to outdoing most of Europe in many high-tech sectors. Conventional economists made every possible effort to contain this history within the "market as magic bullet" model of development but did not succeed. Revisionists such as Johnson (1982), Amsden (1989), and Wade (1990) were eventually joined by the World Bank (1993) in admitting that state bureaucracies had played a central role in the "East Asian Miracle."

The reintroduction of the state as a central actor in capitalist development and the new willingness to treat community norms and interpersonal networks as "social capital" both forced a broadening of the developmental framework, but the two movements were, to say the least, not very well integrated. Theorists of the state as a developmental agent had little to say about social capital. Theorists of social capital often portrayed the state as one of the culprits in the demise of community. For many theorists of social capital, the expansion of the formal bureaucratic organization of the state "crowds out" informal networks without providing the same range of value and functions, leaving communities worse off. Coleman, for example, suggests (e.g., 1990: 321) this kind of "zero-sum" relation between state-sponsored activities and social capital, in which government involvement leads to atrophy of informal networks, diminishing social capital.

Others, however, take the opposite position. Putnam (e.g., 1993b: 42) argues for synergy. The idea of "synergy" implies that civic engagement strengthens state institutions, and effective state institutions create an environment in which civic engagement is more likely to thrive. The actions of public agencies facilitate forging norms of trust and networks of civic engagement among ordinary citizens and using these norms and networks for developmental ends. Engaged citizens are a source of discipline and information for public agencies, as well as on-the-ground assistance in the implementation of public projects. Like Putnam, Nugent (1993: 629) comes down on the side of the "synergy hypothesis," arguing that

there is evidence that the existence of the state and the rules it establishes and enforces can strengthen and increase the efficiency of LOIs [local organizations and institutions] and that, at least in coalition with other urban-based groups, LOIs can give rise to collective action increasing the power of the state.¹

The synergy hypothesis offers the tantalizing prospect of a unifying theme for currently divided efforts to build a broad institutional approach to development. Even unified, the two themes will not, of course, supplant conventional concerns with markets and incentives. Since both bureaucratic public institutions and informal community ties must operate in a global political economy dominated by market relations, work on synergy cannot afford to become the mirror image of "market as magic bullet" theories. Those who would deal with states and communities must, of necessity, also deal with markets.

The five papers that follow this introduction explore the relation between government and civil society in a variety of different developmental contexts. They allow us to assess the extent to which state involvement facilitates developmentally effective collective action by common citizens in a diverse collection of settings around the globe (both in the Third World and in what used to be called the Second World). They chronicle the impact of state-society synergy, or its absence, on several different kinds of outcomes. Some, such as Lam, focus on the institutional arrangements designed to produce a quite tangible and specific set of economic consequences. Others, such as Fox, are primarily interested in political development. Still others, such as Heller, examine a combination of economic and political outcomes.

None of this work denies that there are numerous instances in which relations between state and society are characterized by zero-sum conflicts rather than synergy. State intervention sometimes destroys developmentally promising social networks and undermines developmentally useful social norms. The papers in this work contest the idea that some inescapable structural logic makes zero-sum relations between the state and civil society necessary or normal. These authors certainly do not take synergy for granted, but they do explore the conditions under which it can become a reality.

The set of five articles begins with Wai Fung Lam's report on a well-known case—the unusually effective organization of irrigation on the island of Taiwan. Lam argues that developmental success depends on the interaction of highly bureaucratized government agencies and self-organized local communities. His analysis consti-

tutes the most straightforward vindication of the proposition that state-society synergy lies at the heart of developmental success. After a reading of Lam's detailed depiction of the intricate institutional foundations of Taiwan's irrigation system, it is clear that without their symbiotic relation to the highly bureaucratically organized "irrigation associations" local communities would not be able to organize the delivery of water with the same effectiveness, even at the local level. It is equally clear, however, that government irrigation bureaucracies could not be effective in delivering water without the participation of local communities.

In the second article, Patrick Heller offers an equally compelling validation of the effectiveness of mutually reinforcing state-society ties using a more unconventional case. Kerala is well known among aficionados of welfare-oriented development strategies, but existing accounts of the Kerala case tend to focus on its redistributional successes in agriculture. Heller focuses instead on the industrial sector. His article explores the positive cycle of interaction between a highly mobilized industrial workforce and a deeply engaged government. Government action not only supports mobilization but offers institutional resources that hold the promise of making militancy compatible with capital accumulation.

Elinor Ostrom reminds us in the third article that however developmentally effective state-society synergy may be, it can by no means be taken for granted. She starts from the position that effective delivery of services ostensibly produced by government—such as primary education and city sewer systems—depends in fact on the joint activity of citizens and government, which she calls "coproduction." If we look more closely at cases where public services are most effectively delivered, Ostrom argues, what we are likely to find is that they are "coproduced" with government and citizens acting jointly as producers. In her paper she illustrates this idea by taking two contrasting cases. In Recife, Brazil, coproduction has enabled poor neighborhoods to get the sewer systems they need. In Nigeria, a centralized bureaucracy's failure to realize the obvious opportunities for coproduction hamstrings primary school education.

Jonathan Fox expands the scope of the discussion in the fourth article by looking at a case in which there is overt, often violent conflict between government and citizenry. Fox is less concerned with the coproduction of particular services than with the coproduc-

tion of social capital itself in the form of autonomous peasant organizations. By focusing on the rise of autonomous peasant organizations in authoritarian rural Mexico, he has chosen a case in which a zero-sum model between state power and civic organization seems more appropriate than a synergy perspective. Nonetheless, even in this case, he still finds that "reformists" working within the state apparatus are one important source of support for the construction of social capital among poor peasants.

Finally, Michael Burawoy offers a vision of what happens when institutional foundations for state-society synergy are lacking. In his principal case, Russia, reformers explicitly set about dismantling the state apparatus. They assumed that nothing could be worse than the stagnant, corrupt set of ties that connected the old Soviet party-state to the society it ruled. They hoped that if state power could be destroyed, market relations would replace perverse state-society ties, generating productivity and prosperity. Burawoy's analysis of "economic involution" in the coal and timber industries of Northern Russia shows how trying to construct markets without simultaneously reconstructing public institutions produced results that were as perverse, at least in economic terms, as those produced by the old system. To reinforce his point he uses the case of China, where synergistic relations between the state apparatus and village and county enterprises have provided the basis for a very dynamic transition to a market-oriented economy.

By setting out examples of state-society synergy and illustrating how such synergy can contribute to developmental goals, these five papers help make the empirical reality behind the concept come alive. The articles also use a diversity of analytical approaches to explore state-society relations. The array of empirical settings and the diversity of approaches make the argument for synergy all the more convincing, but they do not generate an obvious set of shared propositions about the nature and dynamics of synergy. Beyond the idea that synergy is a valuable developmental tool, what kind of generalizations can be extracted from such a diverse set of studies?

In my concluding essay I highlight some of the insights that emerge from reading the five articles together.² I focus on two general questions. First, "How are synergistic relations structured?" Are there some structural properties of positive state-society relations that run across the various cases? Second, "How does the surround-

ing sociopolitical context constrain or facilitate the emergence of synergy? Do contexts which generate positive examples of state-society relations share identifiable properties?

In the search for a general response to the question of what forms of state-society relations lend themselves to synergy, two contrasting conceptualizations help frame the debate. The first builds on the conventional view of a healthy relationship between the public and private spheres. In this view, synergy depends on complementarity. Possibilities for civic action are enhanced by the provision of public goods, but easily threatened if public agencies become more intimately involved in community affairs. A more radical view of synergy focuses on "embeddedness." It questions the assumption of distinct public and private spheres and sees trust and productive informal networks not only as a property of civil society but as spanning the public-private divide.³

Wai Fung Lam's earlier (1994) work on irrigation in Nepal offers a good example of a complementarity argument which is very much in line with conventional emphasis on the state provision of lumpy collective goods. Lam's analysis contrasts the value of the state's role in providing complementary goods (dams, main canals, etc.) with the negative consequences of state involvement in irrigation operations at the local level. Systems which the farmers manage for themselves are more effective than ones in which the state becomes directly involved in the day-to-day delivery of water to the fields. The combination of complementarity and a "hands off' relation between the state and self-organized communities implies a very different vision of synergy than the one suggested by an "embeddedness" vision.

Ostrom's vision of "coproduction" can be interpreted as an example of the more radical "embeddedness" approach. Coproduction implies that public and private actors are enmeshed together in the process of production. Judith Tendler's recent (1995) work on "blurred public and private boundaries" makes a similar argument, emphasizing the potential benefits of networks that span the divide between state and civil society. In both cases, synergy is produced by the intimate entanglement of public agents and engaged citizens. This view of synergy flies in the face of both a market-based logic of development and traditional theories of public administration. Neoliberal and statist views of the world can be reconciled to synergy as

complementarity, perhaps even to the possibility of occasional positive influences flowing across the public-private divide, but the idea of ongoing public-private intimacy offends everyone's sense of propriety. Public administration purists see it as threatening the insulation necessary for clearheaded decisions that are in the public interest. Market advocates see it as hopelessly muddying the logic of individual incentives and rational resource allocation.

In my conclusion, I try to reconcile these two contrasting visions of how effective state-society relations might be structured. Reviewing the material from all five articles, I argue that complementarity creates objective grounds on which cooperation between government and citizens can be built but that embeddedness generates the normative and interactional basis for realizing the potential joint gains.

Providing a better understanding of the forms of synergy is only one of the contributions of the five articles. The concluding essay also tries to summarize the collective insights they offer into the circumstances that facilitate the emergence of synergy. In exploring this theme, I focus on what the individual articles have to say on the issue of "endowments" versus "constructability."

An "endowments" view would emphasize the extent to which positive state-society relations depend on preexisting features of the society and polity that are relatively difficult to change in the short run. The most obvious example of a potentially important endowment would be the prior stock of social capital. If it takes a long time (decades or centuries) to accumulate the necessary stock, then only those communities that are already well endowed are likely to be able to enjoy the benefits of synergy. Other features of society that tend to change very slowly—levels of inequality, for example—might also be relevant "endowments." Even the form of political regime or the character of bureaucratic institutions might have to be treated as endowments which constrain the possibility of initiating synergistic state-society projects.

A "constructability" perspective focuses on the possibility of building synergistic relations in the relatively short run. It assumes that prior distributions of sociopolitical endowments are not the primary constraint. Instead, the imaginative application of "soft technologies" of institution-building and organizational change can produce synergistic relations even under unlikely circumstances.

My concluding essay culls the five articles looking for evidence as to what kind of endowments seem to facilitate the emergence of synergy and how much their scarce supply limits the possibility of constructing productive state-society ties. The essay tries to offer a realistic assessment of the ways in which the sociopolitical contexts that prevail in most Third World countries make it hard to develop positive ties between state and society without ignoring the potential for constructive change even under adverse circumstances.

If the five articles in combination serve to support a set of general conclusions, the value of each individual article is all the more enhanced, but it would still be a serious mistake to short-circuit the analysis by focusing too much on crosscutting generalizations. Each of the five articles offers not only a rewarding set of empirical evidence to be digested, but its own original analytical frame to be considered. Lam and Ostrom use the idea of "team production" to explore problems of state-society relations. Heller focuses on mobilization and class relations. Fox develops the idea of the "political construction" of social capital. Burawoy explores the way in which the transition to market relations can produce "economic involution" instead of increasing productivity and output. Careful consideration of the distinctive theoretical contribution of each article in its own right is a prerequisite to evaluating their collective contribution to our understanding of synergy.

NOTES

- 1. Nugent actually postulates a three-way synergy: "Because of the potential complementarity between the state and both markets and LOIs, all can be strengthened by developing appropriate linkages among them" (1993: 630). Three-way synergy is certainly as plausible as bilateral synergy between the state and social capital, but it raises an additional set of complex questions. Looking at the relation between the state and social capital is a sufficiently daunting task.
- 2. I also draw on related work discussed at the conference where the original versions of the five articles were presented, but pulling together ideas from the five articles is the primary aim of the essay.
- 3. The language echoes Granovetter's classic work on the embeddedness of market relations as well as my own (Evans 1995) characterization of the institutional configurations that lie behind the "East Asian Miracle."

REFERENCES

- Amsden, Alice. 1989. *Asia's Next Giant: South Korea and Late Industrialization*. New York: Oxford University Press.
- Coleman, James. 1990. Foundations of Social Theory. Cambridge, Mass.: Belknap, Harvard University Press.
- Evans, Peter. 1996. "Government Action, Social Capital and Development: Reviewing the Evidence on Synergy." World Development 24, 6: 1119–32.
- ———. 1995. *Embedded Autonomy: States and Industrial Transformation*. Princeton, N.J.: Princeton University Press.
- Johnson, Chalmers. 1982. MITI and the Japanese Miracle: The Growth of Industrial Policy 1925–1975. (Stanford, Calif.: Stanford University Press.
- Lam, Wai Fung. 1994. "Institutions, Engineering Infrastructure, and Performance in the Governance and Management of Irrigation Systems: The Case of Nepal." Ph.D. dissertation, Indiana University, Bloomington.
- Nugent, Jeffrey B. 1993. "Between State, Market and Households: A Neoinstitutional Analysis of Local Organizations and Institutions." World Development 21, 4: 623–32.
- Putnam, Robert. 1993a. Making Democracy Work: Civic Traditions in Modern Italy. Princeton, N.J.: Princeton University Press.
- ———. 1993b. "The Prosperous Community." *American Prospect*, no. 13 (Spring): 35–42.
- Tendler, Judith. 1995. "Social Capital and the Public Sector: The Blurred Boundaries between Private and Public." Paper presented at the American Academy of Arts and Sciences, Conference of the Economic Development Working Group, Social Capital and Public Affairs Project, Cambridge, Mass., May.
- ————. Forthcoming. *Good Government in the Tropics*. Baltimore, Md.: Johns Hopkins University Press.
- Wade, Robert. 1990. Governing the Market: Economic Theory and the Role of Government in Taiwan's Industrialization. Princeton, N.J.: Princeton University Press.
- World Bank. 1993. *The East Asian Miracle: Economic Growth and Public Policy*. New York: Oxford University Press. World Bank Policy Research Report.

INSTITUTIONAL DESIGN OF PUBLIC AGENCIES AND COPRODUCTION: A STUDY OF IRRIGATION ASSOCIATIONS IN TAIWAN

Wai Fung Lam

Summary. — The provision and production of many public goods and services involve the joint effort of government officials and citizen-users. This paper examines the successful experience of irrigation governance and management in Taiwan as a means of understanding how joint efforts can be established and sustained through institutional arrangements. Several principles for institutional design, including a careful definition of the scope of farmers' participation, complementarity of interests between individuals, reduction of asymmetries involved in the use of authority, and the existence of domains of autonomy are identified as instrumental to the success in Taiwan.

1. INTRODUCTION

Taiwan's irrigation systems are reportedly among the most effective in the world. In a study comparing the water delivery efficiency in different rice-growing systems in Asia, Levine (1977) estimated that the basic water requirement per crop in Taiwan was 1,000 mm., as compared to 2,500 mm. in the Philippines and 1,400 mm. in Malaysia. In the Tou Liu system in Taiwan (currently part of the Yunlin Irrigation Association), the requirement was even as low as 650 mm. The effectiveness, however, is not confined to the high levels of efficiency in water delivery. Water delivery and distribution in Taiwan's irrigation systems are generally organized in an orderly manner, and the physical structures are kept in relatively good condition (Moore 1983, 1989).¹

One might be tempted to attribute this effectiveness to the heavy investment made by the Taiwanese government in irrigation development and to the sophisticated engineering infrastructure that is commonplace in Taiwan. A high level of infrastructural investment, however, does not tell the whole story. Even the most sophisticated structures must be operated by individuals. How these individuals work with one another significantly affects irrigation performance (Coward and Levine 1987; E. Ostrom 1992; Ambler 1993; Lam 1994; Lam, Lee, and E. Ostrom 1996).

Productive patterns of relationships, however, do not just exist; they are constituted and sustained by a large array of rules relating individuals to each other. Some of these rules are considered formal in the sense that they are created and enforced by governmental authority; others are considered informal in that they are sustained by "private" actions of individuals. Some of these rules are crafted by conscious efforts; others evolve slowly through human interaction. How these rules work together to allow individuals to realize their productive potential is a question of importance in resource management in particular, and public administration in general. This paper addresses this question by studying the successful experience of irrigation management in Taiwan.

Taiwan's successful experience in irrigation management is of major policy relevance, not simply because it is in sharp contrast to the experience of irrigation development in much of the developing world, where many high-cost and sophisticated irrigation systems have been nonsustainable due to inadequate operation and maintenance (Ascher and Healy 1990; Chambers 1988; E. Ostrom, Schroeder, and Wynne 1993). The persistent underperformance of irrigation agencies in much of the developing world in the last several decades has raised serious doubts about the usefulness and feasibility of relying on government officials to manage irrigation and other public services. The viability of government agencies serving as the agent for development has come under serious challenge. Taiwan's experience, however, represents a rare case where irrigation agencies work.

Numerous calls for reforming the governance structure for development have been made (Israel 1992; Kessides 1993; World Bank 1994). Research findings suggest that self-governance can work and, in many instances, outperform government agencies in the manage-

ment of an infrastructure and resources such as irrigation systems (E. Ostrom, Schroeder, and Wynne 1993; E. Ostrom 1990, 1992; Tang 1992; Lam 1994). Unfortunately, that self-governance can work (in some instances) has been used by some policymakers and researchers in developing countries as the justification for a policy recommendation that aims at downsizing, if not getting rid of, the government. Parallel to such a bias in the policy circle is the prevalence in current development literature of studies that focus solely on why government agencies do not work; the question of what can be done to make agencies work better has largely receded to the background (Tendler and Freedheim 1994; Uphoff, ed. 1994). Yet as many scholars have cautioned, local organization alone is no panacea. The administration of public affairs often involves complex tasks that citizens alone might not have adequate capability and resources to handle. Moreover, the survival and operation of selfgoverning local organizations are usually nested within, and conditioned by, a broader institutional setting (E. Ostrom 1992; Tang 1992; Lam 1994). A high degree of complementarity between officials and farmers is necessary for the effective provision and production of many public goods and services. Thus, instead of trying to get rid of government agencies, it would be more useful to study how government agencies can be designed to perform effectively, and complement citizens' efforts in broader institutional settings, in conducting public affairs. This study addresses these issues from a microperspective, examining the mechanisms by which a large array of institutions enables irrigation officials and farmers in Taiwan to conduct irrigation operation and maintenance in an effective manner.

2. THE SETTING

(a) PHYSICAL ENVIRONMENT

Although rainfall in Taiwan is abundant, its distribution is uneven in both space and time. While the annual average rainfall in the northeastern part of the country is about 6,500 mm., it is only 1,000 mm. on the west coast, where most of the cultivated land is located. Moreover, more than 80 percent of the total rainfall falls between

June and October. In other months of the year, the monthly average rainfall is rarely more than 100 mm. During the winter season, areas on the west coast commonly have no rainfall. Thus, effective irrigation management is a major factor affecting the extent of agricultural potential that can be realized.² The physical environment in Taiwan is hostile to irrigation. Rivers are short and with high gradients. This, together with the high concentration of rainfall in the rainy season, results in a high level of run-off flowing into the sea (C. H. Kuo 1986).

(b) SOCIOECONOMIC CONTEXT

Perhaps the most important event that fundamentally shaped the social landscape of Taiwan's rural areas was the Land Reforms conducted in the early 1950s.3 As a result of the reforms, large landlords in Taiwan virtually disappeared. Since then, the country's agricultural sector has mainly comprised small, family-owned farms. In 1952, the average farm size in Taiwan was 1.29 hectares. It dropped to 1.12 hectares in 1984, and to 1.1. hectares in 1992 (COA 1993). Given the small size of farm households, effective irrigation management involves the collective action of a large number of irrigators, which, in turn, requires a high degree of coordination and organization. A more intensive mode of irrigation management was deemed necessary. In addition, without large landlords, who usually assume the traditional leadership role in the rural areas, farmers tend to organize themselves around scattered small groups. Such small group centricity, to a certain extent, explains why farmers in Taiwan do not stand out as having unusual levels of trust and solidarity. Earlier research indicates that farmers in Taiwan did not hesitate to engage in water theft when water was scarce (VanderMeer 1971).

(c) INSTITUTIONAL OVERVIEW

The primary irrigation institutional arrangements in the country are the seventeen Irrigation Associations (IAs), which have the responsibility of operating and maintaining irrigation systems located within one or more hydraulic regions. These IAs are parastatal agencies that are legally owned and formed by farmers and super-

vised by governments at higher levels. Their legal status as juristic entities entitles them to a high degree of de jure autonomy and also certain public authorities to levy water fees.

The activities of the IAs are primarily confined to main-system management. The IA staff at headquarters diverts water to a system and allocates water to different regions. Within a region, a management station coordinates water allocation to different areas. A working station is in place in each area to deliver water to various irrigation districts. Within an irrigation district, the tasks of operation and maintenance are presumably coordinated by a network of irrigation groups (IGs). The structure and operation of IGs vary, depending on specific local environment. Usually, an irrigation district is further divided into several irrigation blocks; in each of these blocks, farmers are presumably organized into irrigation teams (ITs) to carry out the tasks of operation and maintenance. While IGs and ITs are said to be farmers' self-organizing units, they appear in organizational charts as subsidiaries to the IAs.

Government agencies at various jurisdictional levels are also involved in the governance and management of irrigation. At the local level, the interaction between the IAs and local organizations, such as the county governments, conditions the ways that irrigation systems are governed and managed.⁶ At the provincial level, the Provincial Water Conservancy Bureau is in place to formulate and implement water resource policies. The bureau is also responsible for supervising the IAs. Every year, each IA is required to submit a report with details on every aspect of its operation during the last year to the bureau for review; in addition, every year the bureau sends a working team to the IAs to evaluate their operation and performance and to audit their budgets. At the national level, the Council of Agriculture is the lead agency that formulates policies concerning irrigation in general and the operation of the IAs in particular.

3. TEAM PRODUCTION, COPRODUCTION, AND GOVERNANCE

An irrigation system is a common-pool resource (CPR), where the cost of excluding potential beneficiaries is nontrivial and benefits are subtractable (Gardner, E. Ostrom, and Walker 1990). If any farmer can take water from a system whether or not he or she has contributed to the operation and maintenance of the system, he or she sees few incentives to contribute. Furthermore, when the water supply is scarce and unpredictable, allocation of water is necessary to ensure that water is distributed equitably and used productively. The need to allocate water, however, implies that farmers are likely to obtain a smaller amount of water than they desire. Farmers usually want enough water to attain the highest possible returns by working their land to its full potential; they also want more water as insurance against risk and unexpected exigencies. Given the threat of a substantial crop loss, there are usually temptations for farmers to take more water than allowed or to take water out of turn.

(a) TEAM PRODUCTION AND COPRODUCTION

The concept of team production is central to the understanding of the problem of motivation in irrigation agencies. Organization enables individuals to reap the benefits of team production.⁷ Many complex tasks in the public sector cannot be accomplished unless individuals put their efforts and resources together and work as a team. Team production, however, is rarely a simple process of pooling the efforts and resources of individuals. It is a process through which individual efforts and resources are structured in complementary ways that yield a higher level of joint productivity (Lachmann 1978). This is why, in a team production process, the marginal productivity of an individual is a function of the efforts of the others (Alchian and Demsetz 1972).

Coproduction is a form of team production. In a coproduction process, the efforts of the irrigation officials (the regular producers) and those of the farmers (the consumer producers) are largely interdependent; neither can totally substitute for the other (Parks et al. 1982). In the irrigation process, while officials might possess "scientific" knowledge concerning some physical aspects of irrigation systems, the farmers possess time-specific and place-specific local knowledge of the systems upon which their livelihood depends (Freeman 1990). Only when both kinds of knowledge are utilized can effective operation and maintenance be attained.

The interdependence of efforts may give rise to the problem of shirking similar to the setting of team production. In many large-scale irrigation systems, irrigation officials assume that water allocation and maintenance are the responsibilities of the farmers because farmers are directly affected by the performance of operation and maintenance. From the farmers' perspective, the irrigation officials are presumably specialists who have the responsibility of managing the system. Because the officials are the "managers," they are the ones who "should" be doing the operation and maintenance. Since both farmers and officials think that managing the system is the responsibility of the other, it is possible that neither of them invests much effort in irrigation management activities. If no one maintains the systems, they begin to operate less effectively. Such a problem is often exacerbated by the blurred boundary between those who constitute the members of the coproduction team.

For a coproduction process to succeed, incentives must be in place so that regular producers (the irrigation officials) are motivated to serve the interests of consumer producers (the farmers). If the payoffs to irrigation officials are somewhat dependent on how well they serve the farmers, the officials are more likely to take the interests of the farmers into consideration. Unfortunately, there are usually few intrinsic incentives in irrigation that could motivate irrigation officials to serve the interests of farmers. Irrigation officials are usually not the ones who have a stake in the efficient operation of the irrigation systems in which they work. Whether the officials take the interests of the farmers into consideration depends on how the relationships between the officials and the farmers are understood and structured in particular societies.

(b) GOVERNANCE

Unlike irrigation construction that deals with the delivery of tangible goods such as dams and canals, irrigation management is mainly concerned with the provision of a less tangible good: rule-or-dered relationships among farmers. This puts irrigation management in the policy domain, where the patterns of relationships between individuals, as a way of life, are part of the situation that the agencies are meant to deal with. Policy outcomes—that is, the

degree to which these problems are resolved—are inherently linked to how well individuals can work with one another.

In irrigation, effective water delivery largely hinges upon farmers following water allocation rules, taking care of their system in daily exigencies, and contributing their efforts to the maintenance of the structures whenever necessary. While these patterns of relationships are a major part of the outcomes of irrigation management, they cannot be "produced" directly by irrigation officials. Thus, assigning an irrigation agency to handle irrigation does not automatically solve the problems of collective action among farmers involved in irrigation operation and maintenance. What is essential is to design the governance structure in the way that rules are crafted, monitored, and enforced, so that they enable farmers to establish productive working relationships with one another. How the agencies can fit in the governance structure is a question of major import in institutional design.

The problems of team production, coproduction, and governance can serve as the point of departure for understanding the operation and performance of irrigation institutions in Taiwan. In the following sections, I examine the design of Taiwan's irrigation institutions and the mechanisms through which these institutions enable individuals to cope with the problems. The analysis proceeds from three angles: (i) the structures and incentives within the IA; (ii) the ways that water delivery is carried out in the field; and (iii) the interactions between farmers and officials.

4. INSIDE THE BUREAUCRACY: THE STRUCTURE AND PROCEDURES

Like a typical government agency in Taiwan, the structure of an IA is highly bureaucratic and centralized and designed upon the principles of division of labor and hierarchical control. At the top of the bureaucracy is a chairman who, until 1994, was elected by farmer representatives who were in turn elected by farmers. The chairman appoints a general manager and a chief engineer who assist the chairman in overseeing the operation of the association. The day-to-day operation is carried out by various divisions responsible for

specialized functions.⁸ Within a particular division, the tasks are further divided and assigned to several sections.

The centralized image is also reflected in the relationships between the IA headquarters and its field offices (management stations and working stations). The field offices are perceived as the implementation arms of the headquarters. They collect information necessary for irrigation planning and manage the implementation of irrigation plans and other tasks assigned by the headquarters. While the working stations assist the headquarters in making decisions concerning irrigation management, they do not participate in the decision-making process.

(a) FLEXIBILITY

The bureaucratic characteristics of the IAs in Taiwan seem to contradict the image portrayed by prior research. It is particularly interesting that while observers have often likened the IAs to street-level bureaucracies where coordination, discretion, and responsiveness are emphasized, officials in both the central government and the IAs have always emphasized the importance of hierarchy and control in the associations. The puzzle, then, is how the two seemingly contradictory images can be reconciled and geared toward enhancing the performance of the associations.

A possible answer to the puzzle is that the headquarters and the working stations operate on quite different principles, which allow them to deal with problems of different scopes and nature at different levels. The formal organization of the working stations is based upon the bureaucratic image of the headquarters. A station chief is assigned to oversee the operation of a station, and the station staff members are assigned to various sections with specific functions such as engineering and irrigation management. Unlike at the headquarters, however, the size of the working station staff is usually very small, with an average of eight persons. The small staff makes the division of labor by functions more a formality than a meaningful organizational feature. That every one of the staff sits in an open office space further shortens their social distance.

Instead of a division of labor by functions, the small size of the staff makes it necessary to have division of labor by irrigated areas.

Each official at the working station, including the station chief, is assigned the responsibility of overseeing the irrigation management of a certain number of IGs and their irrigated areas. The official, then, serves as the contact person between the working station and farmers in particular areas. This type of division of labor facilitates communication between the IA officials and farmers, but more important, it affects the dynamic of interaction among officials within a working station.

First, a division of labor by irrigated areas, to a certain extent, enables individual officials to monopolize information on their particular areas. This area-specific information becomes a unique asset of individual officials. Since every piece of such area-specific information is essential to the effective operation of the working station, each official holds a key to the overall success of the station. Officials who feel they have something important to contribute to their organization are more likely to perceive their work as meaningful and to do a conscientious job. Moreover, since effective irrigation management in a particular area usually requires complementary actions of officials managing the adjacent areas, horizontal coordination among officials becomes necessary. Thus the working station staff is put in an interdependent situation of which they are well aware. Such awareness not only helps create collective identity among the staff, but also signifies to them the importance of cooperation.

Second, assigning individual officials areas for which they are responsible implicitly holds them accountable to what might happen in the assigned areas. An official is likely to face much pressure from others in the station if his or her area faces persistent problems. In fact, assigning responsibilities in this way also applies to the working stations as a whole. By assigning each working station to oversee the irrigation management of a particular area, officials at the station are held collectively responsible for what might happen in the area. Such collective responsibility creates a sense of collective identity among officials, which transcends hierarchical relationships among them.

While work at the headquarters is basically a nine-to-five routine, work at the working stations requires much more flexibility. The need for such flexibility is well known and has been consciously promoted through various institutional arrangements. A standard working station is a two-storied building. While the ground floor is

used for office space, the upper floor is an apartment where the station chief and his family live.¹⁰ Living in the station, the chief is expected to stay alert twenty-four hours a day. This arrangement allows the working station to better deal with emergencies.

When emergencies come up, the chief alone is unlikely to be able to deal with them. Extra effort from other officials at the station is needed. These other officials, however, are not paid to make the extra effort. For these officials, giving their help to the chief in case of an emergency is doing the chief a favor; it would not be difficult for them to avoid making the extra effort if they chose. The subordinates' ability to do the chief a favor gives them bargaining power that, in turn, affects the way in which they interact with each other, vis-à-vis the chief. As a station chief succinctly puts it, "There will be many occasions when extra effort of the staff is required; whether the staff will offer the extra effort is purely a matter of goodwill. How can I offend them?" Under such a situation, the chief would find that command and control is unlikely to be an effective way to get things done.

Given that irrigation management involves many uncertainties, irrigation managers in almost every system in the world are expected to contribute extra effort when emergencies arise. What is special in the Taiwanese case, however, is that the station chief is locked into the task of dealing with emergencies by various kinds of institutional arrangements. He is targeted as the one who is given incentives and responsibilities to mobilize and coordinate necessary efforts for dealing with emergencies. Now compare this situation to that in many South Asian countries such as India and Nepal, where irrigation officials managing the systems are also expected to deal with emergencies. There, with strict hierarchical control in place, subordinates do not have incentives to take any action before they are ordered to. Infringing on the authority of superiors could be extremely detrimental to an official's career. Ironically, the requirement that the subordinates consult their superiors before they act provides a legitimate excuse for the subordinates to do nothing. So while every official knows that they, the officials as a whole, are expected to deal with emergencies effectively, which officials should be doing the job is not clear.

(a) AUTONOMY

A more organic mode of organization at the working stations is possible only when the headquarters refrains from intervening. The low level of intervention, ironically, is made possible by the bureaucratic principle of strict division of labor across units at different levels. The headquarters is responsible for the overall planning, larger scale maintenance work, management of water sources, and water delivery at the system level. Once the water flows into laterals, it is the responsibility of the management stations to allocate water to different areas managed by different working stations. Usually the management stations deal only with the working station chiefs, but not farmers directly. It is clearly understood that the working stations are where the distribution of water to farmers' fields occurs and where farmers interact with irrigation officials. Such an understanding is essential. It gives the working station chiefs leverage to make necessary adjustments in dealing with water allocation at the local level.

Such local autonomy is further enhanced in that the working stations are given the responsibility of facilitating, and communicating with, the IGs. Although the IGs are shown on the organizational chart as subsidiary units to the IAs, neither IA officials nor farmers see them as part of the associations. Irrigation officials often cite the respect for local democracy as a reason for their unwillingness to be involved in the IGs. But such a reason seems unlikely to be true, given that irrigation officials have never hesitated to intervene when necessary. Instead, several reasons might explain the officials' hesitancy. First, the IA staff see themselves largely as government agents (although they do not have civil service status) and irrigation professionals (even though most of them do not have professional qualifications). Organizing farmers in irrigation operations is not the kind of task that they see themselves fit to do. Second, the ambiguous nature of the IAs as parastatal organizations does not give the IA staff the legitimacy to intervene. While farmers as a whole might not actually play an active role in supervising the IAs, the image that farmers are the boss of the IAs is very clear in the mind of IA officials. Third, from the perspective of the IA officials, being involved in the mushy business of water allocation at the field level is the last thing they want. It is especially the case in the areas where local factions

do not get along with one another. Since it is clearly stipulated in regulations that water allocation at the field level is a responsibility of farmers, irrigation officials are glad to oblige. Finally, until very recently, the farmers' extra contributions (other than the water fees they were required to pay) in terms of voluntary labor and monetary chip-in were an important source of resources for irrigation management at the local level. These extra contributions were largely based upon farmers' goodwill as well as the calculus that they might enjoy payoffs from these contributions. Too much intervention from the IA could offend farmers and damage local goodwill. An unhappy farmer is unlikely to be willing to offer extra contributions.

Since the IAs do not see themselves in the position to be actively involved in the operation of the IGs, the headquarters maintains only limited formal interactions with the groups. The limited involvement of the headquarters in the IGs leaves a vacuum between the IA and farmers that the working stations are in the position to fill. Irrigation operation and maintenance at the local level requires cooperation and coordination between IA staff and farmers. As the officials at the working stations must deal with farmers in their work whether they want to or not, they must have de facto autonomy in dealing with the IGs. Such autonomy allows the working station staff and IGs to develop arrangements to cope with the local situations. For example, in systems where water mainly comes from natural springs and rivers, a water shortage might render rotation within an irrigation block necessary. The order of rotation is therefore arranged normally by farmers themselves. In many instances, farmers draw lots to determine the rotation order. Such an arrangement can be maintained, however, only when the working station is able to adjust water delivery to complement the agreed-upon order.

Earlier irrigation literature has pointed out the importance of a handover point between officials and farmers in irrigation management (Wade 1987; Chambers 1988). Yet the mere existence of a handover may not be enough because whether the handover can be designed in a complementary manner depends on whether the two teams of individuals at the handover point are given liberty to work things out. The high degree of autonomy enjoyed by the working stations in dealing with irrigation groups has facilitated coordination between the two teams.

5. WORKING TOGETHER: THE ORGANIZATION OF WATER DELIVERY

While effective irrigation management involves close cooperation between officials and farmers, such cooperation cannot be taken for granted. A large array of rules must be in place to specify the division of work, to create positive incentives for the parties to contribute their efforts, and to help the parties maintain stable mutual expectations of each other. In this section, I decipher the "nuts and bolts" of the institutional arrangements in Taiwanese irrigation systems that relate the efforts of officials and farmers by examining the organization of water delivery—an activity that requires high levels of continual cooperation.

Given the diverse physical characteristics in disparate locations in the country, there are diverse means by which water delivery is conducted. The following discussion deals mainly with water delivery in the Tainan area of the Chianan IA, where the major water source for irrigation is two connected large-scale reservoirs, the Tsengwen Reservoir and the Wushantou Reservoir. These reservoirs make the practice of rotation irrigation possible.

(a) THE FORMULATION OF THE IRRIGATION PLAN

The practice of rotation irrigation requires a relatively accurate and comprehensive irrigation plan. The process of working out the irrigation plan starts at the working stations. Every year before the first planting season, irrigation officials at the working station convene a meeting of IG leaders in the area to plan irrigation operations in the coming year. A major concern of discussion, of course, is the level of water demand for irrigation in the coming season.

Two factors are the basis upon which the water demand in a particular irrigation block is calculated. The first factor is the physical characteristics of the fields. These include soil type, the topography of the land, the rate of seepage of the soil, and the distance of the land from the gate to where water is diverted into the block. Information about all these physical characteristics is meticulously recorded and integrated in a formula used for the calculation of the

amount and timing of water flow to particular fields. The second factor is the expected cropping patterns of the irrigated land.¹²

It is obvious that variations in these two factors across time are minimal. On the one hand, the physical characteristics of the land are unlikely to change dramatically in the short run. The major source of change in physical characteristics is reduction in the size of irrigated areas due to changes in the patterns of land use. On the other hand, the expected cropping patterns are fixed and rarely adjusted. In fact, broad cropping categories such as "paddy" and "miscellaneous crops" used in the irrigation plan are meant to serve more as a yardstick in determining the amounts of water delivered to a particular area than to control what farmers grow in their fields. In other words, the so-called water demand is defined mainly with reference to the amount of water that a farmer is entitled to receive in a particular season.

Information on water demands provided by the IGs is gathered by the working station staff. The staff checks to see whether the information is reasonable, based upon the past records, and makes necessary adjustments. The information is then submitted to the headquarters. There, the management division staff first checks out the expected amount of water available in the coming year, based upon information about past years and weather forecasts. This estimate of water supplies is the most important variable that basically sets the constraints on the irrigation plan. If water is adequate to meet all the water demands, the management division staff can satisfy the demands (after making sure that the water demands are reasonable). If the expected water supply is inadequate, the management division decides which areas will receive water. Usually, areas that have the lowest rate of conveyance loss are given priority. In other words, upstream areas are usually given water during the period of water shortage. Areas that are not given water are left fallow. The central government (not the IA) will compensate farmers who own cultivated land in the fallow areas at a rate of NT 20,000 per hectare per season. Such an amount is about 50 percent of the revenue that would have been made had cultivation been possible. The IA's freedom to decide how much land it is going to irrigate allows it to better balance water demand and water supply and, hence, to avoid overstretching its managerial capacity.

(b) FLEXIBILITY AMID RIGIDITY

The irrigation plan has a strong flavor of centralized control. Outside observers are frequently amazed, if not stunned, by how detailed the irrigation plan appears to be. The irrigation plan literally specifies the amount and the timing of water delivered to the fields of individual farmers; recently, such detailed calculation has been further facilitated by the use of computers. Obviously, if such a plan was strictly adhered to, it would require a very high level of managerial inputs on one hand, and would severely limit the flexibility of farmers on the other.

Such a possible pitfall of rigidity is coped with by the rule that water delivery within each irrigation block (i.e., below sublaterals) is taken care of by IGs organized by farmers themselves. Such an arrangement combines reliability and flexibility. On the one hand, farmers in a particular irrigation block, as a collective, are assured that they will receive a certain amount of irrigation water for the block. On the other hand, they are given much liberty in adjusting the distribution of water at the field level. In such a situation, the irrigation plan can serve three functions. First, it constitutes an implicit contract between IA officials and farmers—water demands are seen as entitlements of farmers rather than needs. Ironically, because these demands are fixed and rather stable, arbitrary actions on the part of officials are less likely. Such an implicit contract not only supports the farmers' expectations of the reliability of water supplies, but also represents a plan of action, or a focal point, with reference to which farmers and officials work together.

Second, the plan can serve as a yardstick by which farmers evaluate officials' performance. If farmers in an irrigation block have not received the amount of water to which they are entitled, the IA officials are held responsible. Note that it is the IA who, based upon the expected water supplies, decides the size of area that will be delivered water. It would be impossible for the IA to blame the possible inefficiency in water delivery on the excessive demands of farmers.

Third, while the irrigation plan is not strictly implemented below the level of sublaterals, it does provide a framework with which water distribution among farmers is carried out. So while adjustments within an irrigation block are possible, outright inequality is likely to be prevented. It is a de jure right of a farmer who is not given the amount of water to which he is entitled to take the case to the working station for resolution. Furthermore, the entitlement nature of the irrigation plan implicitly creates water rights for farmers, which allow them to deal with one another more effectively.

As each farmer is entitled to receive a certain amount of water, each working station, then, has a claim for the amount of water equal to the sum of the amounts of water due to individual farmers in the area under its jurisdiction. Water claims at different levels set up a dynamic of backward monitoring in the process of water delivery. For an IG leader, being able to deliver the amount of water to which the farmers in his group are entitled requires that he insist on, if not fight for, their water allotment. By the same token, in order to have adequate water for irrigation groups in its jurisdiction, the working station also has the incentive to stick to its water claim. In other words, a unit at a particular level has the incentive to hold the unit from which it receives water accountable, or it will face problems from the unit to which it delivers water. Such a dynamic greatly enhances the mutual accountability between different units in the water delivery process.

(c) WATER ALLOCATION AT THE FIELD LEVEL

Prior research has noted that while the water distribution effort within an irrigation block is supposed to be organized by farmers and rotation irrigation is supposed to be practiced, little is known about how it is actually carried out. The IT is supposed to be the farmers' organization that deals with water distribution within an irrigation block, but whether such an organization exists at all has been questioned by researchers. Since the IA has neither formal authority nor responsibility to manage water distribution within an irrigation block, farmers in different locales have been able to develop their own ways of coping with the problems.

IG and IT are most active in areas where rotation is seriously practiced and the amount and timing of water flows are specified. Neither IG nor IT exists in the form that their names might suggest. Since farmers who are served by the IA are automatically members of the IG and IT, they have a right (or an obligation) to participate in

the IG meetings before the planting season and a right to vote in the election of the IG leader every four years (IT leaders are appointed by IG leaders). Yet unlike what many Taiwanese officials and earlier research have suggested, farmers in general are not actively involved in water delivery. In most instances, the IG leader and a few IT leaders are the only farmers involved in the operation of irrigation in particular areas.

The IG leaders, however, perform many important functions in facilitating irrigation management in Taiwan. One of these functions is to hire water guards to carry out water distribution as well as minor repair work. Usually, one to two water guards will be hired for each irrigation block. These are part-time positions and the salaries are paid by the IG. Water guards are the ones who actually operate the system and allocate water to individual farmers' fields. Conflict resolution is another function of IG leaders. As many of them are local notables who have many local social and political ties, they are respected by both farmers and IA officials. Thus, on one hand, their reputations give them "moral power" to serve as arbiters in resolving conflicts. On the other, their political and social resources enable them to interact with IA officials effectively.

Water guards are supposed to allocate water based upon the irrigation plan. In reality, however, they have a relatively high degree of autonomy in making necessary adjustments. Their high degree of autonomy generally comes from two sources. The first is their seniority in the local community. The water guards are usually local farmers. Obviously, as they are members of the local community, any acts that are perceived by farmers as unfair might place them under pressure of social ostracism. Second, a majority of the water guards are elderly men who have been serving as water guards for many years. As both IA officials and farmers are well aware, the task of allocating the water is not easy by any means. One has to know the physical as well as social landscapes really well to carry out the task effectively. Such knowledge cannot be taught but has to be learned by doing. The experience and local knowledge of water guards allow them to establish authority on matters concerning water allocation and to gain confidence from farmers. Since the experience and local knowledge are highly specific, water guards cannot be easily replaced. As a result, threatening to quit becomes an effective leverage for the water guards to deal with farmers and IA officials. Such a

threat is made even more credible by the low salary received by the guards. Although the salary varies across different IGs, it is normally about NT 400–500 per day. For many water guards, giving up such a small amount of money, if necessary, is not a hard choice to make. From the perspective of many irrigation officials and farmers, the job of the water guards is more like a community service than a way of earning money. By taking up the job, the water guards actually are doing the community a big favor. So unlike patrollers in many irrigation systems in South Asia who command no respect from either their superiors or farmers, water guards in Taiwan are seen as individuals who not only know irrigation and the local situation well, but are also willing to contribute to the local community.

6. INTERACTION BETWEEN IA OFFICIALS AND FARMERS

Discussion in the last section suggests that farmers and IA officials are able to develop complementary relationships in water delivery. While it is generally agreed that such complementary relationships are embedded in the broader pattern of cooperative relationships, how such a pattern of relationships is maintained is subject to less agreement. Earlier research argued that elections and water fee payments are the two major mechanisms that sustain the cooperative relationships. Recent research disputed the importance of these mechanisms and focused on the more subtle means that farmers use to hold IA officials accountable, such as signaling their dissatisfaction by delaying payments and social ostracism.

(a) ELECTIONS, WATER FEES, AND SOCIAL EMBEDDEDNESS

Interviews with officials and farmers indicate that the elected farmer representatives have never played an important role in controlling the IA. These representatives might give some suggestions concerning the budget of the IA at the annual meeting or stop by the headquarters once in a while to convey farmers' concerns, and that is the extent of their involvement. Given that farmers in Taiwan are generally subservient and many of them are part-time farmers, it is

not surprising that the representatives did not exercise effective control over the IA. More important, the election of farmer representatives was more of an extension of local politics than irrigation politics per se. The representatives were unlikely to pay as much attention to irrigation as warranted.

To most IA officials and farmers, water fees were similar to taxes that farmers had to pay. The government was effective in enforcing fee payment. Defaults in water fee payments happened from time to time, but in most of these instances, it was only because farmers did not receive water at all. Withholding payment of water fees was rarely used by the farmers as leverage to have their voices heard. In fact, the water fees have long ceased to be essential to the survival of the IAs. In most IAs, the water fees are not even enough to pay for the salaries of the IA officials. That the central government has been paying water fees on the farmers' behalf since the early 1990s further breaks the link between the water fee payments and control by farmers.

While these formal mechanisms might not have carried the control functions that they were supposed to, they were not totally irrelevant. First of all, as some officials and farmers eagerly pointed out, the process of collecting water fees provided opportunities for officials to talk to farmers. These conversations were not necessarily about irrigation only, but also issues concerning the local community. In other words, these conversations were not formal communication between officials and farmers, but casual discussions between acquaintances. Such conversations might not help improve irrigation management directly, but they allow farmers and officials to gain a better understanding of each other's views.

Second, the officials at the working stations were responsible for collecting water fees. Given the small size of the station staff, the help from the IG leaders was extremely important. As mentioned earlier, the IG leaders are mostly local notables who are respected by the local community; many of them are also representatives to various local government functionaries. Their help could make the process of water fee collection much easier and create incentives for the officials at the local level to maintain a close relationship with the IG leaders. To a large extent, it was just such a close relationship between the working station staff and the IG leaders that mediated the interaction between the IAs and farmers.

Third, although the farmer representatives did not perform the control functions that they were supposed to, their existence was essential to constituting the farmers' perception of their relationship with the IA. As long as farmers saw their representatives in place to supervise the IA, they felt it was legitimate to speak out when they faced problems. According to IA officials, a result of the recent reform that replaced the elected representatives with appointed committee members has been a decrease in the number of farmers' complaints. While such a decrease could be due to a better job done by the appointed members, it could also be due to a change in the farmers' perception of their relationship with the IAs.

Recent research has argued that the embeddedness of local IA officials in the local community is a more important reason for the close relationship between officials and farmers. Irrigation officials are frequently residents of the local community. Their daily interactions with local people in the community can provide them with information on different issues concerning irrigation as well as the community. Since they are part of the community, any wrongdoing on their part that causes harm to the local community could put them under much social pressure or even social ostracism. Moreover, irrigation officials serving at the working stations tend to serve in particular working stations for a long period of time. Knowing that they will have to deal with the same group of local farmers for a long time makes building a good relationship with them a good strategy.

(b) LOCAL POLITICS AND SOCIAL EMBEDDEDNESS

While IA staffs, farmers, and officials at the central government are fond of referring to the IAs as organizations owned by, and representing, farmers and local communities, they generally take a dim view of local politics and tend to downplay its importance in the operation of the IAs. The ambiguous attitude toward local politics is reflected in the continual debate on the importance of elections, compared with control and guidance from the central government, in the operation of the IAs. There is no doubt that some IA officials play an active role in the elections of local public offices and that local factions are to a certain extent involved in the elections of IA offices. To examine the effects of activities on the IAs, however, requires a de-

tailed analysis of Taiwan's local politics, which is beyond the scope of this paper. Several observations and conjectures on the way that local politics plays out, however, might shed light on how cooperative relationships between farmers and officials are sustained.

Many researchers and government officials have tended to understand the linkage between local politics and the IAs by focusing on the formal arenas such as the election of the farmer representatives and the IA chairman. They have thus often come to the conclusion that, notwithstanding the potential for rent-seeking activities, local politics has only minimal direct effects on the IAs' day-to-day operations. What has not been given as much attention is the possibility that local politics might be instrumental in sustaining, if not facilitating, the embeddedness of the IAs in the local community. Space constraints, however, do not allow a detailed discussion of local politics in the country.¹⁵

To understand how the embeddedness works out, however, several features of Taiwan's local factional politics, as laid out by Bosco (1992), might be relevant: (i) In all local elections, factions provide the core of support to particular candidates. On average about two-thirds of the voters are estimated to be divided between two factions and the remaining one-third are the free voters to whom the factions try to appeal. (ii) Taiwan's local factions are held together not by common ideology or class but by social ties such as kinship, patron-client relations, friendship, etc. They arose because although power and authority are concentrated in the hands of the Kuomintang (KMT), in which mainlanders dominate, the central authorities have to deal with local Taiwanese politicians in order to keep local order. (iii) Factions are usually visible only during elections. Outside of elections, most villagers maintain social relationships without consideration for faction.

The existence of local political factions, to a certain extent, provides essential glue to the rural society, where the multitude of small farmers could have made any organizing efforts difficult. The competition among the factions, with their emphasis on bringing favors to constituents as an appeal to voters, can bring the farmers' attention to public interests that pertain to their well-being. The competition, then, serves an interest-articulation purpose in a political system where, until the last several years, there was only one political party. Moreover, the factions that do not control the IAs have

the incentive to monitor the ones who do. This creates a system of checks and balances in the operation of the IAs. As the factions usually overlap with various social ties at different levels, such a checksand-balances mechanism has a rather comprehensive scope. It is the mutual reinforcement between local factions and social ties that makes embeddedness possible.

The competition between factions does not necessarily operate in a benign way. Yet the fluid structure of factions, the limited scope of factional activities, the need to appeal to the middle votes, and the overlap between factions and various social ties all prevent the competition from getting out of hand. Furthermore, in maneuvering to keep factions under control, the ruling KMT has always tried to keep the balance between rival factions and to confine their activities to the local level. By doing so, the KMT government not only gears the operation of factional activities toward enhancing local governance, but also uses factions to help it control the countryside in which mainlanders have few social or political ties.

7. THE ROLE OF THE CENTRAL GOVERNMENT IN IRRIGATION GOVERNANCE

Political economists that are interested in the developmental state of Taiwan and other East Asian newly industrializing countries (NICs) often wonder at the seemingly paradoxical coexistence of an authoritarian state, on the one hand, and space for self-organized activities in the society on the other. An important question, then, is what is the role of the central government in creating, or sustaining, the patterns of relationships described above. In particular, how do the actions of the government allow, or encourage, irrigation officials to make adjustments and to acquiesce to some self-organized activities by farmers?

(a) GOVERNMENT AS EPISTEMIC LEADER

The central government plays an important role in setting the tone of what irrigation management is supposed to be and how it should be conducted. By advocating ideas such as "serving the farmers comes first," the government serves as an epistemic leader. The government not only promulgates ideas but actively carries out activities that promote and sustain them. For example, model IG leaders are selected and honored by the president of Taiwan every year; there is also an irrigation festival every year that highlights the importance of irrigation.

These ideas are extremely important in the governance of irrigation in Taiwan. First, they help constitute motivations for officials and farmers. A chance at being honored by the president, for example, has been a primary motivating force for many IG leaders to take up their jobs. Second, these ideas constitute the major part of the conceptualization of farmer-IA relationships commonly shared by farmers and officials. The way individuals see the game significantly affects how they are to play the game. Third, the activities that enhance these ideas can serve to signal the government's commitment to irrigation development, which is essential to backing the bargaining power of farmers vis-à-vis IA officials.

(b) GOVERNMENT AS ARBITER

The shadow of the government also poses the fundamental constraints within which IA officials and farmers interact. Maintaining effective coproductive relationships requires a certain degree of reciprocity between officials and farmers. The sustenance of reciprocity involves, among other things, a relatively symmetric relationship, complementarity, and credibility. Government actions might help create and sustain these elements.

The farmers' contribution to operating and maintaining field-level channels is substantial. IAs have neither the necessary resources nor the capability to micromanage water allocation and maintain farm ditches. How much and how well farmers organize themselves and mobilize adequate resources for operation and maintenance affects the overall performance of irrigation systems. Note that those ultimately affected most by the overall performance are farmers themselves. IA officials have few intrinsic incentives to see to it that a certain level of performance is attained. Under such a situation, the interests of officials and farmers are in an asymmetric relationship.

Such asymmetry can be somewhat ameliorated if payoffs to officials are linked to the performance of the irrigation systems. If the government, which is able to reward and punish the IA, is committed to satisfying the irrigation needs of farmers, farmers' complaints represent a credible threat to IA officials. The dynamic of the situation changes in that the contributions of farmers are essential for officials to get their jobs done. It implies not only that officials would be more sensitive to farmers' needs, but that fostering the self-organization of farmers is also in the interests of the officials. Government commitment, in other words, reduces the asymmetry, on the one hand, and turns farmers' self-organization into a complementary activity on the other.

(c) GOVERNMENT AS A SOURCE OF FINANCE

Another of the central government's roles is as the major source of financial resources for the IAs. This was the case even before the government started paying water fees on behalf of farmers in the 1990s. The amount of financial support and the way that it is channeled to the IAs affect the capability as well as the management practices of the IAs.

The amount of financial support poses a constraint with which the IAs have to cope. Before the reforms in recent years, for example, the government mainly provided financial support to engineering work, but not to the operation of the systems. It created a need for IAs to try to extract resources from farmers for operation and maintenance activities. Such a need may have had positive effects on the overall provision of irrigation services, for officials had incentives to maintain good relationships with farmers to make sure that the farmers' contribution was forthcoming.

As the IAs are receiving a large amount of financial support from the government, their relations with the government have been a contentious issue. The core concern is that while the IAs are spending government money, government control is minimal. How to make sure that the IAs spend the money in a responsible manner has become an important concern. Government subsidies, however, do not necessarily imply direct government control. While the government's control at the constitutional level is significant, its involve-

ment in collective-choice rules is minimal. This is where the IAs can exercise their autonomy in deciding how they operate and how to raise and spend their money. The reason for the government's restraint from intervening too much at this level is unclear. Given that the government has never hesitated to change the structure of the IAs when necessary, it is unlikely that the government avoids intervening simply to uphold local democracy. A more plausible reason is that the government finds itself incapable of micromanaging. But no matter what the reasons are, the government's restraint allows the IAs to formulate policies and management practices that fit local situations.

8. CONCLUSION: INSTITUTIONAL DESIGN AND IRRIGATION GOVERNANCE

The provision and production of many public goods and services involve the joint effort of government officials and citizen-users. This paper examines the successful experience of irrigation governance and management in Taiwan as a way of understanding how joint efforts can be established and sustained through institutional arrangements. Cognizant of a large array of institutions involved, I have focused in this paper on the institutional design and operation of irrigation associations (IAs) in Taiwan and on the mechanisms by which institutions create incentives to irrigation officials to do a conscientious job and to relate their efforts to farmers.

Several features of the institutional design of IAs are instrumental in coping with these problems. One of them is the multiple arenas at different levels of the IAs in which farmers can work things out, communicate with one another, and resolve conflicts. These arenas provide public space where the "benign" activities can be played out. Moreover, to reduce the cost of participation to farmers and the potential for conflicts due to excessive participation, the scope of farmers' participation is carefully defined. While generally farmers' participation is encouraged, conducting the "technical" tasks such as formulating water plans and conducting major maintenance work is the responsibility of the IAs. Note that these "technical" tasks often set the parameters within which the farmers' participation operates.

For instance, while farmers have much leverage in deciding water allocation within an irrigation block, the amounts of water allocated to particular blocks are determined by the IAs. The effectiveness of the IAs in conducting these "technical" tasks can reduce the farmers' need for active participation. Furthermore, monitoring mechanisms are in place that reduce the possibility of rent-seeking activities. For instance, while IGs might decide on what maintenance work is to be done, the signature of the working station chief is required for payments made to the contractors, even though the farmers raise the money themselves.

Various rules are in place that enhance the complementarity of interests between individuals. At the most general level is the relationship between the IAs and farmers. Institutional arrangements, such as farmer representatives, the payment of water fees, and the status of IAs as juristic entities formed and owned by farmer members, all help create and sustain a conceptualization that emphasizes the mutually dependent relationship between the IAs and the farmers. Such conceptualization provides the basis upon which the officials and farmers develop productive relationships.

A high degree of complementarity of interests can also be found among the IA officials. The prevalence of lifetime careers, as a result of the IA personnel system, for example, aligns the careers (not only jobs) of the officials with the fate of the association as a whole. Stable membership of the organization allows the officials to adopt a longer time horizon in their relationships with each other. The resultant low discount rates of officials are more conducive to their investing time and effort in developing productive relationships with each other. Such an awareness of mutual dependence and low discount rates is further reinforced by the signaling of the IA that emphasizes the close relationship between the officials and the association. The practice of delivering an annual bonus is one of the ways by which the IAs signal their commitment and goodwill to their staffs. Although some IAs are currently facing serious financial problems, they still manage to deliver the bonus. The emphasis on mutual interests and long-term cooperation is consistent with the observation of prior research that many incentives in the IAs are designed to be "grouporiented" (Wade 1982, 1987).

Like irrigation bureaucracies in other Asian countries, authority is an essential component in the institutional design of the IAs.

Through a structure of hierarchy, and also a tight control process in irrigation planning, authority is used rather extensively in the operation of the bureaucracy as well as in the process of water delivery. While authority might enhance coordination, reduce transaction costs associated with negotiating the terms of cooperation in spot markets, and extract contributions from individuals by metering and sanctioning (Coase 1937; Alchian and Demsetz 1972; Williamson 1985), it comes with many potential disadvantages (e.g., Lindblom 1977; V. Ostrom 1989; Tullock 1987; Nicholson 1994). Among these potential disadvantages the most serious is the asymmetries of interests and power between those who exercise authority and those who are supposed to obey. Such asymmetries potentially provide opportunities and incentives for the abuse of authority and might also hinder communication and learning. More important, they dampen the incentives of those in the subordinate position.

What is peculiar about the institutional design of the IA in Taiwan is its ability to cope with the possible asymmetries brought by the use of authority. First, authority is closely aligned with responsibility. For instance, while a working station chief has much authority in handling water allocation within the areas under his jurisdiction, he is also responsible for what might happen in the areas. Saying that the alignment of authority and responsibility is important is a truism; is it not a major design principle of irrigation bureaucracies in many other countries? What makes the Taiwanese case different, however, is that the alignment is supported not simply by bureaucratic rules, but also by norms and social sanctions. As mentioned above, while a working station official has much discretion in managing the irrigated areas assigned to him, he is likely to be subject to much pressure from colleagues if his areas are facing problems persistently. Similarly, while the working station has a relatively high degree of discretion in handling water delivery and irrigation maintenance, the lengthy stay of station officials in the local community ensures that they will be held responsible for their actions.

Second, institutions are designed so that authority is checked and balanced. Perhaps the most obvious check-and-balance designs can be found in the personnel system. The loose alignment between the rank system and the position system and the frequent reshuffling of leadership positions make it less likely that those in leadership positions will abuse their authority. Less conspicuous designs involve the establishment of symbiotic relationships among individuals in which each possesses resources that are essential to the well-being of the others. For example, while the working station staff is evaluated by whether irrigation in the areas assigned to them is well managed, the staff alone usually does not have adequate resources to handle water delivery and system maintenance. Farmers' contributions are essential to the staff to do the job. It is especially the case in systems where rotation irrigation is seriously practiced.

Another major characteristic of the institutional design of the IAs is the various domains of autonomy. Such autonomy is essential for individuals at different levels to exercise their problem-solving capabilities. Within the IA, for example, the working stations are given the liberty of working out arrangements of water delivery and distribution with local farmers. At the field level, the irrigation groups (IGs) also retain a certain level of autonomy in deciding how water delivery is conducted within irrigation blocks. In systems where rotation irrigation is seriously practiced and, hence, farmers' efforts are even more essential, the IGs are given the liberty of deciding how to finance the operation and maintenance activities at the local level. In terms of water delivery, perhaps the most important autonomy is that given to the water guards. As noted by prior researchers, the water guards, rather than the working station staff, are the ones who make decisions about, and actually conduct, the allocation of water to farmers' fields (Moore 1983). The water guards' autonomy is the lubricant between the rigid irrigation plans and the diverse local environments.

The domains of autonomy allow individuals in different settings to develop (informal) rules to cope with various problems that they might face. Autonomy, however, is not equivalent to a hands-off mode of management. Instead, the exercise of autonomy at different domains is supported and facilitated by various mechanisms. First, the boundary of the autonomy is clearly understood. The autonomy of units at different levels within the IAs is based upon the bureaucratic principle of the vertical division of labor; the autonomy of IGs from the IAs, on the other hand, is supported by the understanding, strongly fostered by the national government, that emphasizes the dominant position of farmers vis-à-vis the IAs. Second, the autonomy at lower levels is nested within institutions at higher lev-

els—that is, institutions at higher levels can serve various supportive functions. Prior research, for example, notes that the operation of the IAs, or more generally of irrigation management, is in a default upward mode, in which those problems which cannot be handled effectively at the lower level are transmitted to the next higher level (Levine 1978b; Moore 1983). Thus, while individuals at different levels are given opportunities to exercise problem-solving capabilities, they are provided with backup by higher levels.

In sum, Taiwan's Irrigation Associations are not only examples of efficient water delivery, but they also illustrate a number of interesting features of organizational design that should have broad relevance to other public sector organizations. In this analysis of the IAs, I identified several important principles for designing effective institutions. In particular, I highlighted the problems of team production and coproduction involved in irrigation management and analyzed how these problems can be coped with by various institutional mechanisms. As many goods and services provided or produced in the public sector share similar characteristics of irrigation systems, lessons learned from the experience of irrigation management in Taiwan can be drawn upon to inform institutional reforms in other public sector contexts.

NOTES

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- 1. My observations during my field trips to Taiwan in 1993 and 1994 were largely consistent with what had been said about the good working order of water delivery and well-maintained infrastructures in irrigation systems in the country.
- 2. Earlier research has suggested that the high potentials of irrigation might be a reason why the governments in Taiwan, the colonial government before 1945, and the Nationalist government afterward have made significant investments in irrigation development. It might also explain why irrigation institutions and management procedures have been developed to a high level of sophistication (Levine 1977, 1978a, 1978b).
- 3. For more detailed discussion of the Land Reforms in Taiwan, see S. Kuo, Ranis, and Fei (1981); S. Kuo (1983); Gold (1986).
- 4. Note that unlike in irrigation agencies in many South Asian countries such as India and Nepal, the construction of irrigation facilities is not a responsibility of the IAs. The limited scope of responsibilities of the IAs might avoid the tension between the engineering-oriented function of construction and the management-oriented function of operation and maintenance often observed in South Asian irrigation bureaucracy (Wade 1987; Chambers 1988).
- 5. Only IAs with a large service area have the management stations. On smaller IAs, the working stations report to the headquarters directly.
- 6. The county or city governments, for example, can determine the amount of water earmarked for domestic uses. As irrigation is given relatively low priority in water uses, IAs frequently have to adjust their irrigation plans to cope with the demands from these governments.
- 7. In this study, the term "irrigation agency" is used to denote an aggregate of irrigation staff who are given a set of tasks pertaining to the governance and management of irrigation systems. The term "organization" is used to refer not to the "formal" structures of an agency, but to the patterns of actions and interactions of individuals within an agency as a result of an organizing process, which is defined as changing the situation from one in which individuals act independently to one in which they act in a coordinated manner in an effort to accomplish collective benefits (E. Ostrom 1990; Miller 1992).
- 8. A typical IA includes an engineering division, a management division, a finance division, an administrative division, an accounting division, a personnel division, and a security division.
- 9. When I mentioned to senior IA officials during interviews that many observers had found rather equitable patterns of relationships among IA officials, the officials were eager to explain to me, somewhat apologetically, why such a "leakage of authority" had happened. To them, the IA should operate like a

bureaucracy in which authority is respected. The equitable relationships were viewed very negatively.

- 10. Although there are female staff working in the IAs and some of them are in leadership positions, the posts of working station chief are almost always taken by a male staff member. For simplification, I use "he" to refer to a working station chief in this study.
- 11. The irrigated area managed by the Chianan IA is in the western part of Taiwan, located within Chiayi City, Chiayi County, Tainan City, and Tainan County. As of 1994, the total irrigated area is about 78,113 hectares. The climate of the area is subtropical with an average temperature of 21–24 degrees Celsius and annual average rainfall of 1,600 mm. About 80 percent of the rainfall occurs in the wet season from May to September. Paddy rice and sugar cane are the two major crops in the area.

The major source of water is from reservoirs. There are a total of 33 reservoirs of various sizes. The largest are the Tsengwen and Wushantou reservoirs that provide water to a service area of more than 57,000 hectares. Besides reservoirs, surface water from rivers, springs, and urban sewage systems is another major source of water. Generally speaking, cultivated lands located in the Chiayi area rely mainly on surface water, whereas those in the Tainan area rely on reservoirs. While the construction of the large-scale reservoirs has significantly expanded the area of cultivation, water is still so scarce that crop rotation is practiced in most of the Tainan area. In addition, rotation irrigation is encouraged at the field level. Although rotation irrigation is supposedly practiced in most of the irrigated lands in the Chianan area, it is seriously practiced only in the Tainan areas where reservoirs are the major source of irrigation water.

The Chianan IA is the largest IA in Taiwan in terms of irrigated area, budget size, and the number of officials. As of 1993, the Chianan IA had 678 employees, more than 20 percent of the total number of IA officials in Taiwan. About 30 percent of the staff work at the headquarters and the other 70 percent at the field offices. Chianan IA is said to be one of the best managed IAs in Taiwan.

- 12. Of the total irrigated area of 78,113 hectares the distribution of irrigated areas under various patterns of cropping is as follows: three years-two crops district: 36,534 hectares; double rice crop district: 23,276 hectares; single rice crop district: 9,515 hectares; simple rotation district: 360 hectares; and sugar cane district: 8,428 hectares.
- 13. Although women actively participate in agricultural activities in many places in Taiwan, major decisions in a farming household related to irrigation are usually made by the head of the household, who is almost always a man. As a result, irrigation group leaders are almost always men. In this paper, I use "he" to refer to an irrigation group leader.
- 14. In some areas in the Pingtung IA where abundant underground water makes irrigation organization less necessary, the only function of the irrigation groups is to help the IA collect irrigation fees.
- 15. For a more detailed discussion of local politics in Taiwan, see Bosco (1992), Stavis (1994), and Gallin (1966).

16. Presently the chairmen of all seventeen IAs in Taiwan are members of the KMT.

REFERENCES

- Abel, Martin E. 1975. "Irrigation Systems in Taiwan: Management of a Decentralized Public Enterprise." Minneapolis: University of Minnesota. Development of Agricultural and Applied Economics, Staff Paper.
- Alchian, Armen A., and Harold Demsetz. 1972. "Production, Information and Economic Organization." *American Economic Review* 62, 5: 777–95.
- Ambler, John S. 1993. "Performance Indicators: A Case of a Newly Developed FMIS in Bali, Indonesia." In *Performance Measurement in Farmer-Managed Irrigation Systems: Proceedings of an International Workshop of the Farmer-Managed Irrigation Systems Network*, ed. Shaul Manor and Jorge Chambouleyron, pp. 3–12. Colombo, Sri Lanka: International Irrigation Management Institute.
- Ascher, William, and Robert Healy. 1990. *Natural Resource Policy Making in Developing Countries*. Durham, N.C.: Duke University Press.
- Bosco, Joseph. 1992. "Taiwan Factions: Guanxi, Patronage, and the State in Local Politics." *Ethnology* 31, 2: 157–83.
- Bottrall, Anthony F. 1977. "Evolution of Irrigation Associations in Taiwan." Agricultural Administration 4: 245–50.
- ———. 1981. "Comparative Study of the Management and Organization of Irrigation Projects." Washington, D.C.: World Bank. World Bank Working Paper, No. 458.
- Chambers, Robert. 1988. *Managing Canal Irrigation: Practical Analysis from South Asia*. Cambridge, Mass.: Cambridge University Press.
- Chianan Irrigation Association. N.d. *Brief Introduction of Chianan I.A.* Tainan: Chianan Irrigation Association. (In Chinese.)
- ———. 1994. *Statistical Data of the Chianan I.A., 1993.* Tainan: Chianan Irrigation Association. (In Chinese.)
- COA (Council of Agriculture). 1989. Report on the Improvement of Irrigation Associations. Taipei: Council of Agriculture, Executive Yuan, Republic of China.
- . 1993. *Basic Agricultural Statistics*. Republic of China. Taipei: Council of Agriculture, Executive Yuan, Republic of China.
- Coase, Ronald H. 1937. "The Nature of the Firm." Economica 4: 386–405.

- Council for Economic Planning and Development. 1994. *Taiwan Statistical Data Book 1994*. Taipei: Council for Economic Planning and Development, Republic of China.
- Coward, E. Walter, Jr., and Gilbert Levine. 1987. "Studies of Farmer-Managed Irrigation Systems: Ten Years of Cumulative Knowledge and Changing Research Priorities." In *Public Intervention in Farmer-Managed Irrigation Systems*, ed. IIMI/WECS/Government of Nepal, pp. 1–31. Colombo, Sri Lanka: International Irrigation Management Institute.
- Freeman, David M. 1990. "Designing Local Irrigation Organizations for Linking Water Demand with Supply." In *Social, Economic, and Institutional Issues in Third World Irrigation Management*, ed. R. K. Sampath and Robert A. Young, pp. 111–40. Boulder, Colo.: Westview Press.
- Gallin, Bernard. 1966. *Hsin Hsing, Taiwan: A Chinese Village in Changes*. Berkeley: University of California Press.
- Gardner, Roy, Elinor Ostrom, and James Walker. 1990. "The Nature of Common-Pool Resource Problems." *Rationality and Society* 2, 3 (July): 335–58.
- Gold, Thomas, ed. 1986. *State and Society in the Taiwan Miracle*. Armonk, N.Y.: M. E. Sharpe.
- Israel, Arturo. 1992. Issues for Infrastructure Management in the 1990s. Washington, D.C.: World Bank.
- Kessides, Christine. 1993. *Institutional Options for the Provision of Infrastructure*. Washington, D.C.: World Bank.
- Kuo, Ching Ho. 1986. "Irrigation Management in Taiwan, ROC." Taipei: Council of Agriculture, Executive Yuan. Working Paper.
- Kuo, Shirley W. Y. 1983. *The Taiwan Economy in Transition*. Boulder, Colo.: Westview Press.
- Kuo, Shirley W. Y., Gustav Ranis, and John C. H. Fei. 1981. *The Taiwan Success Story: Rapid Growth with Improved Distribution in the Republic of China*, 1952–1979. Boulder, Colo.: Westview Press.
- Lachmann, Ludwig M. 1978. Capital and Its Structure. Kansas City: Sheed Andrews and McMeel.
- Lam, Wai Fung. 1994. "Institutions, Engineering Infrastructure, and Performance in the Governance and Management of Irrigation Systems: The Case of Nepal." Ph.D. dissertation, Indiana University, Bloomington.
- Lam, Wai Fung, Myungsuk Lee, and Elinor Ostrom. 1996. "The Institutional Analysis and Development Framework: Application to Irrigation Policy in Nepal." In *Policy Analysis Concepts and Methods: An Institutional and Implementation Focus*, ed. Derek W. Brinkerhoff. Greenwich, Conn.: JAI Press. JAI Policy Studies and Developing Nation Series, vol. 15.
- Levine, Gilbert. 1977. "Management Components in Irrigation System Design and Operation." *Agricultural Administration* 4: 37–48.

- . 1978a. "Notes on the Experience with the Reorganization of Irrigation Associations in Taiwan." Ithaca, N.Y.: Cornell University. Mimeo.
- . 1978b. "Irrigation Association Response to Severe Water Shortage— The Case of the Yun-lin Irrigation Association, Taiwan." Ithaca, N.Y.: Cornell University. Mimeo.
- Lindblom, Charles E. 1977. Politics and Market. New York: Basic Books.
- Miller, Gary J. 1992. Managerial Dilemmas: The Political Economy of Hierarchy. Cambridge: Cambridge University Press.
- Moe, Terry M. 1990. "Political Institutions: The Neglected Side of the Story." *Journal of Law, Economics, and Organization* 6 (Special Issue): 213–53.
- Moore, M. P. 1983. "Irrigation Management in Taiwan." Sussex, U.K.: Institute of Development Studies. Unpublished paper.
- ———. 1989. "The Fruits and Fallacies of Neoliberalism: The Case of Irrigation Policy." World Development 17, 11: 1733–50.
- . 1993. "Economic Structure and the Politics of Sectoral Bias: East Asian and Other Cases." *Journal of Development Studies* 29, 4: 79–128.
- Nicholson, Norman K. 1994. "Advantages and Disadvantages of Hierarchy: Exploring the Limits of Bureaucratic Reorientation and Reform." In Uphoff, ed., pp. 167–97. San Francisco: Institute for Contemporary Studies Press.
- Ostrom, Elinor. 1990. Governing the Commons: The Evolution of Institutions for Collective Action. New York: Cambridge University Press.
- ———. 1992. *Crafting Institutions for Self-Governing Irrigation Systems*. San Francisco: Institute for Contemporary Studies Press.
- . 1993. "Institutional Arrangements and the Commons Dilemma." In *Rethinking Institutional Analysis and Development: Issues, Alternatives, and Choices*, ed. Vincent Ostrom, David Feeny, and Hartmut Picht, pp. 101–39. San Francisco: Institute for Contemporary Studies Press.
- Ostrom, Elinor, Larry Schroeder, and Susan Wynne. 1993. *Institutional Incentives* and Sustainable Development: Infrastructure Policies in Perspective Boulder, Colo.: Westview Press.
- Ostrom, Vincent. 1989. *The Intellectual Crisis in American Public Administration*, 2d ed. Tuscaloosa: University of Alabama Press.
- Parks, Roger B., Paula C. Baker, Larry L. Kiser, Ronald Oakerson, Elinor Ostrom, Vincent Ostrom, Stephen L. Percy, Martha B. Vandivort, Gordon P. Whitaker, and Rick Wilson. 1982. "Coproduction of Public Services." In *Analyzing Urban-Service Distributions*, ed. Richard C. Rich, pp. 185–99. Lexington, Mass.: Lexington Books.
- Pingtung Irrigation Association. N.d. Brief Introduction to Pingtung Irrigation Association. Pingtung: Pingtung Irrigation Association. (In Chinese.)
- Rabushka, Alvin. 1987. The New China: Comparative Economic Development in Mainland China, Taiwan and Hong Kong. Boulder, Colo.: Westview Press.

- Speare, Alden, Jr. 1992. "Taiwan's Rural Populace: Brought in or Left out of the Economic Miracle?" In *Taiwan: Beyond the Economic Miracle*, ed. Dennis Fred Simon and Michael Y. M. Kau, pp. 211–33. Armonk, N.Y.: M. E. Sharpe.
- Stavis, B. 1994. Rural Local Governance and Agricultural Development in Taiwan. Ithaca, N.Y.: Cornell University.
- Taiwan Joint Irrigation Association. 1992. *Introduction to Water Conservancy and Irrigation in Taiwan, Republic of China*. Taipei: Taiwan Joint Irrigation Association, ROC.
- Tang, Shui Yan. 1992. *Institutions and Collective Action: Self Governance in Irrigation.* San Francisco: Institute for Contemporary Studies Press.
- Taoyuan Irrigation Association. N.d. *Brief Introduction to Taoyuan Irrigation Association*. Taoyuan: Taoyuan Irrigation Association. (In Chinese.)
- Tendler, Judith, and Sara Freedheim. 1994. "Trust in a Rent-Seeking World: Health and Government Transformed in Northeast Brazil." World Development 22, 12: 1771–91.
- Tullock, Gordon. 1987. *The Politics of Bureaucracy*. Lanham, Md.: University Press of America.
- Uphoff, Norman, ed. 1994. *Puzzles of Productivity in Public Organizations*. San Francisco: Institute for Contemporary Studies Press.
- VanderMeer, Canute. 1971. "Water Thievery in a Rice Irrigation System in Taiwan." Annals of the Association of American Geographers 61: 156–79.
- Wade, Robert. 1982. Irrigation and Agricultural Politics in South Korea. Boulder, Colo.: Westview Press.
- —. 1987. "Managing Water Managers: Deterring Expropriation or Equity as a Control Mechanism." In *Water and Water Policy in World Food Supplies*, ed. W. R. Jordan, pp. 177–83. College Station, Tex.: Texas A&M University Press.
- . 1988. "Management of Irrigation Systems: How to Evoke Trust and Avoid Prisoners' Dilemma." World Development 16, 4: 489–500.
- Wade, Robert, and David Seckler. 1990. "Priority Issues in the Management of Irrigation Systems." In Social, Economic, and Institutional Issues in Third World Irrigation Management, ed. R. K. Sampath and Robert A. Young, pp. 13–30. Boulder, Colo.: Westview Press.
- Wen, Li-jen. 1981. "Improvement of Irrigation Systems and Water Management in Taiwan." *Proceedings of the 11th Congress on Irrigation and Drainage*, Question 36, Part 1, pp. 117–42. New Delhi: ICID.
- ———. 1991. Reorganization of Irrigation Associations for Irrigation and Drainage Systems Management in Taiwan ROC. Taipei: Council of Agriculture, Executive Yuan.
- Williams, Jack F. 1994. "Vulnerability and Change in Taiwan's Agriculture." In *The Other Taiwan: 1945 to the Present*, ed. Murray A. Rubinstein, pp. 215–33. Armonk, N.Y.: M. E. Sharpe.

- Williamson, Oliver E. 1985. *The Economic Institutions of Capitalism*. New York: Free Press.
- World Bank. 1994. World Development Report. New York: Oxford University Press.
- Wu, Chian Min. N.d. Management of Water Resources in an Island Nation: The Taiwan Experience. Taipei: Water Resources Planning Commission MOEA.
- Yunlin Irrigation Association. 1990. Brief Introduction to Yunlin Irrigation Association. Touliu: Yunlin Irrigation Association. (In Chinese.)

SOCIAL CAPITAL AS A PRODUCT OF CLASS MOBILIZATION AND STATE INTERVENTION: INDUSTRIAL WORKERS IN KERALA, INDIA

Patrick Heller

Summary. — This paper argues that state intervention and class mobilization in the state of Kerala, India, have produced two forms of social capital. Kerala's high level of social development and successful redistributive reforms are a direct result of mutually reinforcing interactions between a programmatic labor movement and a democratic state. This synergy between state and labor has also created the institutional forms and political processes required for negotiating the class compromises through which redistribution and growth can be reconciled. These dynamics are explored through a close examination of both the organized factory sector and the unorganized (informal) sector.

1. INTRODUCTION: STRONG STATE, STRONG SOCIETY

Since roughly the mid-1970s the state of Kerala has been of particular interest to students of development. Successive governments in this southwestern state of 29 million inhabitants have successfully pursued social and redistributive strategies of development that has few, if any, parallels in the nonsocialist developing world. As Table 1 shows, Kerala today enjoys levels of social development that are decades in advance of the rest of the country and compare favorably with middle-income countries. All this, it should be underlined, has been achieved against the backdrop of a state that has the highest population density in the country and an economy which, with a per capita income of \$260, puts Kerala below the national average and somewhere between Madagascar and Rwanda.

By any account, these developmental successes are tied to what are clearly exceptionally high levels of social capital. Even the most casual observer of Kerala society would be quick to note the shear

| | Table 1 | |
|---------|--------------------------------|----------|
| Kerala: | Basic Socioeconomic Indicators | Compared |

| | Kerala | India | LICs ^a | United States | South Korea | Brazil |
|--|------------------|-------|-------------------|------------------|----------------|--------|
| Population (in millions) | 29 | 884 | 1,382 | 255 | 44 | 154 |
| Per capita GNP (in U.S. dollars) | 260 ^c | 310 | 370 | 23,240 | 6,790 | 2,770 |
| Adult literacy | 91% | 52% | 43% | 99% | 97% | 82% |
| Life expectancy | 70 | 59 | 52 | 76 | 70 | 66 |
| Infant mortality (per 1000) | 17 | 91 | 91 | 9 | 13 | 57 |
| Birth rate (per 1000) | 20 | 30 | 37 | 16 | 16 | 23 |
| $\operatorname{HDI}\operatorname{Index}^b$ | 0.65^{d} | 0.38 | 0.92 | 0.86 | 0.76 | |
| | | | | | | |

Source: Kerala and India figures (excepting GDP) from GOK, State Planning Board, Economic Review (1992). HDI figures from UNDP (1994). All other figures from World Bank (1994).

Note: AII figures are for 1991 for Kerala and India (except HDI) and 1992 for countries.

density of civic organizations and the vigor of associational life. Keralites of all walks of life, it would seem, have an irresistible inclination to combine, associate, and organize, and to do so without the outbreaks of violent disorder Huntingtonians might have anticipated. Thus, despite extremely high levels of social mobilization, Kerala has largely been spared the sectarian and casteist violence

^aLow-Income Countries refers to the average of 40 countries so designated by the World Bank, excluding China and India.

^bThe Human Development Index is a composite score of life expectancy, educational attainment, and income level developed by the UNDP.

^CCurrent (1992) rupees converted into dollars using World Bank conversion rate.

^d1987 figure.

that has recently been on the upswing throughout most of India.

Across both the formal and informal sectors of the economy, rates of unionization are high. The state boasts the most extensive network of cooperative societies, as well as numerous nongovernment organizations (NGOs), including the KSSP (Kerala Sastra Sahithya Parishad), which has achieved world renown for its efforts to "bring science to the people." Kerala's caste self-help and social upliftment societies have a long history of active civil engagement. Its "library movement," literary associations, and film industry have earned it a reputation as a cultural center rivaled only by Bengal. A network of private and semi-private schools sponsored by communal and caste organizations which overlaps with an extensive public school network has put a school in every village and provided nearuniversal primary school enrollment. The state's high levels of literacy and education have in turn spawned a prolific and diverse vernacular press. Kerala's Malayalam language has by far the highest per speaker daily newspaper circulation of any Indian language, ranking second only to Hindi in total circulation (Jeffrey 1992: 3).

The vigor and dynamism of civil society is matched only by the size and activism of the state. State-owned industries represent a larger percentage of the economy than in other major Indian states. Kerala has the most developed social welfare system in India, including the most extensive network of fair price shops (public food distribution) and rates of social expenditure that continue to be significantly higher than the national average.² Through the implementation of the land reforms of 1970, by far the most radical in the subcontinent (Herring 1983), the state transformed the agrarian social-property structure, destroying the traditional landlord class and creating a new class of small proprietors. The government-run system of primary health care units has reduced infant mortality to near First World rates. Moreover, even by Indian standards, the state has been very active in regulating the market, restricting labor-displacing technologies in traditional industries, legislating work conditions and hiring practices in industry as well as in agriculture, and aggressively enforcing minimum wages.

At this broad level then, state and society in Kerala have reinforced each other in a manner that unambiguously supports the "synergy" hypothesis Evans outlines in the introduction. State interventions aimed at providing public goods have built directly on

existing social capital resources and have in turn reinforced social capital. The expansion of public health and educational services has had a "crowding-in" effect, as the competition between public and private delivery services has increased overall efficiency. Pressures from below—exerted by well-organized groups—and a highly developed culture of civic participation have not only created a demand-side dynamic to which right-and left-wing governments have necessarily had to respond in a competitive electoral system, but have also increased the accountability of local officials.³ The comparatively corruption-free and logistically successful provision of low-cost housing, school lunch programs, subsidized food, and day care have been attributed to the active and informed participation of local groups (Franke and Chasin 1989). Clearly, democracy in Kerala works.

Viewed in this light, one might be tempted to conclude that Kerala looks a lot like the northern parts of Italy described by Putnam (1993a) in his defining study of the relationship between social capital and democracy. Regional governments in Northern Italy, he argues, have been successful in providing public goods because of a long history of civic engagement and active community organization. Similarly, the claim has often been made that Kerala's successful social development can be traced back to the social structure of nineteenth-century Travancore and Cochin (the princely states that constituted the southern half of pre-Independence Kerala). Competition between the minority Christian community and the majority Hindu community, as well as between various caste groups, produced a flurry of organizing and a proliferation of community associations. These associations, drawing on the reserves of social capital that inhere in tightly knit communities, promoted educational, health, and cultural activities, which in turn became the basis for successful political movements demanding more jobs and more political representation from what was a Brahmanical state. The fact that these associations continue to play an active role in Kerala only reinforces the impression of a direct link between this tradition of civic engagement and Kerala's social development.

Taken alone however, the pre-Independence "invigoration" of civil society can hardly explain Kerala's rather unique developmental trajectory. While the mobilization of nineteenth-century civil society did represent the first organized challenge to the hegemony of the Brahmanical state and might explain a general receptiveness (later reinforced by parliamentary democracy) of governments in Kerala to social demand groups, this high degree of associationalism in and of itself cannot explain the structural transformations that have underscored Kerala's social development. The redistributive thrust of Kerala's development has carried with it a direct attack on traditional structures of power as well as the prerogatives of capital. It has as such entailed a fundamental realignment in the balance of class forces.

Not all forms of collective action are conducive to developmentally useful forms of state intervention. Specifying the conditions under which synergy occurs requires carefully untangling the relationship between state capacity and actual patterns of demand aggregation. The politics of caste and communal groups, for example, do not readily lend themselves to positive-sum accommodations, geared as they are to securing particularistic interests. Demands aggregated through collective representations of this kind are in large part mutually exclusive and are in fact more likely to give rise to patronage politics. The resulting process of "demand-overload" is precisely the phenomenon that a wide range of commentators have argued has incapacitated the Indian state (Brass 1990; Rudolph and Rudolph 1987). A vigorous civil society rooted in interests bounded by parochial loyalties is clearly at odds with the more universalistic project of the developmental state. The modes of action and domination associated with traditional forms of social control and organization do not, moreover, lend themselves to the instrumentalities of the bureaucratic state (Evans and Rueschemeyer 1985). Strong "traditional" societies, as Migdal (1988) has argued, can produce weak states.

With large minority communities of Christians and Muslims (roughly 20 percent of the population each) and the balance of Hindus divided into what by most accounts was once the most rigid and orthodox caste structure in India, Kerala's social structure is as diverse as any in the subcontinent. The state in Kerala has certainly not been spared the "mischief of factions," as the proliferation of small community-based parties illustrates. But what sets Kerala aside from other Indian states (with the possible exception of West Bengal) is the particular class-based character of social mobilization that has dominated its post-Independence political life. The cacophony of fragmented societal demands has taken a back seat to de-

mands of a more programmatic and encompassing character. Moreover, insofar as interests and social resources have been mobilized primarily, although not exclusively, along class lines, a democratically accountable state and a mobilized society have become organizationally and functionally linked in a manner conducive to the transformative projects broadly associated with development, particularly those of a redistributive character.

In arguing that class mobilization and the resulting forms of state intervention have produced a sequence of encounters—which, while anything but smooth, have in the aggregate been mutually reinforcing—two historically and analytically distinct sequences can be identified. In the first, the organized militancy of lower class groups eroded traditional structures of domination, clearing the path for state penetration. The bureaucratic-legal capacities of the state were in effect activated and extended by mobilizational pressures from below. The resulting synergy underwrote the politically and administratively daunting tasks of implementing structural reforms and building an extensive network of welfare services in an impoverished society. The legal and social protections enforced by an activist state in turn heightened labor's capacity for militancy. The most concrete and tangible effect of this synergy was redistributive development. A less visible but equally critical outcome of repeated interactions between the state and lower class organizations in a competitive electoral democracy was the institutionalization of lower class power.

The second sequence emerges from the contradictions of the first: redistribution and militancy precipitated a crisis of accumulation. As capital fled and labor agitations disrupted production, a stagnant economy threatened to unravel the successes of Kerala's social development. The response has been the emergence of various forms of class compromise, in which labor has significantly curtailed militancy in an explicit effort to create more favorable conditions of investment and growth. The emergence of the politics of compromise—the only viable strategy for securing future growth in a dependent, but democratic, capitalist economy—is a direct result of a cohesive and disciplined labor movement that has explicitly come to terms with the limits of militancy. An activist and embedded state has facilitated the process of class compromise both directly, through various mediating and regulatory activities, as well as indirectly, by providing the institutional backdrop—the rules of the game—against which capital-labor

conflicts can be negotiated.

2. THE DEVELOPMENTAL STATE AND SOCIAL MOBILIZATION

Putnam notes that in Italy dynamic "civic communities" are associated with the predominance of horizontal solidarities, and that in "uncivic" regions participation is stunted by the persistence of vertical dependencies. "Citizens in these [civic] regions are engaged by public issues, not by patronage" (1993b: 36). Putnam attributes this difference to regional histories, yet his own account suggests that the ability to accumulate the type of social capital that contributes to democracy is predicted on a transformation of the social power structure—namely, the dismantling of traditional patron-client relations. More than anything else, this has been the most important result of lower class mobilization in Kerala.

Beginning in the early 1940s, the Communist Party of India (CPI) successfully united landless laborers, poor tenants, and urban workers. The ideological agenda that drew these caste-differentiated groups together was the CPI's sustained attack on feudal institutions—landlordism, the attached labor system, and the indignities of the caste system. With a strong cadre-based organization and a coherent transformative project, the Communists successfully built instruments of working-class power, most importantly unions, but also farmers' associations, student groups, village libraries, and a powerful cooperative movement. The success of the Communists, as the leaders have often noted, was in large part made possible by the existence of an already large reservoir of mobilizational resources from the social reform movements in the south (Travancore and Cochin) and a long tradition of peasant rebellions in the north (Malabar).

In 1957, in Kerala's first state legislative elections, this broad lower class alliance carried the Communists to power, marking the first time in history that a Communist party had come to power through the ballot box. Though the Communist ministry was short-lived (it was illegally dismissed by the Centre in 1959), the political empowerment of lower caste rural and urban laborers undermined the configurations of authority and domination of the traditional

social order, and, with this weakening of what had been in Migdal's (1988) sense a "strong" traditional society, opened the door for effective state intervention.

Whether in or out of power, the Communists, despite a bitter split in 1965 that saw the CPM (Communist Party of India—Marxist) emerge as the dominant party, have successfully maintained high rates of mobilization.⁴ Their principal rival, the Congress, having learned from the success of the Communists' grassroots mobilization, has also built mass organizations.⁵ In contrast to theories that identify state capacity with regime durability,⁶ it is important to underline the fact that Kerala's sustained strategy of redistributive and welfarist development has come amid a turbulent history of coalition politics and frequent changes of government. A competitive environment of mass-based politics, expressed through tightly contested elections as well as organizational and protest activities, has created the sustained pressures from below that account for the success with which both left- and right-wing governments have delivered institutional reform and basic goods.

The bargaining capacity of working-class organizations has been built on the strength of iterated cycles of struggle (dating back to the democratic and nationalist struggles of the 1940s), to which the CPM imparted a highly disciplined and ideologically cohesive character. The political leverage of the working class thus resides in its "associational autonomy" rather than the clientelistic exchange of material rewards for political subordination that characterizes authoritariancorporatist regimes (Fox 1994: 153). This does not, however, simply follow from the democratic character of the state. Because both of Kerala's political formations (Congress- and Communist-dominated fronts) are in electoral terms closely balanced and actively vie for working-class support, the exclusionary tactics of incorporating the most organized segments of labor that predominate in most developing societies (including India) have been displaced by more "encompassing" forms of political mobilization. This in turn has favored demands for (nondivisible) collective goods (e.g., demands for structural reforms, social protection legislation, and universal entitlements) rather than the exclusionary and disaggregated politics of patronage. In most Indian states, state and society have become intermeshed through a "complex pyramiding of vertical (multiclass and multicaste) factional alliances" controlled by local intermediaries (Frankel 1978:

25). In Kerala the state has been linked to society through a welfare pact that has in effect, within the limits of a capitalist economy, seen the dynamic institutionalization of working-class interests.

In addition to the social welfare measures already discussed, the most notable result of this synergy of state and society has been the implementation of institutional and structural reforms. Class mobilization and state intervention have combined to dissolve the social relations and the institutions of the precapitalist economic order.

In agriculture, the 1970 land reforms were implemented on the strength of the coordination of legislative and administrative intervention with local-level activism. The reforms transferred land from landlords to tenants, decimating the social and political power of the traditional rural elite. The unionization of landless laborers and the subsequent passage of labor laws (including regulation of mechanization, minimum wages, and a pension scheme) eroded the ties of dependency that bound lower caste laborers to landowners. Both these developments directly contributed to further democratizing village life. Elite control over local institutions such as agricultural cooperatives and Panchayats (local governments) has been replaced by fiercely competitive party or union-based politics.

In industry, social legislation and pro-labor governments have provided the working class with an exceptionally high degree of mobilizational capacity. Nowhere is this more visible than in the organization of the so-called unorganized sector. While workers outside the factory sector in most developing societies enjoy few legal protections and have little capacity for collective action, the efforts of unions and state agencies in Kerala have combined to effectively penetrate the unorganized or informal economy, drawing traditionally disenfranchised workers within the purview of the law and the protection of the social-welfare state.

The fact that it is lower class elements that have been the agents of structural reform, as well as the agents of political democratization, is an historically unique phenomenon, and yet one that has produced contradictions that are only too familiar. The political and institutional power of labor has imposed social limits on capital that are incompatible with sustained economic development in a dependent capitalist economy. Labor militancy and state intervention have adversely affected investment. High wages, state-enforced controls on mechani-

zation, rigidities in labor deployment, and high levels of social consumption have all contributed to either driving capital away or creating significant barriers to internal capital accumulation. In the decade that followed the peak of class mobilization in 1975, the state domestic product grew at an anaemic rate of 1.76 percent (Kannan 1990a: 1952). National and international investments during this period were negligible. Some traditional industries—in particular cashew processing and beedi production—experienced capital flight.

How the state and mobilized social forces have responded to this economic crisis is the question to which I now turn, focusing specifically on the industrial sector, where the mobility of capital has exacted a particularly high price for state intervention and labor militancy. Rejecting the view that high levels of lower class mobilization and the associated redistributive bias of the state have created insurmountable contradictions—a view informed by a static, zerosum understanding of the relationship between economic interests and political institutions—I argue, following Bates (1989), that institutions evolve dynamically in response to conflict. That class mobilization in Kerala led to struggles that produced a stalemate in the 1970s is not in dispute. But insofar as these conflicts were of a clearly defined class character, and as such instrumentally aggregated (unlike, for example, ethnic or religious conflicts), they lent themselves to the intermediation of a bureaucratic-legal state. Moreover, precisely because the working class was well organized and highly solidaristic, it had the capacity to act strategically—that is, to overcome economism and recognize the dependency of future wages on current investment.

Over the past decade or so, the organized working class has undergone a fundamental political reorientation. Having exhausted redistributive strategies of development, the CPM and its unions have embraced the politics of class compromise. In addition, the logic of that compromise, much as Przeworksi (1985) has described it within the context of developed capitalist economies, entails an explicit bargain in which workers contain their militancy and employers agree to reinvest. The role of the state in securing and guaranteeing the terms of class cooperation has been critical.

To explore the evolution of synergistic relationships between the state and labor—from securing redistributive reforms to underwriting compromise—I examine first the organized factory sector

and then turn to the unorganized (informal) sector. It is in the factory sector, quite predictably, that labor mobilization has been most successful and where, given the formal character of employment relations, the state has been the most interventionist.8 This is in fact true of all of India, but in Kerala the organization of industrial unions was an integral part of the Communist Party's strategy of promoting class struggle, and thus assumed a particularly confrontational character. Militancy produced a capital strike, but also resulted in the consolidation of a sophisticated industrial relations regime which, coupled with strong and autonomous industrial unions, has dramatically reduced the incidence of militancy and enhanced the possibilities for class coordination. This stands in marked contrast to the national scene, in which collective bargaining has been undermined by weak and fragmented unions and the corporatist strategies of the state. By its very nature, the unorganized (informal) sector does not lend itself to collective action or state intervention. Nonetheless, a similar, if later and much more uneven, sequence of state-society interactions can be identified. In a first stage, highly insecure and exploitative conditions of work drove a politicized workforce with strong ties to the organized labor movement (via the CPM) to engage in what were especially chaotic and disruptive forms of conflict. In a second stage, the state, with the support of labor unions, has made concerted efforts to formalize conditions of work and provide a more stable and contractually based labor relations environment. In light of the fact that the unorganized sector in India remains largely beyond the reach of the state and of public accountability and continues to reproduce the most labor-repressive forms of production, the case of Kerala deserves special attention.9

3. MILITANCY AND COMPROMISE IN THE FACTORY (ORGANIZED) SECTOR

To properly situate the case of Kerala, it is first necessary to say a few words about the national picture. India's industrial relations system is characterized by a seemingly paradoxical combination of "state-dominated" and "involuted" forms of pluralism (Rudolph and Rudolph 1987). On the one hand, a state bent on securing rapid industrial development and maintaining industrial peace from above

fashioned legislation that heavily favors "state controlled compulsory procedures rather than open-ended bargaining among interested parties" (Rudolph and Rudolph 1987: 270). The result is that "State policy has created a legal and procedural environment that encourages unions to depend for recognition and benefits on government and management more than on their membership and the capacity to represent its interests" (Rudolph and Rudolph 1987: 273).

On the other hand, trade union laws that grant equal legal status to any registered union (for which only seven members are required) have fueled multi-unionism (there were eleven national federations at last count) and have given strategic power to opportunistic union "bosses" acting more as brokers—strategically placed between their membership, management, and the state—than as organizers. Pervasive government interference coupled with the involution of labor has in effect undermined associational autonomy and favored the politics of clientelism and cooptation over horizontal and solidaristic mobilization, creating a highly unstable industrial relations system. With no legal provisions for authorizing a majority bargaining agent, "employers usually have to deal with those who shout the loudest" (Ramaswamy 1983: 978). And in the absence of effective organization-building and worker loyalty, unions secure support by pressing economistic demands. A fragmented and dependent labor movement has spawned atomized and disaggregated strategies, and as many observers have noted (Ramaswamy 1984; Rudolph and Rudolph 1987), labor-management relations in general have become increasingly chaotic and ungovernable.

Finally, it should be noted that this institutional failure to effectively aggregate and promote "encompassing" forms of association has quite predictably given rise to exclusionary forms of collective action, specifically communal-based unions. The most significant recent development on the Bombay labor scene has been the emergence of the Shiv Sena (Heuze 1990: 175), a local Hindu-chauvinist party. Reports in the Indian press, moreover, suggest that the fastest growing labor federation in the country is the Bharatiya Mazdoor Sangh, which is tied to the Hindu fundamentalist BJP. The fact that a Shiv Sena-BJP alliance won the legislative elections of March 1995 in Maharashtra—India's most industrialized state—does not bode well for the future of industrial relations.

In contrast to the fragmented character of the national labor

movement, the labor movement in Kerala is more broad-based and organizationally coherent. Its historical formation was largely the work of the Communist Party, which organized unions primarily as instruments of class struggles, giving "political" unionism the upper hand over trade unionism. Struggles were defined in general, encompassing terms, linking workers in urban and rural sectors in a unified effort to secure the protection of the state against the prerogatives of capital. Moreover, precisely because the terms of conflict were class-based, the labor movement in Kerala did not become dependent on the bureaucratic and pluralistic framework of Indian industrial relations. Conflicts between labor and management became the object of open struggles and hard bargaining rather than patronage. At the same time, because the state found itself confronted with organized demands that could not be coopted or channeled into the legalism of compulsory adjudication (the CITU, the Communist Party's powerful labor federation, stubbornly rejected binding third-party intervention), intervention took the form of "facilitating joint consultation and joint regulation," the pillars of collective bargaining (Nair 1994).

The pronounced class character of unionism and a stronger tradition of collective bargaining has checked the spread of opportunistic deal-making and cast labor-management relations in the mold of "regulated conflict." Unlike the forms of state corporatism that often characterize the relationship of the state to organized labor in developing countries, unions in Kerala, born of political mobilization, have maintained organizational autonomy. While the Indian state has obfuscated class conflicts (Rudolph and Rudolph 1987), the state in Kerala has given them institutional expression.

This is most significantly reflected in the critical role that Kerala's unique Industrial Relations Committees (IRCs) play in mediating industrial conflicts. These tripartite committees are essentially consultative bodies that have few statutory powers yet have been instrumental in forging the terms of industry-wide labor-management agreements. Appointed by the government, the committees are constituted of leaders of all the concerned labor federations, representatives from employer associations and officials from the Labour Department. IRCs presently cover nineteen industries, ranging from the capital-intensive petrochemicals industry to more traditional and labor-intensive industries such as coir and cashew production.

The actual role and importance of the IRC varies widely across industries. In some it essentially functions as a forum of last resort, whereas in others it formulates, negotiates, and oversees industrywide agreements on wages, work conditions, and benefits. In most cases, IRCs were instituted following periods of intense labor-management conflict and were an explicit acknowledgment on the part of state officials of the futility of imposing agreements from above in a climate of highly antagonistic class relations. The overall effect was to give institutional emphasis to voluntarily negotiated settlements over the compulsory adjudication of the Indian industrial relations system (Nair 1994).

Through the late 1970s high levels of labor militancy and state intervention adversely affected productivity growth and investment. As industrial growth and employment stagnated, it became increasingly clear that militancy was exacting too high a price. When the CPM came to power in 1981, it abandoned its past strategy of using the state "as an instrument of mass struggle." The subsequent CPM ministry (1987–91) openly courted private capital (including the once demonized Tatas), restrained the CITU, and called upon the working class to develop a new "work culture," the party's euphemism for labor discipline. Organized labor had come to terms with the inherent limits of redistribution in a subnational state and recognized the need to compromise with capital. A CITU leader, R. Raghavan Pillai, succinctly identified the dilemma: "Without increasing investment and production there can be no prosperity." 10

These compromises, as they have emerged over the past decade, rest on two explicit pillars: the first is labor's strategic "quiescence," to use Cameron's (1984) term; the second is the self-conscious embrace of increased productivity as the positive-sum basis for coordinating profits and wages.

The quiescence of labor—or more accurately its strategic with-holding of militancy—is reflected directly in the decline of strike activity as well as in the increase in negotiated long-term agreements. As the figures in Table 2 show, the man-days lost to industrial disputes declined significantly in the 1980s.

This is true in both absolute and comparative terms. For the first time in three decades the number of man-days lost per factory worker in Kerala has fallen below the national average. While throughout the 1970s Kerala had the distinction of ranking only be-

Table 2

Total Man-days Lost to Strikes and Lockouts

| | Total Man-Days Lost (1,000) | | Man-Days Lost Per Factory Worker ^a | | |
|-------------------|---------------------------------|--------|--|-------|--|
| | Kerala | India | Kerala | India | |
| 1965 | 869 | 6,470 | 4.4 | 1.4 | |
| 1966 | 2,296 | 13,846 | 11.5 | 2.9 | |
| 1967 | 2,318 | 17,148 | 11.4 | 3.6 | |
| 1968 | 2,492 | 17,244 | 12.1 | 3.6 | |
| 1969 | 1,628 | 19,048 | 7.9 | 4.0 | |
| 1970 | 685 | 20,563 | 3.3 | 4.1 | |
| 1971 | 3,132 | 16,546 | 15.0 | 3.2 | |
| 1972 | 3,216 | 20,544 | 14.1 | 3.8 | |
| 1973 | 1,894 | 20,626 | 7.7 | 3.7 | |
| 1974 | 3,647 | 40,262 | 14.0 | 7.1 | |
| 1975 ^b | 501 | 21,901 | 1.9 | 3.8 | |
| 1976 ^b | 68 | 12,746 | 0.2 | 2.1 | |
| 1977 | 2,111 | 25,320 | 7.3 | 4.1 | |
| 1978 | 2,055 | 28,340 | 7.5 | 4.3 | |
| 1979 | 3,770 | 43,854 | 12.7 | 6.4 | |
| 1980 | 1,250 | 21,925 | 4.1 | 3.1 | |
| 1981 | 2,234 | 36,583 | 7.3 | 10.2 | |
| 1982 | 1,334 | 74,615 | 4.6 | 10.1 | |
| 1983 | 1,575 | 46,858 | 5.5 | 6.3 | |
| 1984 | 2,036 | 56,025 | 7.0 | 7.4 | |
| 1985 | 1,061 | 29,240 | 3.6 | 3.8 | |
| 1986 | 2,327 | 32,749 | 7.8 | 4.2 | |
| 1987 | 2,163 | 35,358 | 7.1 | 4.5 | |
| 1988 | 1,666 | 33,947 | 5.5 | 4.3 | |
| 1989 | 335 | 32,663 | 1.1 | 4.1 | |
| 1990 | 388 | 24,086 | 1.3 | 3.0 | |
| 1991 | 561 | 26,428 | 1.9 | 3.3 | |
| 1992 | 584 | 31,259 | 1.9 | 3.9 | |

Source: GOI, Labour Bureau, Indian Labour Yearbook (various years).

 $[^]a\mathrm{Employment}$ in registered factories. Figures for 1990–92 calculated using 1989 factory employment.

^bYears of the Emergency.

hind West Bengal in total number of man-days lost (Kumar 1989), its current three-year average places it ninth among fourteen major states.¹¹

Across the board, labor officials, union leaders, and industrialists report declining militancy. In a survey of businessmen and representatives of industry associations conducted by the State Planning Board, the vast majority reported a significant improvement in the industrial relations climate (GOK, State Planning Board, Report of the Task Force for Review of Implementation of Plan Schemes under the Industries Sector, 1991: 51). Of the ten chief executives of large or medium-scale factories I interviewed, nine categorically asserted that labor militancy in the 1980s had noticeably declined. Although inter-union conflicts were cited as an ongoing problem, the modal opinion was that unions had become more "responsible."

Trade union leaders are no less categorical. S. C. S. Menon, the most prominent independent trade union leader in Kerala and a forty-two-year veteran of the movement, notes that ever since the 1981–82 Left Democratic government "tamed the unions," the Cochin-Ernaukulam industrial belt (where the majority of Kerala's large manufacturing units are located) has been a model of industrial peace. The president of over nine large factory unions in the area, Menon added that industrial relations have been routinized to the extent that the Labour Department's conciliation functions have become redundant. Because labor has politically and institutionally secured the right and the power to bargain with capital, militancy has lost much of its strategic saliency. As the president of CITU, T. N. Ravindranath, a long-time advocate of the class-struggle line, put it, the "principle that wages and bonuses have to be negotiated is widely accepted. The phase of militancy is over." 13

The decline in militancy is closely tied to the increasingly common practice of negotiating long-term labor-management agreements, which now routinely include bonus schemes linked to productivity. This represents an important departure from past practices. Historically, bonuses have been the most explosive object of industrial conflict in Kerala. In the dominant Marxist anti-capitalist discourse of the trade unions, profits were equated with exploitation, and bonuses became the means through which workers could secure their "rightful" share of surplus. The idea of tying wages to performance was also specifically rejected because, as one union

leader remarked, it "would result in the workers working themselves out on the jobs" (Menon 1979). The CITU repeatedly called upon its unions to resist efforts to link wages to productivity.

A political climate of class struggle did not, however, rule out negotiating compromises in some of the larger and more profitable factories. As early as 1957, following a protracted strike, unions and management at the Indian Aluminum Company agreed to the first long-term agreement with a productivity-linked monthly bonus scheme in the state. Similar agreements were soon adopted in other factories, including the state-owned Fertilizers and Chemicals Travancore Company, the central government undertaking Cochin Refineries Ltd., and the private sector Tata Oil Mills Company. By the 1970s, Nair, in an exhaustive study of Kerala's industrial relations system, concluded that "in no other state in India are there so many long-term collective bargaining agreements operating so successfully as in Kerala" (1973: 391).

It was not, however, until the 1980s that long-term agreements were openly embraced by the CPM and that labor productivity came to be viewed as a positive-sum game. S. C. S. Menon summed up the change succinctly:

The CPM had always advocated resisting capitalists. Workers were urged to not cooperate with management. Productivity increases were seen as inherently exploitative. But that philosophy has changed. Now the CPM is even educating workers about productivity.¹⁷

At present, the Labour Department is actively promoting the signing of five-year agreements with productivity-linked wage increases and has sponsored legislation that would tackle the problem of multi-unionism. Industrial Relations Committees have been created for all major industry groups, and in at least two industries (textiles and coir) these committees have successfully fixed industry-wide productivity standards and measurements. In 1991, the new Congress government issued a "Statement of Industrial Policy," which, for the first time in the state's history, included a competitive package of financial and policy incentives geared to attract new investors. The policy, moreover, contained measures to curb "restrictive" labor practices and increase managerial flexibility in labor deployment. These were publicly denounced by the CPM, but no

overt actions were taken in protest, and strike levels have remained at historical lows. Most telling has been the determination of the political establishment to publicize the decline in militancy. The last two governments have gone to great pains to advertise Kerala's "peaceful" labor front.¹⁸

To a great extent, the emergence of class compromise has been the work of the CPM. As a highly organized, coherent, and class-based political force, the CPM enjoys the strategic capacity to recognize the tradeoffs between militancy and growth. A programmatic party has created a programmatic labor movement that has successfully minimized economistic trade unionism. Class-based unionism alone, however, does not suffice to explain why workers have foregone militancy and accepted compromise. Even where class cooperation opens up the possibility of a positive-sum game, the coordination of interests must have a sound material and institutional basis if compliance is to be secured.

Organized class struggle produced concrete redistributive results. The outcome of organized class compromise is less certain. Under the conditions of a private property economy, there are no guarantees that future interests will be met (Przeworski 1985: 140). Within the boundaries set by the logic of accumulation, it is, however, possible to reduce the degree of "uncertainty" involved in the tradeoff between wages and profits. The politically dominant position of labor provides some guarantees. The strength of unions and the extent of protective legislation have secured a high degree of social and political control over the distribution of surplus, thus minimizing the risks involved in making concessions to capital. A leveled playing field reduces the chances of unilateral and opportunistic behavior, increasing the chances of cooperation. But it does not establish the rules of the game.

Which is where the significance of institutional developments comes into play. As it has evolved under the impetus of working-class mobilization, the industrial relations system in Kerala has facilitated the kind of hard bargaining and the coordination of interests that reduces the uncertainty and hazards of inter-class transactions. When workers are highly organized, represented by competitive unions with strong ties to political parties, their interests are clearly articulated. While the terms and the balance of forces are necessarily antagonistic, they nonetheless lend themselves to instrumental coor-

dination. Such coordination is not, however, given by some larger economic necessity. It must be concretely shaped and managed. It must be institutionally and politically embedded.

The dilemma, as it evolved historically, was to accommodate the pressures and demands that came with class mobilization. Creating the conditions for labor-capital cooperation thus meant giving institutional expression to the class power of labor, creating a playing field on which the threat of militancy, rather than actual militancy, would define labor's bargaining position. The combination of a militant, class-based movement and democratic institutions did just that, though not without setbacks.

As the industrial relations system matured, moreover, it defined the procedures and norms by which compromises could be developed and ultimately secured. Thus as the respective positions of labor and capital have become increasingly institutionalized, formal bargaining practices have evolved and become more acceptable to both parties through iteration and the demonstration effect of success. These institutions cannot as such be explained in the functionalist language of the "new institutional economics" but must be seen as the product of concrete historical struggles, in which a particular configuration of social forces has been congealed. The consolidation of an industrial relations regime based on "regulated conflict" between aggregated interests has reduced the degree of uncertainty and increased the scope for cooperation. "In the past," remarked the manager of OEN Industries, Kerala's most successful electronics manufacturer,

labor would demand impossible bonuses. Management would offer nothing. A strike or lockout would follow. Now negotiations are over a 1 or 2 percent increase. The total bonus package is well defined and always in the 15–16 percent range. All these norms have removed items of conflict.¹⁹

The state-mediated coordination of interests between labor and capital here closely resembles corporatist arrangements, with an important qualification. In Latin American cases "corporatist patterns of interest representation . . . are frequently the consequence of political structures consciously imposed by political elites on civil society" (Stepan 1978: 47). The process in Kerala has been negotiated: it begins with the mobilization of workers and finds expression

through, and not outside of, democratic institutions. The state's role in mediating conflicts between capital and labor was not initiated from above, but rather emerged in response to the political imperatives of managing class struggles in a parliamentary setting. This "democratic" or "left" variant of corporatism bears an important similarity to European social democracy. The growth strategy undergirding class compromise specifically seeks to build on the comparative advantages in labor productivity and social organization that reside in the democratic welfare state—that is, advanced human capital resources and a highly developed institutional capacity for fostering cooperative labor-management relations.²⁰

4. ORGANIZING THE UNORGANIZED SECTOR

The organized factory sector of the Indian economy is dominated by state and monopoly capital. The material base for coordinating interests is actually quite large. Large-scale economic units, regularized and permanent conditions of work, and a relatively small number of organized actors have facilitated state intervention. Providing a framework for collective action in the unorganized sector (as the informal sector is called in India) has proven far more elusive. Nowhere are the developmental failures of the Indian state in fact more manifest than in the resiliency of this sector of the economy.

Out of a total of 285 million main workers enumerated in India in the 1991 census, only 9.3 percent were in enterprises classified as organized (all public sector enterprises and all nonagricultural private enterprises with ten or more workers). Even as a percentage of the nonagricultural workforce, the organized sector accounted for only 28.2 percent of total employment (the figures for Kerala are roughly the same).²¹ In sum, almost three-fourths of the nonagricultural workers in India are either service workers employed on a casual or semi-permanent basis, manufacturing workers employed in small workshops or unregistered factories (i.e., sweatshops), or self-employed.

While overly vague and even somewhat arbitrary, the organ-

ized/unorganized dichotomy does capture the fundamental distinction of the dualistic character of labor markets in the developing world. The organized sector is characterized by the contractual relations of a class-based social organization of production, closely linked with the development of the modern state. Workers in this sector enjoy legal protections and institutional conditions that are favorable to collective action (which may be of a more or less autonomous character). The organization of production in the unorganized sector, however, is rooted in a configuration of social relations largely beyond the reach of the bureaucratic state and modern political institutions. With large reserves of cheap and untapped labor, workers have little or no capacity for pursuing their collective interests.

Labor relations in the unorganized sector in India are extremely heterogeneous. At one extreme can be found the persistence of extraeconomic forms of coercion as in cases of bonded or attached labor. Even where labor is formally "free" and has taken the wage form, the inherently asymmetrical social and political relations that condition transactions belie the formally "contractual" character of exchanges. The spread of the wage form notwithstanding, exchange relations remain fundamentally shaped by precapitalist social institutions or what Migdal (1988) calls the "web of overlapping forms of social control" that define traditional societies.

At the risk of oversimplification, the socioeconomic dynamics of unorganized labor markets in India are characterized by two reinforcing structural features. The first is the deep segmentation of work conditions and entry barriers along caste, gender, and regional lines (Mies 1982; Harris, Kannan, and Rodgers 1990; Singh 1991; Breman 1993). The second is the tapestry of vertical forms of dependency that condition the terms of labor recruitment. Because of the shear oversupply of unskilled casual labor, workers are locked into dependent contractual relations with jobbers, recruiters, gang bosses, and other intermediaries, often kinsmen, caste mates, or co-villagers. As Breman notes, "the immobilizing effect caused by horizontal division is increased by the pressure emanating from the need to invest in vertical dependency relationships" (Breman 1993: 210). The social relations in which these labor markets are embedded (Granovetter 1985) reduce the logistical and information costs of securing "trustworthy" and "dependable" workers in volatile

markets by in effect desolidarizing them.

The powerlessness of workers in this sector is matched only by the powerlessness of the state. Rare legislated efforts to improve work conditions or fix minimum wages have been implemented indifferently at best. Out of 1,500,674 establishments covered under the rules framed by the states under the Minimum Wages Act of 1948, only 87,103 even actually submitted returns as required by law (GOI, Labour Bureau 1984: 84). The inability of the state to curb exploitative labor practices is nowhere more visible than in the area of child labor. Despite legislated prohibitions, estimates put the number of working children in India anywhere between 13 and 44 million. The capacity of the Indian economic bureaucracy to tightly control product markets (the infamous license permit Raj) stands in sharp contrast to its near complete failure to penetrate the labor relations of the unorganized sector, a fact captured quite appropriately in the official usage of the term "unorganized." 23

The failure of the state to bridge the gap between the organized and unorganized sectors, and the implications for economic and social development, are now widely recognized.²⁴ The availability of large reserves of cheap labor is a disincentive to technological innovation. Depressed wages limit the scope for stimulating growth through effective demand. Finally, by reinforcing traditional economic and social inequalities, the unorganized sector has stymied the development of human resources, and hence productivity. The link between the persistence of the dual economy and labor's lack of wage leverage has recently been underlined by the National Commission on Rural Labour:

The conspicuous co-existence of mushrooming high-wage islands in the organized sector on the one hand and miserable conditions of labour in informal urban and rural sectors (both farm and nonfarm) on the other and the corresponding dualism in capital/labour incentives and associated levels of productivity are the result of our inability or even unwillingness to implement a sound and firm wage policy (GOI, Ministry of Labour 1991, vol. 1: 23).

In Kerala the unorganized sector has become something of a misnomer. A large segment of workers outside the public sector and outside the registered factory sector are in fact unionized. Over half the state's two million agricultural laborers belong to the CPM-affiliated KSKTU (Kerala State Karshaka Thozhilali Union), the single largest union in the state. Large segments of workers in Kerala's traditional industries, cashew and coir, and its two largest casual labor markets, construction and headload work, have been unionized.²⁵ In the beedi (traditional cigarettes) industry—the archetypical labor-squeezing, putting-out industry—unions have organized the largest and most successful producer cooperative in the state with a membership of over 30,000. Even *mahouts* (elephant drivers) have a union.

The organizational success of unions in this sector is a direct outgrowth of the broad-based character of Kerala's labor movement. As early as the 1940s, the organizing strategies and demands of a small but militant core of coir factory workers were quickly extended to coir workers in the rural household sector, other nonfactory occupations, and agricultural workers. Even before Independence, agricultural laborers and other rural workers were demanding the same benefits granted to industrial workers, including security of employment, fixed work days, and the right to bargain collectively (Kannan 1992: 9).

Responding to these pressures from below, the state in Kerala has actively intervened in the unorganized sector. Through a series of direct regulatory and institutional reforms, as well as broader welfare measures, the state transformed traditional labor markets and underwrote labor's organizing efforts. The state actively supported unions in building and financing labor cooperatives for toddy tappers, beedi workers, coir-processing workers, cashewprocessing workers, and handloom weavers (Kannan 1992: 12). Minimum-wage committees were appointed first for the coir and cashew industries and then gradually extended to forty-five other industries, including the "handling and care of elephants" (GOK, Labour Department 1990). Enforcement remains uneven, but labor market interventions coupled with the provision of universal welfare entitlements have, piecemeal, created a social wage. Other measures, such as the regulation of mechanization in the coir industry and the prohibition of cottage outsourcing in the cashew industry, have effectively leveraged labor's bargaining position. Finally, social polices have curbed the most egregious labor practices. Universal primary education has practically removed children from the workforce. The 1981 census reported a 0.72 percent work participation rate for children in the 0–14 age group, and 17 percent for the 15–19 age group, both figures being the lowest of any state. The all-India figures were respectively 4.2 percent and 34.8 percent.²⁶

The most discernible impact of increased state intervention and labor organization has been its leveling effect. Government wage data conclusively show that the income differential between workers in unorganized occupations and the modern factory sector has declined noticeably, particularly since the mid-1970s (Kannan 1990b). Wage gains in one sector appear, moreover, to be quickly transmitted to other sectors (Krishnan 1991), suggesting that increased bargaining capacity and solidaristic wage policies have eroded the asymmetries of traditional labor market boundaries.

Unionization and state intervention have thus fundamentally transformed the traditional character of labor relations. Protective social legislation and horizontal mobilization have supplanted patron-client and despotic relations of employment with more formal and contractual ones. By its very nature, however, this sector does not readily lend itself to the coordination of conflicting interests. The terms of employment are often semi-permanent or casual, production is decentralized, market fluctuations are pronounced, and profit margins narrow. In these conditions of both material and institutional instability, managing and accommodating the demands of a mobilized labor force is necessarily difficult. The economic consequences of labor militancy have in fact been dramatic. Between 1970–71 and 1990–91, growth in the manufacturing sector of the unorganized economy (i.e., unregistered factories) averaged a sluggish annual rate of 1.6 percent, and a number of footloose industries (Oommen 1979) fled to neighboring states. The militancy of headload workers (unloading and loading of goods) and construction workers is often cited as the most important deterrent to investment in the factory sector (Sankaranarayanan and Bhai 1994). As an editorial entitled "Tempting the Investor" recently noted, "the State's labour problem is confined to the unorganized sector (primarily headload workers) and cannot be solved unless their demands—security of tenure, wages, welfare schemes and so—are met."27

The response of the state has been twofold: the first has been to initiate targeted welfare programs to provide these casual workers with some degree of security. Since 1987, the legislature has, with bipartisan support, enacted welfare schemes in all the major unor-

ganized sectors. The second has been to draw on the model of the IRCs in initiating tripartite negotiations and designing new industrial and labor policies.

Coir production, which employs roughly half a million workers in the treatment, spinning, and weaving of coconut fiber, is a case in point. Unions have historically opposed mechanization and supported price controls on the supply of coconut husk from which the coir fiber is extracted. In the face of increasing competition from Tamil Nadu and Sri Lanka in the 1980s, the unions, coir manufacturers, and the state agreed in 1990 to an ambitious restructuring plan involving mechanization, price deregulation, extension of the cooperative sector, and job retraining. The plan's principle architect has described it as a "social consensus project." The accord rests on an explicit compromise: in exchange for their support of phased mechanization, the unions have been guaranteed a degree of institutional control (through the cooperative sector) over the modernization process.

The most dramatic example of cooperation between the state and unions in formalizing labor relations and containing militancy comes from the headload sector. More commonly known as "coolies," headload workers have historically been among the most degraded, socially and economically, of all occupational groups.²⁹ Although physically demanding, the work is unskilled and semi-permanent. These conditions favored the development of spot markets in labor, with few barriers to entry, although hiring patterns were often on communal or caste lines.

Headload workers first organized in urban markets as part of the larger mobilization of laborers in the 1950s. Local unions successfully established a "complex system of work sharing, compartementalization of the labour market, specification of tasks and elaborate wage schedules" (Vijayasankar 1986: 23). The localized character of unions coupled with the absence of a legally sanctioned bargaining framework, however, produced particularly disruptive forms of militancy. Because of fierce inter-union rivalries, coupled with the fact that headload workers in Kerala have a long history of serving as the muscle-men (*goondas*, as they are known in India) for political parties, ³⁰ agitations were often violent (often pitting CPM workers against merchants with ties to communal organizations) and extortionate practices not uncommon. Strike actions paralyzed large mar-

kets, closed down factories, and had a disruptive ripple effect on the entire economy.³¹ The payoff for headload workers was, however, handsome. Since 1964 real wages have climbed steadily (Vijayasankar 1986). In the mid-1980s, urban headload workers commanded wages that were 75 percent higher than those of factory workers (Kannan 1992: 17).³²

Recognizing, as one government official put it, that "the lack of governmental legislative regulation of employment conditions and wage levels was leading to a state of anarchy in the headload labor market all over the state" (Vijayasankar 1986: 120), a CPM-led government acted by legislating the Headload Workers Act (1980) and a companion bill, the Kerala Headload Workers (Regulation of Employment and Welfare) Scheme (1983). The scheme is particularly significant because it represents by far the most ambitious effort of its kind in India.³³ Through state intervention and a tripartite corporatist formula, the scheme aims to institutionalize contractual relations of employment in a casual labor market.³⁴

The scheme regulates conditions of work (work hours, carrying loads), strengthens the arbitration role of the Labour Department, establishes a broad range of welfare measures, and most importantly, creates self-governing local tripartite committees charged with registering, pooling, and compensating workers. Constituted in major markets and composed of equal numbers of Labour Department officials, union representatives, and merchants, the committees negotiate wages and bonuses for two-year periods and allocate work to union-based labor pools.

The implementation of the schemes did at first elicit resistance from some unions. While the pooling system has largely been patterned after the segmented labor markets carved out by the unions, there have been fears that this institutionalization will erode the unions' capacity to enforce entry barriers. Some local union bosses also opposed the formalization of transaction costs because it effectively eliminated their brokerage fees. As one Labour Department official put it, "With this regulatory system, there is less room for unscrupulous practices." But the committee system has been aggressively pushed by the labor federations, in particular the CITU. 35 Welfare Board officers readily credit the CITU with having successfully mobilized worker support for the scheme.

Merchants have also, by all indications, benefited from the dra-

matic decline in conflicts, the steady and regulated supply of labor, and the formalization of pay scales. The Secretary of the Ernaukulam Chamber of Commerce noted that with fixed wages, there is less room for arbitrary exactions. "Even in cases where the costs to merchants are higher [because of the 25 percent administrative and welfare levy] they still prefer the new system because it operates more smoothly." 36

As of 1992, committees had been established in thirteen major urban markets covering 8,000 workers, and total committee receipts amounted to Rs. 13 million.³⁷ Ten thousand additional workers were slated to be incorporated into the scheme in 1993. The Headload Workers Scheme has been so successful that a government committee has recommended its extension to all casual labor markets (GOK, State Planning Board 1990).

In a relatively short period of time the headload sector has progressed from a classic case of an informal, unorganized spot market in labor, embedded in patron-client networks, to an open, competitive but conflictual and disorganized exchange between local power groups, to a formalized and bureaucratized exchange relation governed by tripartite corporatist institutions. In the absence of institutional and legal moorings, and rooted as it was in local conditions, militancy originally took a particularly disruptive form. With labor enjoying strategic control over the labor process and capital having no exit option, the returns on militancy were high. Under these conditions of unbounded conflict, the logic of collective action exacted high social and economic costs. This ultimately necessitated the intervention of the state, which through legislative and administrative reforms secured an institutional basis for formal contractual relations. State action was facilitated by the support of the CPM, which was eager to bring rogue local unions into line.

Formalization and bureaucratization have allowed for the institutionalization of labor gains while reducing externalities. Transaction costs have been reduced. Payoffs to intermediaries, down time resulting from disputes, and the costs of negotiation have been replaced by a relatively streamlined administrative system. Because the scheme is entirely self-financing (all administrative costs are covered by levies), the state exchequer is spared further strain.³⁸ Moreover, the forced savings and deferred wages of the welfare fund guarantee long-term welfare benefits generally reserved for the or-

ganized sector.

State intervention has thus helped secure collective goods that were beyond the logic of the previous system of labor relations. But the rationalization of the headload sector does not simply follow from the penetration of a modern bureaucratic state. It was made possible by mobilization from below. The pooling system through which workloads are allocated is thus little more than an administrative revamping of the market barriers the unions had secured. Implementation of the scheme, moreover, relies entirely on the organizational capacity of the unions. The Chief Executive of the Welfare Board was categorical on this point:

There is no possible way for the Labour Department to supervise the working of the scheme at the field level. We have neither the financial nor the administrative capacity. The scheme can only work if it is actually implemented by the workers.³⁹

5. CONCLUSION

The "synergy" of state and class mobilization in Kerala has produced two forms of social capital. The first underwrote the provision of redistributive goods; the second facilitated class coordination.

Mobilization along class lines and democratic institutions triggered a virtuous cycle of collective action. Under the leadership of a Communist Party that was committed to building a broad-based coalition of lower class groups, urban workers and the rural poor agitated, built associations, and won elections. The instrumental and universalistic character of the movements' demands invited effective state intervention. The mobilizational resources of lower class groups combined with the legal and bureaucratic capacity of the state to successfully transform the institutions and property relations of a traditional, vertically organized social structure. With this came the "deepening" of democratic structures (O'Donnell 1993) as the leveling of social forces (in particular the demise of traditional rural elites) saw representation and engagement replace patronage and dependency. The degree to which state-society interactions promoted the expansion of "public legality" and associationalism is

most dramatically illustrated by the successful mobilization of the unorganized sector. The most visible product of this synergy between a society mobilized along class lines and a democratically accountable state has been the efficient and comprehensive provision of social services and the development of human capital resources.

The "embedded autonomy" (Evans 1995) of the state, however conducive to social development and redistributive reforms, was by its very nature antithetical to the forces of the market in a dependent economy. Financial capital is mobile; social capital is not. The labor movement was faced with the vexing dilemma that too much collective action in an economy governed by private investment is a negative-sum game.

The decline of militancy and the emergence of class compromises, however, suggest that the labor movement has come to terms with the limits of militancy. In the case of severe economic crises social actors in a poorly institutionalized democracy will resort to disaggregated strategies and seek to "privatize" the state, making the formulation and pursuit of long-term collective goals all the more difficult (O'Donnell 1993). In India, the increasing fragmentation of the polity, the much discussed "deinstitutionalization" of the Congress Party, and the resurgence of electoral alliances rooted in parochial loyalties appear to be a case in point. In Kerala, the disciplined and programmatic character of the party, rooted as it is in the solidaristic politics of class, has allowed for a more strategic and aggregated response to the challenge of reconciling redistribution with growth. In the factory sector, organized labor has embraced increased productivity as the basis for a positive-sum coordination of class interests. In the unorganized sector, the organizational capacity of unions has been combined with bureaucratic intervention to formalize conditions of work in an effort to stabilize labor relations and provide a more secure investment climate.

The rules of the game that facilitated such strategic actions are a product of the state's relationship to organized social forces. State actions gave institutional expression to the interests of organized labor, facilitating what Cohen and Rogers call an "artful democratic politics of secondary associations" in which "public powers are used to encourage less factionalizing forms of secondary associations" (1992: 395). Specifically, this is reflected in the extent to which the

industrial relations system in Kerala favors collective bargaining between organized interest groups and tripartite mediations over the "involuted pluralism" and compulsory adjudication of the national labor scene. But how has the interaction of the state with organized working-class interests specifically contributed to increasing the likelihood of positive-sum forms of class cooperation?

First, this interaction has created well-defined interlocutors with whom the state can formulate and negotiate policy initiatives. Second, in its welfare capacity the state has created the material basis for class compromise by providing basic public goods and social protection to the most vulnerable sections of society. Third, a wide range of state institutions, from pension funds to welfare boards, labor courts, IRCs, minimum wage committees, and so on, have created both the distributional mechanisms as well as the formally defined and legally enforced procedures through which conflicting interests can be mediated. The cycle of iterated negotiations between these groups has made the interdependence of interests more transparent and outcomes less uncertain. Overall, this has increased the possibilities for class cooperation.

Whether this will secure future economic growth remains an open question, particularly in light of Kerala's dependence on both the national and world economy. Nonetheless, what is certain is that the synergy between working-class mobilization and state capacity has directly contributed to building the political and institutional foundations most likely to effectively "manage" the contradictions of democratic capitalist development.

NOTES

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1. The retention rate in primary schools—the percentage of children having

entered primary school who complete the fifth grade—is 82 percent in Kerala, compared to 26 percent for India (Weiner 1991: 174).

- 2. In 1989–90, per capita expenditures on health and education in Kerala were 36 percent higher than the average for all states (GOK, *Kerala Budget in Brief*, 1992: 59).
- 3. Jeffrey notes that as early as the 1950s, "Education was a commodity that governments could take credit for distributing—or be blamed for withholding" (1992: 55).
- 4. The split was occasioned by the decision of the CPI to favor a broad nationalist alliance with the national bourgeoisie. The CPM categorically rejected cooperation with the Congress and captured most of the Communist mass base that same year by winning 21 percent of the popular vote, compared to 8.1 percent for the CPI, in mid-term legislative elections. In the 1987 elections, which were won by the CPM-led Left Democratic Front, which includes the CPI, the results were almost identical (22.84 percent and 8.07 percent respectively).
- 5. The power of Communist unions in the rural sector is virtually unchallenged. In the industrial sector, the CPM-affiliated Communist labor federation, the Centre of Indian Trade Unions (CITU), is the largest (415,000) and most disciplined in the state. The Congress-affiliated Indian National Trade Union Conference (INTUC) is smaller and more loosely structured. Nonetheless, it is present in most large factories, and as one party leader noted, "because of the influence of the CITU, only in Kerala is the INTUC a "front organization for the Congress" (interview, A. C. Jose, 7 July 1992, Ernaukulam).
- 6. The classic statement of this theory is, of course, Huntington's (1968). Kohli (1987) has given this argument new life and a new twist by arguing that the success of the CPM's attack on poverty in West Bengal is a function of regime characteristics—its organizational coherence and its long tenure in power (since 1977).
- 7. For a comprehensive discussion see the special issues of *Economic and Political Weekly*, 1–8 September and 15 September 1990.
- 8. In 1991, there were 1.62 million workers in Kerala's organized sector (all nonagricultural enterprises with ten or more workers), or 27 percent of the nonagricultural workforce (CMIE 1993: table 9.6). Of this total, the registered factory sector accounted for 0.37 million workers (GOK, State Planning Board, *Economic Review*, 1992).
- 9. It is also worth noting that efforts to formalize the informal sector in Kerala and bring more workers under the purview of the law run counter to the global trend of increasing informalization.
- 10. Interview, 3 April 1992, Trivandrum.
- 11. Calculated from CMIE (1993: table 8.10).
- 12. Interview, 12 November 1992, Ernaukulam.
- 13. Interview, 22 November 1992, Ernaukulam.
- 14. In 1962–63 out of 141 work stoppages, 121 were precipitated by the bonus

issue (Nair 1973: 85).

- 15. As one industrialist put it, "Unions didn't understand that there is a profitwages nexus. Profits were seen as the concern of management."
- 16. At the national level, the Bonus Act (1965), while including provisions for productivity linking, ties bonuses to profits. A series of case studies and commentaries by industrialists and trade unionists collected in Suri (1981) indicates that only a small percentage of factories in India have adopted effective wage-productivity schemes. The existing practice of negotiating bonus payments on a yearly basis is generally viewed as being the most common cause of industrial conflict.
- 17. Interview, 12 November 1992, Ernaukulam.
- 18. CPM Chief Minister E. K. Nayanar, having noted the recent period of labor peace, gave this sales pitch at a conference of industrialists in Bombay: "Let us work together on the principles of fair wages and fair profits," reassuring prospective investors that "our Labour Department would act swiftly in case of any dispute" (cited in Herring 1991: 7–23).
- 19. Interview, 19 November 1992, Ernaukulam.
- 20. It is too early to tell if class compromise will successfully underwrite sustained accumulation. A poorly developed industrial base, the geographical concentration of national capital in historical growth centers and lingering perceptions of Kerala as a bastion of labor militancy present formidable barriers. There are, however, some positive indications. In his analysis of total factor productivity in Kerala's registered factory sector during 1976–87 Arun (1992) found a growth rate of 7.11 percent, which was significantly higher than the national figure of 3.9 percent. Capital, moreover, would appear to be responding. After a two-decade-long drought of private investments, a number of high-profile large business houses have recently invested in Kerala, most notably the Tatas, Birlas, and BPL group.
- 21. Calculated from CMIE (1993: tables 9.5 and 9.6).
- 22. The lower figure is from the 1981 census, the higher figure from a Labour Ministry study that included children paid in kind as well as in cash (Weiner 1991: 21).
- 23. Breman actually makes the claim that the informal sector has persisted because of state intervention: "Under government surveillance, unfree labour and capitalist production relations are quite compatible one with the other" (Breman 1993: 189).
- 24. Drawing on CSO National Accounts Statistics, Sen has calculated that income per worker in India in 1984–85 (in 1970 prices) in the unorganized sector was Rs. 1,324, compared to Rs. 6,300 in the organized (private) sector. The gap, moreover, has been steadily increasing with unorganized wages falling from 26.6 percent of organized wages in 1960–61 to 21.0 percent in 1984–85 (Sen 1991: table 3). In a detailed survey of sixteen occupations in Bombay, Deshpande found that factory workers earned Rs.477 per month compared to Rs. 280 for small sector workers and Rs.181 for casual (unorganized) workers (1983: 26).

- 25. There are no reliable official data on levels of unionization in this sector (only unions in the organized sector submit official returns). There is general agreement that Kerala is the only state in India where a sizeable section of workers in this sector have been unionized (Singh 1991; Kannan 1992). Figures obtained from the CITU for the district of Trivandrum, however, provide a rough measure. Although nominally an industrial trade union federation, over 80 percent of registered members were in the unorganized sector. Out of a total of 63,031 members, almost two-thirds were headload, construction, or coir workers.
- 26. GOI, Office of the Registrar General and Census Commission (1988: table 3:4). Figures given are the unweighted average of male and female rates.
- 27. Indian Express (Cochin), 22 September 1992.
- 28. Interview with Thomas Isaac, Chairman of the Task Force on the Coir Industry, 10 November 1992, Trivandrum.
- 29. The use of the term headload worker, *chumattu thozhilali*, is itself an explicit rejection of the low social status associated with the term coolie.
- 30. This pattern, as one IAS officer suggested to me, probably has its historical roots in the black marketeering of World War II, when headload workers doubled as hired hands for merchants who engaged in illicit trading activities.
- 31. "Some sections of these headload workers were holding the business community to ransom by demanding unreasonable wages and not allowing anybody else to work in their areas of operation, especially in the export processing zones and in huge godowns [warehouses], where lightening strikes brought all work to a standstill for days. Export orders have been known to be canceled as a result of expired deadlines and the entire economy of the State was affected adversely by this section of workers" (*Indian Express* [Cochin], 23 June 1993).
- 32. While wages in the rural sector are not as high, they are nonetheless closely linked to urban rates (Krishnan 1991).
- 33. Following a series of strikes in Bombay, headload workers (hamalis) came under a 1968 law designed to formalize work conditions. A "milestone in the jurisprudence on informal sector labour in West India . . . in practice, the regulation of head loaders' labour was probably fated to be short, undoubtedly linked to the absence of a strong trade union movement" (Breman 1993: 160). Breman specifically notes that union involvement in Kerala has made regulation of the industry effective.
- 34. The scheme directly addresses the principal demand of workers in the unorganized sector. In the words of one party official: "As rightly characterized by the headload workers' movement a worker in the informal sector is a *nathan illatah thozhilali*—i.e. a worker without a master or a citizen disowned by the society. This movement had declared its primary objective to be to discover or identify a master for the headload worker" (K. Vijayachandran, interview, 6 July 1992, Ernaukulam).

- 35. In interviews a number of CITU officials candidly acknowledged that the scheme was a means to tame its affiliated local unions, which had become "unruly" and "irresponsible."
- 36. Interview, P. P. Thomas, 20 November 1992, Ernaukulam.
- 37. All figures are from the Finance Officer and the Chief Executive of the Kerala Headload Workers Board, Ernaukulam, 14 July and 18 November 1992.
- 38. Not all workers see the new bureaucracy as an improvement. One commented that "the entire staff are maintained with the sweat and tears of the workers." It should be pointed out that the Rs. 2,500 monthly salary of headload workers in the busier markets is significantly higher than the pay for lower division clerks.
- 39. As originally designed, the labor pools were to be directly administered by staff members. This system proved too expensive and lacked flexibility. Elected pool leaders have proven to be the linchpin of the pool system, acting as intermediaries between the pools and the committees.

REFERENCES

- Arun, T. G. 1992. "Growth and Structural Changes in the Manufacturing Industries of Kerala: 1976–87." M.Phil. thesis, Centre for Development Studies, Trivandrum.
- Bates, Robert. 1989. Beyond the Miracle of the Market: The Institutional Foundations of Agrarian Development in Kenya. Cambridge: Cambridge University Press.
- Brass, Paul R. 1990. *The Politics of India since Independence*. Cambridge: Cambridge University Press.
- Breman, Jan. 1993. "A Footloose Proletariat: Informal Sector Labour in the Rural and Urban Landscape of West India." Amsterdam. Manuscript.
- Cameron, David. 1984. "Social Democracy, Corporatism, Labor Quiescence, and the Representation of Economic Interests in Advanced Capitalist Democracies." In Order and Conflict in Contemporary Capitalism, ed. John Goldthorpe, pp. 1, 43–180. Oxford: Oxford University Press.
- CMIE (Centre for Monitoring Indian Economy). 1993. *Basic Statistics Relating to the Indian Economy*, vol. 2. Bombay: CMIE.
- Cohen, Joshua, and Joel Rogers. 1992. "Secondary Associations and Democratic Governance." *Politics and Society* 20, 4: 393–472.
- Deshpande, L. K. 1983. Segmentation of Labour Market: A Case Study of Bombay. Bombay: Orient Longman.
- Evans, Peter. 1995. Embedded Autonomy: States and Industrial Transformation. Princeton: Princeton University Press.

- Evans, Peter, and Dietrich Rueschemeyer. 1985. "The State and Economic Transformation: Toward an Analysis of the Conditions Underlying Effective Intervention." In *Bringing the State Back In*, ed. Peter Evans, Dietrich Rueschemeyer, and Theda Skocpol. New York: Cambridge University Press.
- Fox, Jonathan. 1994. "The Difficult Transition from Clientalism to Citizenship." World Politics 46, 2 (January): 151–84.
- Franke, Richard, and Barbara Chasin. 1989. *Kerala: Radical Reform as Development in an Indian State*. San Francisco: Food First. October. Food First Development Report No. 6.
- Frankel, Francine. 1978. *India's Political Economy 1947–1977*. Princeton: Princeton University Press.
- GOI (Government of India), Labour Bureau. Various years. *Indian Labour Year-book*. Simla: Government Printer.
- . 1984. Report on the Working of the Minimum Wages Act 1948, for the Year 1984. Simla: Government Printer.
- GOI, Ministry of Labour. 1991. *Report of the National Commission on Rural Labour*, vols. 1 and 2. New Delhi: Government Printer.
- GOI, Office of the Registrar General and Census Commission. 1988. *Analysis of Work Force in India*. New Delhi: Government Printer. Occasional Paper No. 8.
- GOK (Government of Kerala). 1992. Kerala Budget in Brief. Trivandrum.
- GOK, Labour Department. 1990. Enforcement of Minimum Wages Act 1948 in Kerala. Trivandrum.
- GOK, State Planning Board. 1990. Eighth Five Year Plan 1990–95—Report of the Steering Committee on Industry and Mining. Trivandrum.
- . 1991. Report of the Task Force for Review of Implementation of Plan Schemes under the Industries Sector. Trivandrum.
- ———. 1992. Economic Review. Trivandrum.
- Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." American Journal of Sociology 91, 3: 481–510.
- Harriss, John, K. P. Kannan, and Gerry Rodgers. 1990. *Urban Labour Market Structure and Job Access in India: A Study of Coimbatore.* Geneva: International Labour Organization.
- Herring, Ronald. 1983. Land to the Tiller: The Political Economy of Agrarian Reform in South Asia. New Haven, Conn.: Yale University Press.
- ———. 1991. "Contesting the 'Great Transformation': Land and Labor in South India." Ithaca, N.Y.: Cornell University, Department of Government. Manuscript.
- Heuze, Gerard. 1990. "Workers' Struggles and Indigenous Fordism in India." In Work for Wages in South Asia, ed. Mark Holmstrom. New Delhi: Manohar.

- Huntington, Samuel. 1968. *Political Order in Changing Societies*. New Haven, Conn.: Yale University Press.
- Jeffrey, Robin. 1992. *Politics, Women and Well Being: How Kerala Became "a Model."* Houndmills, Basingstoke, Hampshire: Macmillan Press.
- Kannan, K. P. 1990a. "Kerala Economy at the Crossroads?" *Economic and Political Weekly*, 1–8 September, pp. 1951–56.
- ——. 1990b. "State and Union Intervention in Rural Labour: A Study of Kerala, India." New Delhi: International Labour Organization. Asian Regional Team for Employment Promotion.
- ———. 1992. "Labour Institutions and the Development Process in Kerala, India." Trivandrum: Centre for Development Studies. Mimeo.
- . 1994. "Levelling Up or Levelling Down? Labour Institutions and Economic Development in India." *Economic and Political Weekly*, 23 July, pp. 1938–45.
- Kohli, Atul. 1987. The State and Poverty in India. Cambridge: Cambridge University Press.
- Krishnan, T. N. 1991. "Wages, Employment and Output in Interrelated Labour Markets in an Agrarian Economy: A Study of Kerala." *Economic and Political Weekly*, 29 June, pp. A82–A96.
- Kumar, Mohana S. 1989. "Industrial Disputes in India 1951–1985." M.Phil. thesis, Centre for Development Studies, Trivandrum.
- Menon, S. C. S. c. 1979. "Linking Annual Bonus to Production/Productivity: Employees' View Point." Cochin. Mimeo.
- Mies, Maria. 1982. The Lace Makers of Narsapur: Indian Housewives Produce for the World Market. London: Zed Press.
- Migdal, Joel S. 1988. Strong Societies and Weak States: State Society Relations and State Capabilities in the Third World. Princeton, N.J.: Princeton University Press.
- Nair, K. Ramachandran. 1973. *Industrial Relations in Kerala*. New Delhi: Sterling Publishers.
- ———. 1994. "Trade Unionism in Kerala." In *Kerala's Economy*, ed. B. A. Prakash. New Delhi: Sage Publications.
- O'Donnell, Guillermo. 1993. "On the State, Democratization and Some Conceptual Problems: A Latin American View with Glances at Some Postcommunist Countries." World Development 21, 8: 1355–59.
- Oommen, M. A. 1979. "Inter State Shifting of Industries: A Case Study of South India." Trichur: University of Calicut. Manuscript.
- Przeworski, Adam. 1985. Capitalism and Social Democracy. Cambridge: Cambridge University Press.
- Putnam, Robert. 1993a. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, N.J.: Princeton University Press.

- . 1993b. "The Prosperous Community: Social Capital and Public Life." American Prospect (Spring): 35–42.
- Ramaswamy, E. A. 1983. "The Indian Management Dilemma: Economic vs. Political Unions." *Asian Survey* 23, 8: 976–90.
- . 1984. *Power and Justice: The State in Industrial Relations.* Delhi: Oxford University Press.
- Rudolph, Lloyd I., and Susan Hoeber Rudolph. 1987. In Pursuit of Lakshmi: The Political Economy of the Indian State. Chicago: University of Chicago Press.
- Sankaranarayanan, K. C., and M. Meera Bhai. 1994. "Industrial Development of Kerala—Problems and Prospects." In *Kerala's Economy*, ed. B. A. Prakash. New Delhi: Sage Publications.
- Schmitter, Philippe C. 1985. "Neo-Corporatism and the State." In *The Political Economy of Corporatism*, ed. Wyn Grant. New York: St. Martin's Press.
- Sen, Abhijit. 1991. "Shocks and Instabilities in an Agriculture-Constrained Economy: India, 1964–85." In *Rural Transformation in India*, ed. Jan Breman and Sudipto Mundle. Delhi: Oxford University Press.
- Singh, Manjit. 1991. Labour Process in the Unorganised Industry: A Case Study of the Garment Industry. New Delhi: Manohar Publications.
- Stepan, Alfred. 1978. The State and Society: Peru in Comparative Perspective. Princeton, N.J.: Princeton University Press.
- Suri, G. K., ed. 1981. *Linking Bonus with Productivity*. Papers and Proceedings of a National Tripartite Seminar. New Delhi: Sri Ram Centre for Industrial Relations and Human Resources.
- UNDP (United Nations Development Programme). 1994. *Human Development Report, 1994*. New York: Oxford University Press.
- Vijayasankar, P. S. 1986. "The Urban Casual Labour Market in Kerala: A Study of Headload Workers in Trichur." M.Phil. thesis, Centre for Development Studies, Trivandrum.
- Weiner, Myron. 1991. *The Child and the State in India*. Princeton, N.J.: Princeton University Press.
- World Bank. 1994. World Development Report 1994: Infrastructure for Development. New York: Oxford University Press.

CROSSING THE GREAT DIVIDE: COPRODUCTION, SYNERGY, AND DEVELOPMENT

Elinor Ostrom

Summary: Coproduction is a process through which inputs from individuals who are not "in" the same organization are transformed into goods and services. Two cases are presented—one from Brazil and one from Nigeria—where public officials play a major role. In Brazil, public officials actively encourage a high level of citizen input to the production of urban infrastructure. In Nigeria, public officials discourage citizen contributions to primary education. The third section of the paper provides a brief overview of the theory of coproduction and its relevance for understanding the two cases. The last section addresses the implications of coproduction in polycentric systems for synergy and development.

1. HYPOTHETICAL DIVIDE

In his introductory essay for this symposium, Peter Evans identifies a strong divide between "a market-based logic of development and traditional theories of public administration" (Evans 1996). He identifies Judith Tendler's concept of blurred public-private boundaries and my work on coproduction as "radical" and potentially offending to "everyone's sense of propriety":

Public Administration purists see it as threatening the insulation necessary for clearheaded decisions that are in the public interest. Market advocates see it as hopelessly muddying the logic of individual incentives and rational resource allocation (Evans 1996).

Since I think the great divide between the Market and the State or between Government and Civil Society is a conceptual trap arising from overly rigid disciplinary walls surrounding the study of human institutions, I am delighted to be considered a radical. If trying to remove artificial walls surrounding disciplines is offensive, I regret assailing individual senses of propriety. I proceed on the assumption that contrived walls separating analysis of potentially synergetic phenomena into separate parts miss the potential for synergy (see V. Ostrom 1995). By developing more fully the theory of coproduction and its relevance to the study of synergy and development, I hope to change the views of social scientists toward the hypothetical "Great Divide."¹

My own approach to breaching the great divide utilizes the concept of "coproduction." By coproduction, I mean the process through which inputs used to produce a good or service are contributed by individuals who are not "in" the same organization. The "regular" producer of education, health, or infrastructure services is most frequently a government agency. Whether the regular producer is the only producer of these goods and services depends on both the nature of the good or service itself and the incentives that encourage the active participation of others. All public goods and services are potentially produced by the regular producer and by those who are frequently referred to as the client. The term "client" is a passive term. Clients are acted upon. Coproduction implies that citizens can play an active role in producing public goods and services of consequence to them.

To provide grist for the discussion of coproduction in section 3, I discuss two experiences with coproduction in developing countries. One is based on excellent, detailed case materials by other scholars, and the second is based on my own and colleagues' fieldwork. In both cases, public officials play a major role: in the first case, public officials actively encourage an unusually high level of citizen input to the production of public goods. In the second case, the actions of public officials discourage citizen contributions. The first occurs in a somewhat unlikely sector: peri-urban water and sanitation. The second occurs in a sector where one would hope to find relatively high levels of coproduction: primary education.² In section 3 of this paper, I present a brief overview of the theory of coproduction and use it to explain some of the patterns of relationships discussed in section 2. In the last section of the paper, I address the implications of coproduction for the study of synergy and development.

2. EMPIRICAL CASES

(a) ACTIVATING COPRODUCTION OF URBAN INFRASTRUCTURES IN BRAZIL

Constructing major infrastructures, especially water and sanitation works in urban and peri-urban areas, is not where one would first look to find important, replicable examples of effective coproduction in developing countries.³ Because of the technical expertise needed to design effective public works, the considerable economies of scale present in large-scale construction projects, and the difficult legal problems of acquiring rights-of-way across private lands, most analyses of infrastructure have presumed that the provision of infrastructure was best performed in the public sector (but see World Bank 1994 and E. Ostrom, Schroeder, and Wynne 1993). The actual construction of infrastructure facilities has usually been undertaken by public agencies themselves or arranged for by these agencies through contracts with large-scale, private for-profit contractors. The opportunities for illegal side payments in this form of provision and production are substantial.

This system has not, however, been successful in providing safe water and adequate sanitation to citizens living in developing countries even after a decade (1981-90) devoted by the international donor community to enhancement of drinking water supply and sanitation. While the percentage of urban dwellers receiving water and sanitation increased during 1980-90, the absolute number of urban dwellers without adequate sanitation rose by about 70 million people (Briscoe and Garn 1994: 3). In a few large cities in developing countries, such as Karachi and Christy Nagar in Pakistan, and in Brasilia, Recife, Natal, and several smaller urban areas in Brazil, the number of housing units connected to a low-cost waterborne sanitation system has, however, been growing steadily throughout the 1980s (Watson 1995: 10-12). In Brazil alone, more than 75,000 connections serving 370,000 residents have been made to this type of "condominial system"—so called since it is like a system that might be designed for a co-owned apartment building. The living units exist on a horizontal plane, however, rather than in vertical relationships to one another.

The Recife-based Brazilian engineer Jose Carlos de Melo identified in the 1980s a number of institutional factors which, he argued,

extreme financial constraints. First, centralizing infrastructure provision at the national level kept municipalities from access to decision-making responsibilities and resources in this area. Second, excessively high engineering standards set in a capital city were inappropriate, de Melo argued, for bringing better service to poorer regions and neighborhoods. Third, citizens were themselves helpless to do anything about squalid conditions even though they possessed skills and time that could be applied toward solving aspects of the problems they faced. While the proportion of the Brazilian urban population receiving water had increased from 55 percent to 83 percent during the decade of the 1980s, the percentage connected to sewerage services rose from only 22 percent to 37 percent (Watson 1995: 13). Moreover, most of those served were in the wealthier neighborhoods.

The reform plan initiated by de Melo combined an innovative approach to the design of engineering works combined with an active role for citizens.⁴ Instead of designing all sanitation systems with large cast-iron pipes sunk deep under urban streets at high per household costs, de Melo proposed much smaller feeder lines that can run through urban blocks in either the back yards, front yards, or sidewalks of those being served. By placing these feeder lines away from heavy traffic, the costs of constructing the feeder section are about one-fourth those of conventional designs. Local residents have the skills needed to dig and maintain the feeder lines. The condominial feeder lines are then connected to larger trunk lines that are constructed to regular engineering standards, located under urban streets, and lead to treatment plants.

A key part of this program is the activation of local citizens to participate from the very start in the planning of their own condominial systems. To accomplish this goal, project teams first set up a series of neighborhood meetings where a general overview of the process, opportunities, and costs of a condominial system is presented. Then, meetings are held in each block, where detailed discussions center on the choices that residents will have to make, their implications in regard to cost, and in regard to the maintenance of the system. Block meetings are called off if half of the households on a block are not in attendance to ensure that there is wide availability of relevant information and good discussion among those living on a block.

All of this effort to involve citizens is directed, however, toward facilitating their making real decisions in a process of negotiation among neighbors and with project personnel. Residents decide on the layout of the system they want, which affects the cost of the system and the charges that they will pay. Arriving at these decisions can take considerable time if some neighbors want the less expensive (but more intrusive) backyard layout while others want the more expensive (and less intrusive) front yard or sidewalk options. Much of the costs of determining and achieving rights-of-way agreements are borne by residents themselves. Residents also develop a plan for constructing the feeder lines, thus allowing for common agreement to be achieved about how diverse participants would contribute to maintenance. Before construction begins, residents sign a formal petition requesting a condominial system and committing themselves to the payment of the fee agreed upon during negotiations. The first blocks in an area may take from four to six months to gain the needed agreement, but these serve as demonstration projects for others to see and understand the process. The process speeds up once residents can see how alternative designs work and talk with others who have successfully obtained services. Condominial project planners have learned that they cannot restrict the planning process to only those issues that planners think should be on the agenda. Residents in each city have raised different issues that were crucial to them. As Watson concludes:

The evolution of what is negotiated and what is not reflects both project planners' refinements of the process of providing residents with choices, and the ability of residents and neighbourhood associations to push for their concerns with service providers. The lesson is that there is no "right" way to approach projects, but that each project's design, implementation strategy, and management arrangements evolve during the course of give-and-take negotiations between the project team and residents (1995: 23).

The overall performance of these systems has varied from project to project and depends on both the success of the negotiation process to achieve a plan that neighbors can really implement and the construction of high-quality trunk lines arranged for by public agencies. Watson (1995) reports that medium-sized local firms who

contract with a municipal- or state-level water agency built better performing trunk systems. A reputation for high-quality work is important to a local contractor and may be of little concern to a large firm (with political connections to national leaders) who may never return to that locality.

Studies of the performance of condominial systems point to difficulties in all stages of providing, producing, and maintaining these systems. Some systems perform at low levels.⁵ The extensive involvement of citizens requires time and effort on the part of public officials. Some neighborhood groups need more effort from facilitators than others to help them learn how to keep up their commitments. In addition, the problems of monitoring the performance of those who construct trunk lines do not disappear even though the length of the trunk lines is substantially reduced. On the other hand, many of these systems have been successful, and have dramatically increased the availability of lower cost, essential urban services to the poorest neighborhoods of Brazilian cities. Similar systems are now completed or under construction in Kenya, Paraguay, and Indonesia (Watson and Jagannathan 1995).

While the results are impressive and similar efforts to encourage coproduction are being established in other parts of the world, the condominial system depends on three difficult challenges: (i) the organization of citizens and their fulfillment of promises to undertake collective action (what Judith Tendler 1995 refers to as social capital outside the government), (ii) good teamwork within a public agency (what Tendler calls social capital within the government), and (iii) effective coordination between citizens and an agency. In many regards, the citizens in a condominial system face a similar set of problems to those of any group of potential beneficiaries facing the problem of producing a collective benefit. The rich literature on successful and unsuccessful efforts to organize to produce public goods or common-pool resources focuses on closely related problems.6 Similarly, the literature on principal-agent relationships and on team production focuses on the second task.⁷ Less attention has been paid, given the gulf perceived between public and private spheres, to the problem of relating citizen and official inputs.8 Watson stresses the possibility that what citizens do improves the performance of what agencies can do:

Good agency performance results not from "strengthening" public sector agencies, but from increasing their responsiveness to customers. . . . The condominial system activates residents by engaging them during project implementation when service level, layout, maintenance arrangements, and cost recovery mechanisms are negotiated. This fosters an active, vocal constituency that puts in motion the accountability mechanisms needed for good agency performance (1995: 49).

Making these systems work effectively over the long run requires as much change in the attitude and operational routines of public agencies as it requires input from residents in all phases of the project.⁹

(b) THWARTING COPRODUCTION OF PRIMARY EDUCATION IN NIGERIA

A marked contrast exists between the condominial systems in Brazil and what frequently happens in other developing countries. To provide a more typical example of how the actions of public officials at the heads of state agencies and national governments discourage effective participation of citizens, even in those sectors where such participation could be most efficacious, I draw on fieldwork conducted in 1991 in Nigeria. We visited schools and health clinics in four Local Government Authorities (LGAs) in western, eastern, central, and northern Nigeria; talked with many school teachers and health workers; and dug into as many records as we could find about the provision and production of these services. Here I limit my focus to a review of our findings related to the coproduction of primary education.

Until the colonial period ended in Nigeria, primary schools were largely provided by missionary and philanthropic organizations. Schools were normally constructed by local villages and run by a religious organization. Local villagers frequently provided housing and food for the teachers at a local school and considered it to be "their" school. They usually had some voice in decisions about the retention of teachers based on their views of teacher effectiveness. During the 1970s, in an era of centralized military rule, all mission schools throughout the country became public schools even though they continued to carry their original name.

In 1976, in a dramatic move, the Federal Military Government launched an ambitious nationwide program of universal primary education. Formal enrollment in primary schools leapt from 6.2 million students in 1975 to 8.1 million students the next year and continued to grow rapidly until 14.7 million students were formally enrolled in 1983. Formal enrollment then fell for four years in a row until it reached 11.5 million in 1987 (estimated to be 77 percent of the school-age population). In 1990, enrollment was up to 13.6 million students, still not at the level it had been seven years previously (Ayo et al. 1992: 30–31, table 5.1). The national government provided full grants to finance education during 1976–78.

The first oil shocks led the national government to demand that state governments begin to shoulder part of the cost of education. The national government stopped funding primary education in 1981. The World Bank estimated that per-pupil expenditures dropped from \$92 in 1970, to \$60 in 1974, \$48 in 1981, and \$55 in 1983 (Word Bank 1988: 141, table A- 17, in constant 1983 dollars). The first year that structural adjustment policies would have been felt was 1987, when expenditures on public education fell from \$848 million in 1986 to \$680 million. In 1988, the national government assumed responsibility for funding a portion of expenditures on primary education. In a sudden turnaround in 1991, it announced a decentralization program making local governments fully responsible for financing and managing local schools.

Thus, throughout the 1970s and 1980s, turbulent change characterized national, state, and LGA policies related to the organization of primary education. Early claims were made that neither local nor state governments were capable of providing and producing adequate levels of education, and that a massive infusion of funds from the national level was essential. As the costs of carrying out such policies became apparent, however, diverse strategies were adopted to shift the costs through changes in funding formulae. Changes in financial responsibility carried with them dramatic changes in who hired teachers; what standards were to be used in retaining, transferring, or promoting teachers; and exactly how teachers were to be paid. At several junctures, teachers waited for long periods of time to receive their paychecks. Parents were told at one point that they should not have to pay for education, only to have school fees reestablished a short time thereafter. Free books were provided in one period but not

in the next. Teachers had very little input to such decisions and local villagers even less. All policy switches appeared in a top-down proclamation by the national government, acting alone, or after some consultation with state governments.

In all of the villages we visited, informal associations of villagers were actively engaged in community projects such as the maintenance of a road, the repair of a school building, and/or the construction of a community center. In many cases, the successful "sons and daughters" of the village returned each year to participate in general planning of improvements that could be made, and they sent funds to purchase supplies that were needed to undertake the project. Some projects would take many years to complete because of limited resources, but all of the villagers were proud to tell us of the projects they had undertaken. In all of the villages, therefore, it was possible to mobilize citizen effort for community affairs and the coproduction of goods and services,

In each of the villages we found teachers wanting to increase the skills and knowledge of their students but facing immense problems in trying to create an effective learning environment. All of the schools suffered from a paucity of books and teaching materials. Most of the teachers had the minimal certification necessary for teaching at a primary school, but many of them hoped they could find ways of obtaining further training or higher educational degrees themselves. Most of them, however, did not feel that they had any voice in making decisions either about how they could improve education in the school to which they were assigned, or about their own career development. They all faced immensely difficult financial constraints exacerbated by the recent and major devaluation of their currency on top of their need to pay for their own housing and to try to find land where they could grow some of their own food.

While differences always exist among administrative structures, all four of the LGAs we visited were relatively similar in regard to the type of top-down decision-making that characterized them. Officials in the LGA headquarters worked in isolation from what was going on in the villages. While vehicles were parked in the LGA lot, funds were not available for gas and maintenance. Traveling to the villages was a rare adventure for LGA officials. Since decisions from the state and national government came arbitrarily, issuing the same kind of top-down orders to local schools was the

accepted way of handling key decisions. Village administration is not considered part of the formal structure of governance even though substantial activities are organized within each village and carried out by the villagers themselves. The four villages included in our study varied substantially in the support they provided to primary education even though we could find no evidence of major difference at the LGA level.

Let us first discuss two villages located in the western and eastern parts of Nigeria where villagers provided a higher level of support to their primary schools than the two villages located in the central and northern regions. The two schools in Itagunmodi village, located in the Atakunmosa LGA in Oyo State,11 were in the best condition of all of the schools we visited during our study. The teachers also had the highest morale. Itagunmodi, a village of about 200 households, is located on a barely motorable road about 40 minutes from Osu, which was the headquarters of the LGA. Parent-Teacher Associations had remained active at each school since 1970, when the formerly missionary schools became public schools. The buildings themselves were in good repair. While in the lower grades, two or three students shared a desk, there were desks in all classrooms, and upper-grade students each had their own desk to use. Teachers at both schools indicated that all eligible students attended primary school and that parents did not try to keep children at home. School records were available showing the number of students completing sixth grade and the rate of success in passing the state-administered Primary School Leaving Certificate. Since 1979, 85 percent of the students at the Methodist School and 82 percent of those at the Nawarudine School had obtained their certificates.

This excellent record was achieved in a setting where few parents were able to purchase books for their children. Most classrooms had no more than three or four books per classroom for classes that averaged seventeen pupils in Nawarundine and twenty-eight pupils in the Methodist School. The problem of unavailable textbooks was greatly exacerbated by the fact that the list of textbooks authorized by the Ministry of Education changed every year. Students from one class could not, therefore, pass books onto the next class to allow for a slow accumulation of books for each class. Further, teachers were confronted with new books to master every year. Given the limited teaching materials, teachers found that they had to dig into their own

diminishing salaries to provide essential charts and other teaching supplies.

Illustrative of the formal administrative structure that teachers faced is their lack of control over where they would be assigned to teach. The headmaster of the Nawarudine School traced his career path for us since he graduated from Teachers College in 1979. During these eleven years he had taught at seven different schools, never staying at one school more than two years at a time. With one exception, the transfers were all initiated by his superiors. He had most recently been shifted from being a teacher at the Methodist School to become headmaster at Nawarudine, where he had never taught previously.

The second village included in our study where we found higher levels of coproduction was Ofemilli, located in the Oji River LGA in Anambra State, about 32 kilometers from Enugu, the state capital. The school in Ofemilli village had been built by the community in 1945 and staffed by the Roman Catholic Church until it became a public school after the civil war. The building, while small, was in reasonable physical condition. All four classes were conducted in the same large, rectangular classroom. As many as 120 children and their teachers used the same room simultaneously. Only a few benches were available at each of the major blackboards. Again, only a few children in each class had textbooks.

Parents in this village were highly supportive of primary education and the local school. They had decided upon several projects that would improve the physical structure and sanitary conditions of the school. One project was building a new pit latrine for the school. All work on this project was on hold, however, waiting for permission from the state government authorities. Attendance rates were high. The headmaster proudly told us that thirty-two out of thirty-four students passed the school-leaving examination in the prior year (94 percent) and one with distinction. A local progressive union awards scholarships to at least three students from the village to attend secondary school.

The LGA Educational Authority was in a similar situation to the LGA authorities visited elsewhere. During 1983–88, teacher paychecks had been issued irregularly as various changes had occurred in the financial responsibility for the payment of teachers. Some years, books arrived from the state government late in the year and sometimes never arrived. Getting the books out to the schools was not, however, a high priority for LGA officials as we stumbled over crates of books in the office of the director of the LGA Education Authority.

The two villages that members of our team visited in Plateau and Sokoto States were a distinct contrast. Plateau State is located roughly in the center of Nigeria. We focused on Wereng Village in the Barakin Ladi LGA, located about fifty kilometers southeast of Jos, the state capital. This area had been a tin mining area, but the larger commercial firms had all left the region during the mid-1960s, when the tin mines no longer produced sufficiently for commercial mining. During the tin mining era, considerable investment had been made in the construction of all-season roads and other public facilities, including schools and health clinics.

The maintenance of school buildings in the area was generally deficient. In a relatively rich village that we visited, Foron, the primary school was in a deplorable state of repair and had virtually no classroom furniture. In Wereng, the roof blew off one section of the primary school in 1988 and a second section in 1989. Members of the community replaced one section of roofing not long before we arrived after giving up hope of getting the LGA to do the repair. 12 This classroom, however, had not yet been returned to use for classes as the community had also hired a carpenter to repair broken furniture and he was using this classroom for that purpose. Thus, only about half of the students attended school at one time and classes were divided between a morning and afternoon session. The number of books available in any one classroom varied from a low of zero books (in one of the Grade 5 classrooms) to a high of twenty-one books (for the thirty-two students in the second Grade 5 classroom). Overall, an average of just under one-third of the students had the textbooks assigned for their class.

The proportion of students in Wereng who received a full six years of education is lower than the average for Barakin Ladi. Further, many children enter school after the first grade for a year or so before dropping out. For example, fifty-three boys and sixty-six girls started first grade in 1986, and eighty-four boys and eighty-eight girls showed up for second grade. The problem was even greater in 1987, when more than half of the students in the second grade had not attended first grade. Tracing students through five years re-

vealed that only about one-fourth of the girls and boys in the first or second grade in 1985 or 1986 were in fifth or sixth grade in 1990. Many erratic changes had occurred in class size during the interim period, and very few students attended classes during the rainy season, when their labor was needed by their families. Few students continue education after the sixth grade. No data were available regarding the proportion of students obtaining a school-leaving certificate.

Teacher morale was obviously low in this setting. Besides the problems of overcrowded and short sessions, they all mentioned the lack of teaching materials in the classroom. In the words of the teachers themselves:

- I don't like to teach in a school where the students don't attend.
- I would like to go somewhere where parents can give us more of the cooperation we need.
- The atmosphere here is very bad for teaching. No roof. No textbooks. No writing paper. No teaching aids. No uniforms. Lots of students drop out.
- The government should not neglect the plight of the teacher.
 The problem is nationwide, not just Barakin Ladi. Barakin Ladi is a relatively good teaching assignment compared to some places.

In Sokoto State in the northern part of Nigeria, we included the Bodinga LGA and Darhela village in our study. The school in Darhela was constructed by the state government in 1970 and was in a state of bad repair. The roof of one of the three blocks had blown off in early 1990 and remained off. Birds had invaded several of the classrooms, and several had no windows or outside doors. None of the fifty-three students officially enrolled in Class I by the Headmaster had attended school from January through July of 1991. Only one-third of the thirty-six students who completed sixth grade passed the entrance examination to secondary school. A girl was the only student to actually enter secondary school, located fifty kilometers from the village.¹³

In each village, the capability to devote greater inputs into the educational process was demonstrated by the diversity of community projects in progress. In two of the villages, where parents valued

education highly, this ability was focused on the primary schools and enhanced what the teachers could do. In these villages, most children of school age obtained at least six years of primary education, and 85 percent or more of them passed their school-leaving examination. In the other two villages, parents did not value education highly and contributed little to the local primary schools. Without parental support, the teachers were incapacitated and demoralized. In these villages, children obtained a scattered education, if at all, and only a few successfully passed their school-level examination. The number of children from these villages going on to secondary education was also smaller.

When coproduction is discouraged by taking over schools that villagers had perceived as being "their" schools, by creating chaotic changes in who was responsible for funding and running a primary school system, and by top-down administrative command as the style for all decision-making, only the most determined citizens will persist in coproductive activities. In Brazil, many urban neighborhoods that had never undertaken collective action were empowered by the action of government officials to make real decisions and coproduce an urban service that was highly valued. In Nigeria, villages that had demonstrated their capabilities to engage in collective action were discouraged by government officials from active engagement in the education of village children.

3. COPRODUCTION

The concept of coproduction was initially developed by colleagues associated with the Workshop in Political Theory and Policy Analysis during the late 1970s as we struggled with the dominant theories of urban governance underlying policy recommendations of massive centralization. ¹⁴ Consolidation of all governments serving metropolitan areas was proposed in many urban areas. Scholars and public officials argued that citizens as clients would receive more effective and efficient services delivered by a professional staff employed by a large, bureaucratic agency (see E. Ostrom 1972). After studying police services in metropolitan areas, however, we had not found a single instance where a large, centralized police department

was able to provide better direct service, more equitably delivered, or at a lower cost to neighborhoods inside the central city when these were carefully matched to similar neighborhoods located in surrounding jurisdictions.¹⁵ Our findings were replicated by us and other scholars repeatedly over a fifteen-year period. A study recently conducted by Parks (1995) replicated the earliest findings in Indianapolis after the passage of a quarter of a century.

In our efforts to understand these strong empirical results, we came to recognize that several myths adversely affected how scholars viewed service production. First, there was the notion of a single producer responsible for urban services within each jurisdiction. We found, instead, many public agencies (e.g., municipalities and counties) as well as private firms (e.g., security services) producing immediate response services. Turning to intermediate police services, we found even more variety. Forensic laboratory analysis was frequently produced in a public or private hospital. Training was often produced in a local community or private college. We were dealing with a public-private industry rather than with the bureaucratic apparatus of a single government (V. Ostrom and E. Ostrom 1965; E. Ostrom, Parks, and Whitaker 1974, 1978).

Second, drawing on the work of Lipsky (1973), we recognized that street-level bureaucrats were not simply the pawns of a central bureaucratic machine that would do whatever their supervisors commanded. Riding eight-hour shifts with police officers enables one to see their job more as they do and recognize how much discretion they have in how they spend their time. A motivated officer uses time in many ways that enhance the safety of a beat. An officer who is not motivated finds many ways to escape the summons of the police radio and get some sleep.

Third, we realized that the production of a service, as contrasted to a good, was difficult without the active participation of those supposedly receiving the service. If students are not actively engaged in their own education, encouraged and supported by their family and friends, what teachers do may make little difference in the skills students acquire. If citizens do not report suspicious events rapidly to a police department, there is little that department can do to reduce crime in an area or solve the crimes that occur. We developed the term "coproduction" to describe the potential relationships that could exist between the "regular" producer (street-level police

officers, school teachers, or health workers) and "clients" who want to be transformed by the service into safer, better educated, or healthier persons. Coproduction is one way that synergy between what a government does and what citizens do can occur.

All production involves the transformation of some set of inputs into outputs—or a production function. In the conventional way of thinking of production, a principal, such as an entrepreneur or a bureau chief, organizes factors of production (traditionally, land, labor, and capital) to produce varying levels of output. All relevant aspects of these factors are under the command of the principal, who decides how much of any one factor will be combined with other inputs based on relative costs and capabilities. Production functions array the tradeoffs that a principal faces in making combinatorial decisions in order to get the most out of one set of inputs given their relative costs and the production technology in use and amount of other inputs allocated to this process.

In some important production processes, however, not all of the inputs that could potentially be used to produce an output are under full control of a single, public-sector principal. In constructing infrastructure facilities, for example, the labor used to construct a facility could all be employed by a public utility, it could all be contributed by citizens, or some of the labor could come from both sources. Whether a production process would best be organized entirely in the public sphere, entirely in the private sphere, or coproduced by both depends primarily on the shape of the production function. The relative role of public or private sector depends on the relative costs of the inputs contributed by these sources of potentially productive labor (and, as we discuss below, the likelihood of motivating either public employees, private citizens, or both).

In analyzing coproduction, we also use production functions. Production functions may involve strictly substitutable processes. If inputs are strictly substitutable, no potential for synergy exists. In Figure 1, for example, Q_1 , Q_2 , and Q_3 represent three levels of output that could be achieved from a combination of inputs from citizens and from government. Inputs by public officials are completely substitutable for the inputs of citizen-producers. In such a situation, no advantage exists to finding ways of coproducing a good using both sources of input. Rather, the decision to produce the good in the public sector (e.g., sending a public truck on a regular route to collect garbage or

Figures 1–3

recyclable materials) or to have citizens produce the good (e.g., require that citizens take garbage or recyclables to a designated location) depends on the wage rate paid to public officials as compared to the opportunity costs facing citizens for spending their time in transport. ¹⁶ If the wage rate of public officials is lower than the opportunity cost of citizens—as illustrated by budget constraint B₂—then the most efficient form of production is located entirely in the public sector. The most output, Q₂, could be produced entirely by the public agency assuming that public officials are fully motivated to work up to their capacity. Alternatively, if the opportunity costs of citizens were comparably lower than the wage rate of public officials, as illustrated by B₁, the most output could be entirely produced by citizens alone, again assuming full motivation to perform to capacity.

When the inputs from a government and citizen are complementary, as shown in Figure 2, output is best produced by some combination of input from both sources. Now, a potential for synergy exists. With such production functions, it would be possible to achieve the same level of output with many combinations of input from a government agency and from citizens. A combination of inputs, however, is needed rather than reliance on only citizens or only officials. If the opportunity costs of contributing are high for citizens, as compared to the wage rate of public officials, as shown in B_1 , the least cost combination would be for C_1 inputs from citizens and A_2 from a government agency. The same quantity of output, Q_1 , could also be produced by C_2 from citizens and A_3 from an agency, and this would be the least cost combination if the relative costs were reflected as in the B_2 budget constraint.

Analytically, the possibilities of coproduction are clear and of particular relevance in a developing country context. In many developing countries, the shape of a budget constraint is closer to that of B₂ in Figure 2 than to B₁. Many poor regions and neighborhoods are characterized by severe underutilization of the knowledge, skills, and time of residents—which means the opportunity costs of devoting these inputs to the creation of valued public outputs are low. Obtaining better infrastructure and services generates very high benefits.

Designing institutional arrangements that help induce successful coproductive strategies is far more daunting than demonstrating their theoretical existence. Part of the problem stems from the nature of the goods and services typically produced in the public sector. It is noto-

riously difficult to specify a clear production technology for education, health, and police services (Wilson 1989). While production technologies for constructing infrastructure are better known, how to regulate their use and keep them well maintained is a substantial technological puzzle. In addition, as discussed below, part of the innovative aspect of the condominial systems was changing the professionally proscribed production technologies themselves. Public sectors typically rely on incentive systems that send very weak signals about performance to staff who are employed on long-term, low-paying contracts with few legal opportunities for advancement. The signals encouraging citizen inputs are even more feeble.

The operational challenge exists in both developed and developing countries, but the severity of the problems involved is greater in many sectors of developing countries, where the importance of central control and direction has dominated official thinking since the end of colonialism. The situation in many cases is illustrated by Figure 3, where the technically achievable production function for combinations of inputs from government and from citizens is shown as Q, while the current output at X is far from the frontier of what is feasible given budget constraints. Much less is being generated from both sources of inputs than could be produced if everyone were motivated to exert more effort.

In such a situation, substantial problems need to be addressed in enhancing the productivity of inputs from the public sector itself, let alone finding ways of more effectively motivating citizens and coordinating the efforts of diverse inputs not subject to the command of a single principal. In both the Brazilian and Nigerian cases, public servants receive relatively low wages. In Nigeria, after the devaluation of the naira during the late 1980s, the value of teachers' salaries plummeted. Earlier, they lost the food and housing that local communities used to provide. Now, teachers had to devote even more time to finding affordable housing and in tending their own gardens to provide food for their families. Arbitrary assignments and transfers, little chance for promotion, unkept promises by national and state governments regarding the support of primary education, and frequent top-down changes of relative responsibilities of national, state, and local authority over education generate few incentives for highly motivated teaching. In villages where parents are relatively uninterested in primary education, who send only a small proportion of their children to school, and where school buildings are left without roofs, neither teachers nor citizens are actively putting effort into the production of primary education. In villages where parents are more supportive of primary education—for example, contributing C_2 of effort in Figure 3 rather than C_1 , output levels of Y rather than X could be achieved even without any increase in the effort of teachers. If teachers were to respond positively to increased support by parents and students, and themselves move from A_1 to A_2 , output would increase still further to Z. The much higher proportion of students attending school and graduating after six years, and passing external examinations in the villages where parents supported primary schools, is evidence consistent with a change such as the one from X to Y (and perhaps Y to Z) in Figure 3.

At any one point in time, it is useful for analytical purposes to conceptualize production functions as a fixed technology. Entrepreneurs in both the private and public sectors can change the shape and components of production functions over time. Creative entrepreneurship is itself more likely in environments that encourage innovation and allow for a wide array of options in the organization of public service production. The innovative condominial program in the Brazilian case brought together several crucial ideas that expanded the level of services made available to poorer residents of Brazilian towns and cities. First, the idea to split sanitation systems into two linked systems—large-scale public works and small-scale community works—allowed for the separation of what had been one production function into two component parts. The effectiveness of the public sector inputs into the construction of systems requiring deep trenches and large pipes is considerable. This advantage disappears in the construction of shallow trenches and small pipes. Further, the opportunity costs of organizing residents to construct condominial systems in one neighborhood are much lower than trying to coordinate residential work teams for a citywide project. The money saved by minimizing the length of trunk lines to serve any one system could then be applied to the construction of trunks in other neighborhoods as well as to pay for staff to work with communities in the time-consuming process of negotiating local contracts.

Another innovation of the condominial system is the intensive involvement of citizens in the initial design and continuing maintenance of these systems. This changed the *shape* of these production functions so that what citizens did made the efforts of public officials more efficacious and vice-versa. Developing new production functions and changing the shape of others was indeed a major breakthrough for the condominial systems. Even more important, however, is motivating both public officials and citizens to work effectively together in settings where coproduction has rarely occurred and considerable distrust exists. This has been accomplished in the more successful systems by a slow building of citizen organization that, in turn, has affected the incentives of officials in a positive direction. Officials designing and operating infrastructure projects are usually supported by large construction firms interested in receiving more contracts. The incentives of this system are well known and do not lead to quality construction, good monitoring, or effective operation (E. Ostrom, Schroeder, and Wynne 1993).

The condominial systems depend more on satisfied users to mobilize political support to construct still more condominial systems. Those systems performing at higher levels have solved some of the difficult problems of operating and maintaining these systems over time. According to Watson (1995: 41), the key elements of successful operation of these systems are "(1) staff continuity between the construction and operations phases; (2) a specialized condominial maintenance crew; (3) face-to-face contact with residents; and (4) ongoing network monitoring and repairs and customer education." These elements change the nature of information available as well as the incentives of participants. It also generated social capital in the form of urban residents learning how to work with each other and with public agencies. This social capital is then a potential asset to be drawn on to obtain other kinds of urban goods and services.

Coproduction is not, of course, universally advantageous. Nor is it a process that will occur spontaneously simply because substantial benefits could be achieved. Several conditions heighten the probability that coproduction is an improvement over regular government production or citizen production alone. First, the technologies in use must generate a complementary production possibility frontier (such as in Figures 2 or 3) rather than merely a substitutive one (as in Figure 1).¹⁷ When coproductive inputs are legally owned by diverse entities and complements, synergy can occur. Each has something the other needs. In the condominial systems, citizens had information, skills, time, and other resources essential to constructing the

condominial works. Officials had the capabilities for constructing the public works and connecting the feeder lines to the trunk lines and treatment plants. By obtaining a modest cash contribution from the community, they are more motivated to make sure the system works.

Second, legal options must be available to both parties. In centralized systems, many potentially productive options are restricted. Teachers are not authorized to change a curriculum to make it more relevant for their students. Headmasters do not have the authority to change the timing of the school year so that school is open when children are not essential for the agricultural activities of their families. Parents who must wait many months to obtain permission before building a school latrine are hindered by such restrictions in their efforts to make their children's school a healthier place. The condominial system broke through such restrictions to open up a much wider set of options for both officials and citizens.

Third, participants need to be able to build a credible commitment to one another so that if one side increases input, the other will continue at the same or higher levels. Clear and enforceable contracts between government agencies and citizens enhance that credibility. The complementarity of their inputs is analytically similar to the production of a local public good that is jointly enhanced if either side increases its inputs. In the condominial system, residents signed a formal contract outlining what they were willing to do in order to obtain a connection to a major trunk line. In the Brazilian cities where this petition was fully recognized as a dual commitment (at least after experience with the system over time), higher performance levels were achieved than where citizens did their part only to find that the trunk lines were shoddily constructed and poorly maintained. It is also important to make a credible commitment not to undertake actions. If citizens come to believe that a government agency will bail them out if they do not perform according to their side of an agreement, citizens will be more likely to break the promises they make.

Fourth, incentives help to encourage inputs from both officials and citizens. Such incentives may be little more than the opportunity for officials to get to know citizens and vice-versa in an open and regular forum. Teachers who are feted when the children they teach excel in competitions are more motivated than those who are ignored no matter what their students do. One lesson from the Nigerian cases

is that coproduction will be quite uneven when it is officially discouraged.

The last three of these conditions are more likely to be met in a polycentric political system than in a monocentric (or highly centralized) political system. A polycentric polity offers citizens opportunities to organize not one, but many, governing authorities (see V. Ostrom, Tiebout, and Warren 1961; V. Ostrom 1987, 1991). Each unit in a polycentric system exercises independent authority to make and enforce rules within a specified area for particular policy areas. A condominial system is one example of a polycentric system. In this case, the smallest unit of the system is only one or two blocks in size. It is nested in a municipal, state, and national regime that can complement the activities of citizens organized in these mini-polities (see E. Ostrom, Schroeder, and Wynne 1993: ch. 9).

In a polycentric system, rules at a large-system level can be written in a general form that can then be tailored to local circumstances. In regard to the school year, for example, a large unit can specify the number of days that schools must be open while smaller units can specify the particular dates to fit the local agricultural seasons. A larger unit can specify a series of textbooks that are authorized for a decade or so at a time. Then, smaller units can pick those books that have examples of most relevance to the students in the smaller units. In other words, many more actions tailored to local arenas can be authorized in a polycentric system than in a monocentric system that tries to establish uniform rules for all settings. Incentives that encourage coproduction are easier to design when some of the units in a polycentric system are relatively small and encourage more meaningful contact among officials and citizens.¹⁸ The overlap of governmental units could perform the oversight needed to reduce the threat of arrangements that are "too cozy" in a smaller unit.

4. IMPLICATION OF COPRODUCTION FOR SYNERGY AND DEVELOPMENT

Let me be more radical than Peter Evans expects and suggest that coproduction of many goods and services normally considered to be public goods by government agencies and citizens organized into polycentric systems is crucial for achieving higher levels of welfare in developing countries, particularly for those who are poor. Prior efforts directed at improving the training and capacity of public officials have frequently had disappointing results. Efforts directed at increasing citizen "participation" in petitioning others to provide goods for them have also proved disappointing. Efforts directed at increasing the potential complementarities between official and citizen production or problem-solving activities may require more time at the initial stage of a process but promise a much higher long-term return.¹⁹

In regard to physical infrastructure, the potential complementarities may be great, especially when those facilities involve major "trunk" lines and "feeder" lines. This is the case for highway systems, water and sanitation systems, and most communication systems. Planning the location and specification of the major trunk lines is a task requiring the input of larger agencies in a polycentric system because of the economies of scale, the need to raise large sums of monetary resources, and the capability of larger units to deal with externalities. When the construction and maintenance of feeder lines is then planned by a smaller unit in a polycentric system to meet reasonable general standards, but also local needs and capabilities, the large and small polycentric units complement each other. Each performs tasks the other cannot perform well. Small units cannot effectively plan the backbone of a large network. Large units do not have the relevant information about local time and place.

As long as public officials and citizens in developing countries continue to see a great divide between them, however, potential synergies will remain mere potentialities. Contemporary textbooks contribute to this artificial wall. Many textbooks on public administration stress managerial skills within the bureaucracy itself and few discuss the skills needed to work effectively in problem-solving activities with citizens. Economics textbooks that address problems of market failure assert that "the" government must provide in those cases where the market fails.²⁰ Textbooks in political science tend, in recent times, to focus on the formal aspects of national governments, on how party systems work, and on struggles to achieve dominance in a legislative body. They seldom discuss how services are produced and delivered or how agencies work at levels below that of national government. The role of citizens is depicted as casting ballots and

watching the action. Even books comparing local government in Nigeria and the United States focus entirely on the formal structure of authority in both countries (Aborisade and Mundt, eds. 1995).²¹ No mention is made of village governance, which is the only governance that has an impact on the lives of most Nigerians. Textbooks that focus on local governance tend to posit the presence of a large number of local units of government as evidence of fragmentation and overlap of authority (and thus a detriment to good governance) rather than as the existence of organization on many different scales (and thus an asset for good governance).

One reason given for creating a divide between public and private sectors is controlling corruption. Corruption is a threat to the effectiveness, fairness, and growth of all polities and economies (Wade 1984, 1985). Other forms of opportunistic behavior—including free-riding, shirking, deception, and untrustworthy behavior—are also threats. If the remedy to corruption is seen as the creation of a strict bureaucratic structure to separate the servants of the public from the public, it is likely that behind the closed doors of a centralized system corrupt practices can flourish without much fear of exposure (Klitgaard 1988). The efforts to control corruption by creating a gulf between polity and society may encourage other forms of opportunistic behavior to proliferate along with corruption. When public officials and the citizens they are supposed to serve work together in diverse sets of open, nested arenas, productivity can be higher and all forms of opportunistic behavior are more likely to be exposed, but never totally eliminated.²²

The experience of success of coproduction also encourages citizens to develop other horizontal relationships and social capital (Putnam 1993). Those working with condominial systems report that local activism through coproduction rapidly spills over to other areas. Alert citizens are able to increase the quality of services they obtain from multiple government agencies and not just the initial project.

Thus, let me recommend that the bridging of the gulf between the analysis of private activities apart from those of government agencies needs to be high on the agenda of development theorists and activists. No market can survive without extensive public goods provided by governmental agencies. No government can be efficient and equitable without considerable input from citizens. Synergetic outcomes can be fostered to a much greater extent than our academic barriers have let us contemplate.

NOTES

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- 1. Tendler and I are, of course, not alone in bridging this gulf. See also Klitgaard (1991); Bates (1987); D. Korten (1980); F. Korten (1982, 1985); Levine (1980); and Evans (1995).
- 2. Bates (1976) stresses the investment of Zambian parents in their children's education as a rational strategy to ensure income when the parents are no longer able to provide for themselves.
- 3. Jon Van Til (1982) stressed the importance of coproduction of energy by citizens in conjunction with public and private energy producers—a field that also requires major investment in infrastructure facilities.
- 4. It appears that several fortuitous circumstances came together to support this program over the hurdles that would normally prevent it from ever moving from paper to practice. Natal is where the first systems were developed. A World Bank loan to support the effort of the state water company CAERN to provide sanitation services to poor neighborhoods made the funds available. De Melo obtained the enthusiastic support of the president of CAERN and a small group of entrepreneurial and social-minded engineers in his division. "The team had considerable autonomy of action: they developed their own work plans, ordered materials without going through lengthy procurement procedures, and hired consultants as they saw fit. It was mission-oriented and composed of young, eager engineers, who saw their work as providing previously excluded groups access to critical social benefits" (Watson 1995: 19).
- 5. See Watson (1995) for an analysis of the difference between the high- and low-performing systems. See Tendler and Freedheim (1994) and Tendler (forthcoming) for other positive developments in the tropics.

- 6. Relevant books include McCay and Acheson (1987); Fortmann and Bruce, eds. (1988); Wade (1988); Berkes (1989); Pinkerton (1989); E. Ostrom (1990); Sengupta (1991,1993); Blomquist (1992); Bromley et al. (1992); Tang (1992); Martin (1989/1992); Thomson (1992); Dasgupta and Maler (1992); V. Ostrom, Feeny, and Picht, eds. (1993); Netting (1993); E. Ostrom, Gardner, and Walker (1994); Keohane and Ostrom, eds. (1995).
- 7. See in particular Milgrom and Roberts (1992); Alchian and Demsetz (1972); and Marshak and Radner (1972).
- 8. But see Lam (1996) and the literature cited therein, WECS/IIMI (1990), and the works cited in section 3.
- 9. Implementation teams have frequently involved both engineers and social workers and over time have involved a larger number of paraprofessionals so as to keep the costs of these time-intensive activities lower (see Watson 1995: 23).
- 10. The fieldwork was part of the Decentralization: Finance and Management Project, which was jointly conducted by Associates in Rural Development, Syracuse University, and Indiana University and funded by the Research and Development Bureau of the Agency for International Development (DHR-5446-Z-00-7033-00). I was the team leader for a Nigerian-American team composed of Dele Ayo, Kenneth Hubbell, Dele Olowu, and Tina West. I am deeply appreciative of the good fortune of working with such talented and productive colleagues. Parallel studies were conducted in Ghana (Fiadjoe et al. 1992), Ivory Coast (Garnier et al. 1992b), and a synthesis report comparing experiences in all three countries (Garnier et al. 1992a). See also Green (1994).
- 11. After our study, Oyo State was further divided into two states and Atakunmosa ended up in Osun State.
- 12. That the community could repair the roof is evidence that they had the skills and capability of doing so. The community had also built a public health clinic. When the supply of medicine and facilities to that health clinic turned out to be inadequate, the community was able to attract a private pharmacist to the area who ran a very successful private clinic. The community, and our research team, was also fortunate to have an action-research team from the University of Durham and the University of Jos in the area helping collect relevant information and providing useful input to community problem-solving skills. That the community was waiting for the government to repair the roof is a reflection of the perception that the government had taken over the school in relatively good repair and promised to provide higher quality education than they had had previously.
- 13. The problem of getting good data in the field, especially for an adequate managerial picture of what is happening, is illustrated by the following description of our team's effort to obtain data in this school: "The data on enrollment had to be fished out from enrollment registers which were thrown in different classrooms and were in tattered shape. In spite of the spirited assistance of the teachers and the Headmaster, we were not able to establish enrollment data for any year besides 1990 and 1991. Diaries, school record books,

- files and ten copies each of textbooks supplied by the Federal Ministry of Education through the State Ministry of Education (for English Language, Mathematics, Social Studies, and Hausa) were found in various cupboards in the Headmaster's office" (Ayo et al. 1992: 124),
- 14. See Parks et al. (1982); Kiser and Percy (1980); Percy (1978); Rich (1979, 1981); and Whitaker (1980).
- 15. See E. Ostrom and Whitaker (1973); E. Ostrom and Parks (1973); E. Ostrom, Parks, and Whitaker (1974); Parks and Ostrom (1981); and Parks (1984).
- 16. An example of "own production" of major infrastructures is that of farmer-constructed irrigation systems where the farmers design, finance, construct, operate, and maintain an irrigation system (see E. Ostrom, Lam, and Lee 1994; E. Ostrom 1996).
- 17. There is, of course, still a further logical possibility of a concave relationship where one source of inputs interferes with the inputs of the other. There was, after all, an era in the history of U.S. education when parents were told not to "interfere" with their children's learning. The consistent finding in study after study is that parents' SES is strongly associated with children's educational performance (see Hanushek 1986 for a review of this literature). This leads one to conclude that this relationship operates in practice via the type of encouragement given to students in middle-class families and the help extended to children in such families who are having difficulty with some subject at school. If some process did have a concave production relationship, coproduction would be inefficient rather than synergistic at any level.
- 18. Even though Nigeria is formally a federal nation, the control of the national government over state governments, and of state governments over LGAs, has been so extensive that little effective polycentricity exists other than in the village setting, where what goes on is largely ignored by the formal units of government.
- 19. Recent efforts to rethink management, training, and institutional development congruent with local cultures, led by Mamadou Dia at the World Bank, reflect the general effort to rethink development processes that bridge previously defined gulfs. See Serageldin and Taboroff, eds. (1994) and Bryant (1994). See also Dia (1993) for an application to the reform of civil service systems in Africa.
- 20. As Sugden (1986: 3) indicates, "Most modern economic theory describes a world presided over by a government (not, significantly, by governments), and sees this world through the government's eyes."
- 21. For a completely different and important approach to the importance of indigenous as well as governmental governance structures, see Wunsch and Olowu, eds. (1995) and Olowu and Erero (1995).
- 22. Most game-theoretical analyses of complex opportunistic behavior agree that such behaviors are never completely eliminated in social dilemmas or games of trust (see, for example, Weissing and Ostrom 1991, 1993; Güth and Kliemt 1995; and Laffont and Tirole 1993).

REFERENCES

- Aborisade, Oladimeji, and Robert J. Mundt, eds. 1995. *Local Government in Nigeria and the United States: Learning from Comparison*. Ile-Ife, Nigeria: Obafemi Awolowo University, Department of Local Government Studies. Local Government Publication Series.
- Alchian, Armen A., and Harold Demsetz. 1972. "Production, Information Costs, and Economic Organization." *American Economic Review* 62, 5 (December): 777–95.
- Ayo, Dele, Kenneth Hubbell, Dele Olowu, Elinor Ostrom, and Tina West. 1992. The Experience in Nigeria with Decentralization Approaches to Local Delivery of Primary Education and Primary Health Services. Decentralization: Finance and Management Project Report. Burlington, Vt.: Associates in Rural Development.
- Bates, Robert H. 1976. Rural Responses to Industrialization: A Study of Village Zambia. New Haven, Conn.: Yale University Press.
- . 1987. Essays on the Political Economy of Rural Africa. Berkeley: University of California Press.
- Berkes, Fikret, ed. 1989. Common Property Resources: Ecology and Community-Based Sustainable Development. London: Belhaven Press.
- Blomquist, William. 1992. *Dividing the Waters: Governing Groundwater in Southern California*. San Francisco: ICS Press.
- Briscoe, John, and Mike Garn. 1994. *Financing Agenda 21: Freshwater*. Washington, D.C.: World Bank, Transportation, Water, and Urban Development Department.
- Bromley, Daniel W., et al., eds. 1992. Making the Commons Work: Theory, Practice, and Policy. San Francisco: ICS Press.
- Bryant, Coralie. 1994. "Culture, Management, and Institutional Assessment." In Serageldin and Taboroff, eds.
- Dasgupta, Partha, and Karl Göran Maler. 1992. *The Economics of Transnational Commons*. Oxford: Clarendon Press.
- Dia, Mamadou. 1993. A Governance Approach to Civil Service Reform in Sub-Saharan Africa. Washington, D.C.: World Bank.
- Evans, Peter. 1995. Embedded Autonomy: States and Industrial Transformation. Princeton, N.J.: Princeton University Press.
- ———. 1996. "Government Action, Social Capital and Development: Reviewing the Evidence on Synergy." World Development 24, 6: 1119–32.
- Fiadjoe, F., David Green, Charles Schwabe, and Tina West. 1992. "Decentralization: Improving Governance in Sub-Saharan Africa—Ghana Case Study." Decentralization: Finance and Management Project Report. Burlington, Vt.: Associates in Rural Development.

- Fortmann, Louise, and John W. Bruce, eds. 1988. Whose Trees? Proprietary Dimensions of Forestry. Boulder, Colo.: Westview Press.
- Garnier, Maurice, David Green, Elinor Ostrom, Charles Schwabe, James Thomson, and Tina West. 1992a. "Decentralization: Improving Governance in Sub-Saharan Africa—Synthesis Report." Decentralization: Finance and Management Project Report. Burlington, Vt.: Associates in Rural Development.
- Garnier, Maurice, A. B. Noel, Charles Schwabe, and James Thomson. 1992b. "The Experience in Ivory Coast with Decentralized Approaches to Local Delivery of Primary Education and Primary Health Services," Decentralization: Finance and Management Project Report. Burlington, Vt.: Associates in Rural Development.
- Green, David B. 1994. "Decentralized Public Service Provision in Sub-saharan Africa—A False Start: Lessons from the DFM Project." Decentralization: Finance and Management Project Report. Burlington, Vt.: Associates in Rural Development.
- Güth, Werner, and Hartmut Kliemt. 1995. "Competition or Cooperation: On the Evolutionary Economics of Trust, Exploitation and Moral Attitudes." Berlin: Humboldt University. Working paper
- Hanushek, E. A. 1986. "The Economics of Schooling: Production and Efficiency in Public Schools." *Journal of Economic Literature* 24: 1141–77.
- Keohane, Robert O., and Elinor Ostrom, eds. 1995. Local Commons and Global Interdependence: Heterogeneity and Cooperation in Two Domains. London: Sage.
- Kiser, Larry L., and Stephen L. Percy. 1980. "The Concept of Coproduction and Its Prospects for Public Service Delivery." Bloomington: Indiana University, Workshop in Political Theory and Policy Analysis. Working paper.
- Klitgaard, Robert. 1988. *Controlling Corruption*. Berkeley: University of California Press.
- ———. 1991. Adjusting to Reality: Beyond "State vs. Market" in Economic Development. San Francisco: ICS Press.
- Korten, David C. 1980. "Community Organization and Rural Development: A Learning Process Approach." Public Administration Review 40, 5 (September/October): 480–511.
- Korten, Frances F. 1982. "Building National Capacity to Develop Water Users' Associations: Experience from the Philippines." Washington, D.C.: World Bank, Agricultural and Rural Development Department. Staff Working Paper No. 528.
- . 1985. "A Participatory Approach to Irrigation Development in the Philippines." In *Public Participation in Development Planning and Management: Cases from Africa and Asia*, ed. Jean Claude Garcia-Zamor, pp. 179–86. Boulder, Colo.: Westview Press.
- Laffont, J. I., and Jean Tirole. 1993. *A Theory of Incentives in Procurement and Regulation*. Cambridge, Mass.: MIT Press.

- Lam, Wai Fung. 1996. "Institutional Design of Public Agencies and Coproduction: A Study of Irrigation Associations in Taiwan." World Development 24, 6: 1039–54.
- Levine, Gilbert. 1980. "The Relationship of Design, Operation, and Management." In *Irrigation and Agricultural Development in Asia: Perspectives from the Social Sciences*, ed. E. Walter Coward, Jr., pp. 51–64. Ithaca, N.Y.: Cornell University Press.
- Lipsky, Michael. 1973. "Street Level Bureaucracy and the Analysis of Urban Reform." In *Neighborhood Control in the 1970s*, ed. George Frederickson. New York: Chandler Publishing.
- Marshak, Jacob, and Roy Radner. 1972. Economic Theory of Teams. New Haven, Conn.: Yale University Press.
- Martin, Fenton. 1989/1992. Common-Pool Resources and Collective Action: A Bibliography, vols. 1 and 2. Bloomington: Indiana University, Workshop in Political Theory and Policy Analysis.
- McCay, Bonnie J., and James M. Acheson. 1987. *The Question of the Commons: The Culture and Ecology of Communal Resources*. Tucson: University of Arizona Press.
- Milgrom, Paul, and John Roberts. 1992. *Economics, Organization and Management*. Englewood Cliffs, N.J.: Prentice-Hall.
- Netting, Robert McC. 1993. Smallholders, Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture. Stanford, Calif.: Stanford University Press.
- Olowu, Dele, and John Erero. 1995. "Governance of Nigeria's Villages and Cities through Indigenous Institutions." Ile-Ife, Nigeria: Obafemi Awolowo University. Working paper.
- Ostrom, Elinor. 1972. "Metropolitan Reform: Propositions Derived from Two Traditions." Social Science Quarterly 53 (December): 474–93.
- ———. 1990. Governing the Commons: The Evolution of Institutions for Collective Action. New York: Cambridge University Press.
- Ostrom, Elinor, and Roger B. Parks. 1973. "Suburban Police Departments: Too Many and Too Small?" In *The Urbanization of the Suburbs: Urban Affairs Annual Reviews*, vol. 7, ed. Louis H. Masotti and Jeffrey K. Hadden, pp. 367–402. Beverly Hills, Calif.: Sage Publications.
- Ostrom, Elinor, and Gordon P. Whitaker. 1973. "Does Local Community Control of Police Make a Difference? Some Preliminary Findings." *American Journal of Political Science* 17, 1 (February): 48–76.
- Ostrom, Elinor, Roy Gardner, and James Walker. 1994. *Rules, Games, and Common-Pool Resources*. Ann Arbor: University of Michigan Press.

- Ostrom, Elinor, Wai Fung Lam, and Myungsuk Lee. 1994. "The Performance of Self-Governing Irrigation Systems in Nepal." *Human Systems Management* 13, 3: 197–207.
- Ostrom, Elinor, Roger B. Parks, and Gordon P. Whitaker. 1974. "Defining and Measuring Structural Variations in Interorganizational Arrangements." *Publius* 4, 4 (Fall): 87–108.
- ———. 1978. Patterns of Metropolitan Policing. Cambridge, Mass.: Ballinger.
- Ostrom, Elinor, Larry Schroeder, and Susan Wynn. 1993. *Institutional Incentives and Sustainable Development: Infrastructure Policies in Perspective*. Boulder, Colo.: Westview Press.
- Ostrom, Vincent. 1987. The Political Theory of a Compound Republic: Designing the American Experiment, 2d rev. ed. San Francisco: ICS Press.
- . 1991. The Meaning of American Federalism: Constituting a Self-Governing Society. San Francisco: ICS Press.
- ———. 1995. The Meaning of Democracy: The Vulnerability of Democracies. Bloomington: Indiana University, Workshop in Political Theory and Policy Analysis.
- Ostrom, Vincent, and Elinor Ostrom. 1965. "A Behavioral Approach to the Study of Intergovernental Relations." *Annals of the American Academy of Political and Social Science* 359 (May): 137–46.
- Ostrom, Vincent, David Feeny, and Hartmut Picht, eds. 1993. *Rethinking Institutional Analysis and Development: Issues, Alternatives, and Choices*, 2d ed. San Francisco: ICS Press.
- Ostrom, Vincent, Charles M. Tiebout, and Robert Warren. 1961. "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry." *American Political Science Review* 55 (December): 831–42.
- Parks, Roger. 1984. "Linking Objective and Subjective Measures of Performance." Public Administration Review 44, 2 (March/April): 118–27.
- ——. 1995. "Do We Really Want to Consolidate Urban Areas?" *Polycentric Circles Newsletter* 1, 2. Bloomington: Indiana University, Workshop in Political Theory and Policy Analysis.
- Parks, Roger, and Elinor Ostrom. 1981. "Complex Models of Urban Service Systems." In *Urban Policy Analysis: Directions for Future Research*, ed. Terry N. Clark, pp. 171–99. *Urban Affairs Annual Reviews* 21. Beverly Hills, Calif.: Sage Publications.
- Parks, Roger, Paula Baker, Larry Kiser, Ronald Oakerson, Elinor Ostrom, Vincent Ostrom, Stephen Percy, Martha Vandivort, Gordon Whitaker, and Rick Wilson. 1982. "Coproduction of Public Services." In Analyzing Urban-Service Distributions, ed. Richard C. Rich, pp. 185–99. Lexington, Mass.: Lexington Books.
- Percy, Stephen L. 1978. "Conceptualizing and Measuring Citizen Coproduction of Community Safety." *Policy Studies Journal* 7, Special Issue, pp. 486–93.

- Pinkerton, Evelyn. 1989. Cooperative Management of Local Fisheries: New Directions for Improved Management and Community Development. Vancouver: University of British Columbia Press.
- Putnam, Robert. 1993. "The Prosperous Community: Social Capital and Public Life." *American Prospect* 13 (Spring): 35–42.
- Rich, Richard C. 1979. "The Roles of Neighborhood Organizations in Urban Service Delivery." *Urban Affairs Papers* 1 (Fall): 81–93.
- ———. 1981. "Municipal Service and the Interaction of the Voluntary and Government Sectors." *Administration and Society* 13 (May): 59–76.
- Sengupta, Nirmal. 1991. Managing Common Property: Irrigation in India and the Philippines. London: Sage.
- ———. 1993. User-Friendly Irrigation Designs. New Delhi, India: Sage.
- Serageldin, Ismail, and June Taboroff, eds. 1994. Culture and Development in Africa. Washington, D.C.: World Bank.
- Sugden, Richard. 1986. *The Economics of Rights, Cooperation, and Welfare*. Oxford: Basil Blackwell.
- Tang, Shui Yan. 1992. Institutions and Collective Action: Self Governance in Irrigation. San Francisco: ICS Press.
- Tendler, Judith. 1995. "Social Capital and the Public Sector: The Blurred Boundaries between Private and Public." Paper presented at the Conference of the Economic Development Working Group, Social Capital and Public Affairs Project, American Academy of Arts and Sciences, Cambridge, Mass., May.
- ———. Forthcoming. *Good Government in the Tropics*. Baltimore, Md.: Johns Hopkins University Press.
- Tendler, Judith, and Sara Freedheim. 1994. "Trust in a Rent-Seeking World: Health and Government Transformed in Northeast Brazil." World Development 22, 12: 1771–92.
- Thomson, James T. 1992. *A Framework for Analyzing Institutional Incentives in Community Forestry*. Rome: Food and Agriculture Organization of the United Nations.
- Van Til, Jon. 1982. Living with Energy Shortfall: A Future for American Towns and Cities. Boulder, Colo.: Westview Press.
- Wade, Robert. 1984. "The System of Administrative and Political Corruption: Canal Irrigation in South India." *Journal of Development Studies* 18, 3: 287–328.
- ———. 1985. "The Market for Public Office: Why the Indian State Is Not Better at Development." *World Development* 13, 4: 467–97.
- . 1988. Village Republics: Economic Conditions for Collective Action in South India. Cambridge: Cambridge University Press.
- Watson, Gabrielle. 1995. Good Sewers Cheap? Agency-Customer Interactions in Low-Cost Urban Sanitation in Brazil. Washington, D.C.: World Bank, Water and Sanitation Division.

- Watson, Gabrielle, and N. Vijay Jagannathan. 1995. "Participation in Water and Sanitation." Washington, D.C.: World Bank. Environment Department Papers Participation Series No. 002.
- WECS/IIMI (Water and Energy Commission Secretariat, Nepal, and International Irrigation Management Institute). 1990. Assistance to Farmer-Managed Irrigation Systems: Results, Lessons, and Recommendations from an Action Research Project. Colombo, Sri Lanka: IIMI.
- Weissing, Franz, and Elinor Ostrom. 1991. "Irrigation Institutions and the Games Irrigators Play: Rule Enforcement without Guards." In *Game Equilibrium Models 11: Methods, Morals, and Markets,* ed. Reinhard Selten, pp. 188–262. Berlin: Springer-Verlag.
- . 1993. "Irrigation Institutions and the Games Irrigators Play: Rule Enforcement on Government- and Farmer-Managed Systems." In *Games in Hierarchies and Networks: Analytical and Empirical Approaches to the Study of Governance Institutions*, ed. Fritz W. Scharpf, pp. 387–428. Frankfurt: Campus Verlag; Boulder, Colo.: Westview Press.
- Whitaker, Gordon P. 1980. "Coproduction: Citizen Participation in Service Delivery." *Public Administration Review* 40: 240–46.
- Wilson, James Q. 1989. Bureaucracy. New York: Basic Books.
- World Bank. 1988. Adjustment Lending: An Evaluation of Ten Years of Experience. Washington, D.C.: World Bank.
- ———. 1994. World Development Report 1994: Infrastructure for Development. Washington, D.C.: World Bank.
- Wunsch, James, and Dele Olowu, eds. 1995. The Failure of the Centralized State: Institutions and Self-Governance in Africa, 2d ed. San Francisco: ICS Press.

HOW DOES CIVIL SOCIETY THICKEN? THE POLITICAL CONSTRUCTION OF SOCIAL CAPITAL IN RURAL MEXICO

Jonathan Fox

Summary. — The growth of the building-block organizations of an autonomous civil society in an authoritarian environment depends on the "political construction" of social capital. Social capital can be coproduced by state and local societal actors or by the interaction of local societal actors and external actors in civil society. Social capital may also be produced from below, but external allies still turn out to be crucial in the ability of such organizations to survive. An examination of variety in political dynamics across different regions and over time in rural Mexico provides ample iilustration of these general points.

1. INTRODUCTION

How do the building-block organizations of an autonomous civil society emerge and grow in authoritarian environments? How can state action block or encourage the broadening and strengthening of organizations that can represent diverse societal interests? To explain the production of social capital, analytical frameworks need to account for widely varying outcomes—over time, space, and social groups. One promising approach is to hold the broad context as "constant" as possible, comparing diverse regions or social groups within nation-states. So far, however, much of the literature on social capital has focused on societies governed by political democracies. This article explores pathways for the "thickening" of civil society under less-than-democratic conditions.

To explain the diversity of outcomes within actually existing societies, one must "unpack" both state and society. Under what

circumstances do "prosocial capital" actors in both state and society manage to converge? When one steps back to explain the societal outcomes found in the case of rural Mexico, it turns out that diverse subnational results emerged from three distinct political pathways: coproduction between state and societal actors, coproduction between external and local societal actors, and independent mobilization from below.

Societal "thickness" refers to the breadth and density of representative societal organizations, and can also be thought of in terms of social capital accumulation. Putnam's definition of social capital as the "stock" of "norms of reciprocity and networks of civic engagement" helps explain how citizens overcome the classic textbook obstacles to collective action (1993: 167). His work puts two distinct causal arguments on the agenda: social capital as potential cause of good governance and economic development, and social capital as the result of path-dependent historical legacies.2 Most discussions of this study have tended to conflate these two issues, but they are logically and empirically distinct. This article focuses on the second question: how civil societies thicken.3 One of the challenges facing the emerging literature on social capital is how to build in the role that political conflict plays in shaping state relations with "social capitalists." Otherwise it is difficult to explain why some state actors are constructive partners while others are violent enemies of social capital formation.

Most explanations of collective action and civil society-building are either state- or society-driven. On the society side, there is the "historical determinist" explanation of social capital formation, including some who stress social structure and others who take values and cultures as givens. Much of the social movement literature stresses political strategy, ideology, and leadership, emphasizing consciousness, action, "solidary incentives," and socially constructed collective identities to explain how people overcome the obstacles to joint action. From the state side, the resource mobilization and new institutional approaches stress the centrality of rules and incentives that induce societal responses, but they do not explain the origins of the institutions. Most state- or society-centered approaches tend to treat the other arena as a residual "black box." Patterns of constructive mutual support between state and societal actors may not be common, but they challenge "one-way" approaches to state-society relations.

To explain patterns of state-society synergy, one must analyze both with an interactive framework that can capture the processes of mutual influence between state and society. A "political construction" approach focuses on recursive cycles of interaction between state and societal actors to account for the uneven emergence of representative societal organizations under less-than-democratic conditions. Such cycles of state-society conflict and coalition-building may or may not lead to social capital accumulation, both state and societal elites can either block or encourage autonomous collective action. The problem is not only in explaining how the accumulation or dismantling of social capital unfolds, but how each process can unfold simultaneously. In other words, the same state can include competing factions that act at crosspurposes—consciously or not—with some attacking societal groups that other state actors support.

Three conceptual building blocks contribute to the development of a "political construction" approach to the uneven emergence of social capital under authoritarian regimes. They include political opportunities, social energy and ideas, and the processes of "scaling up" local representation and bargaining power.

First, elite political conflicts have an independent causal effect on civil society's capacity to organize because they determine the state's willingness and capacity to encourage or dismantle social capital. Associational life does not unfold in a vacuum: state or external societal actors can provide either positive incentives or negative sanctions for collective action. This point draws from Tarrow's "political opportunity structure" approach, where collective action emerges largely in response to "changes in opportunities that lower the costs of collective action, reveal potential allies and show where elites and authorities are vulnerable" (1994: 18).

Even in less-than-democratic regimes, reformist officials can create positive incentives for collective action from below, as the Mexican government's rural development reforms of the 1930s, and the mid-1970s and early 1980s indicate. In the case of the Community Food Councils of the early 1980s, these channels for participatory community oversight of government consumer food subsidy programs made region-wide networking possible for village-level organizations for the first time in many rural areas (Fox 1992a, 1992b). Government reformists created positive incentives: if participation succeeded in making the program work, then communities received

the material incentive of reduced food prices through more competitive local markets (a public good). The program also provided the community-managed transportation necessary to bring local representatives together over wide distances. But state reformists' most important contribution to collective action was not their offer of positive incentives. Rather, it was the capacity to buffer the negative sanctions that other state actors usually deployed against autonomous collective action beyond the village level. Official reformists legitimized regional associational autonomy and therefore provided some measure of protection for scaled-up collective action. Both the positive incentives and the buffering of the negative sanctions matter, but the first helps little without the second.⁵ This point reinforces Tversky and Kahneman's emphasis on "loss aversion" for explaining collective action. They stress that potential actors fear losses more than they value gains and the related importance of subjective framing of contingencies and outcomes (1990).6

The second conceptual building block of the political construction approach involves taking actors, their ideas and motivations into account to explain how people respond to political opportunities (or threats). Historical legacies certainly shape the ways in which actors respond to positive and negative incentives for collective action, but they do not respond in automatic or unidirectional ways. Contingent ideas, leadership, and action influence whether grievances are defined as shared and whether problems are interpreted as subject to change.⁷

Hirschman's "Principle of Conservation and Mutation of Social Energy" is useful here (1984). Hirschman acknowledges that most of the time, failed efforts at collective action lead people to turn away from public life—Putnam's "low civicness" equilibrium state. But since Hirschman is more interested in explaining collective action than its absence, he looks for the exceptions. First he stresses the role of external aggression in provoking resistance, which is well known, but then he turns to cases where such unifying factors are not present. After studying a wide range of community development groups in Latin America, he found that many of them

shared one striking characteristic: when we looked into the life histories of the people principally involved, we found that most of them had previously participated in other, generally more "radical" experiences of collective action, that had generally not achieved their objective, often because of official repression. It is as though the protagonists' earlier aspiration for social change, their bent for collective action, had not really left them even though the movements in which they had participated may have aborted or petered out. Later on, this "social energy" becomes active again but is likely to take some very different form (1984: 42–43).

The usual response to failed collective action is demobilization, but it turns out that those initiatives that people manage to sustain in inhospitable environments are also often responses to past failures. For Hirschman, success can come from previous failure, whereas for Putnam only past success explains success. But why does civic failure lead to frustration and powerlessness in some cases, while it is "conserved and mutated" into constructive social energy in others? Perhaps freedom of association is both cause and effect of society-building—once one gets a little, one can get more, as with Putnam's virtuous circles of social capital formation. Yet it is also possible that a little bit of freedom of association leads threatened elites to murder local leaders. Then what happens? When does repression lead to a downward spiral of demobilization, versus the many cases, as in Chiapas, where the murder of local leaders inspires others to take their place and mobilization continues? In other words, repression cuts both ways, simultaneously facilitating collective action by sharpening the "us" vs. "them" distinction, while increasing the price to be paid for it. The impact, on balance, is politically contingent. Political ideas and culture may make the difference here, though, as is often the case, ideas are granted causal weight when more tangible factors cannot explain the outcome.8 Nevertheless, a more dynamic, actor-oriented approach to collective action gives more weight to the social capitalists, their motivations, and their decisions about whether and how to persist in spite of the odds against them. Leaders are those who pay the "irrational" startup costs of mobilization, long before collective action reaches the critical mass needed to produce any tangible benefits for participants (Oliver, Marwell, and Texeira 1985).

The third building block in the political construction approach unpacks social capital and highlights the importance of those organi-

zations whose efforts create opportunities for others to engage in autonomous collective action. Social capital is not homogeneous: some kinds of organizations have more public good "spillover effects" than others. The premise here is that bargaining power is necessary to create respect for freedom of association, which in turn requires some degree of "scaling up" of organization beyond the most local level.⁹

For some analysts, the nature of the unit of social capital is not relevant. For Putnam, the micro-units of choral societies and soccer clubs are taken to be indicators of the stock of social capital spread throughout society. This view assumes that social capital is "continuously distributed" both horizontally and vertically. If this assumption were valid, then many of Mexico's poorest regions would be considered to have large stocks of social capital. They are covered with strong horizontal associational webs at the most local level. Yet these are precisely the country's poorest regions, with the worst systems of governance in terms of both process and performance. The answers lie in both society and the state. On the societal side, strong local solidarities may or may nor extend beyond villages or neighborhoods. 10 Nagengast and Kearney's study of the social construction of indigenous ethnicity showed both the local confines of village-based identities and the importance of collective action in encouraging broader shared identities (1990). The state also plays an active role in either blocking or promoting the expansion of solidary ties beyond the village level. 11 Most important, state actors have regularly used force to deny indigenous Mexican communities the opportunity to scale up and form organizations of sufficient scale to defend their interests. 12 In short, social capital cannot be assumed to be continuously distributed, especially where freedom of association is not guaranteed.

Scaling up is especially important for representing the interests of dispersed populations since they have the greatest difficulty defining common interests and are the most vulnerable to "divide and conquer" efforts from above.¹³ If they do develop scaled-up organizations, they are then among the most vulnerable to the "iron law of oligarchy" since dispersed populations have little capacity to monitor the activities of their leadership and therefore have little capacity to hold them accountable.¹⁴ The category of "region" is defined here as it is by rural social movements in Mexico—regional movements

usually involve dozens of villages, often covering several municipalities, but usually do not cover an entire state.¹⁵

Regional organizations are especially important for representing the interests of dispersed and oppressed groups for three main reasons: overcoming locally confined solidarities, representative bargaining power, and access to information.

- There is no reason to assume that community-based horizontal associations have ties with other communities. Dense concentrations of social capital may well be highly segmented across spatial and ethnic divides. Regional organizations can facilitate collective action in defense of shared interests by helping to overcome the socially constructed constraints of locally confined solidarities.
- Strictly local organizations usually lack the clout to offset concentrated elite power, while national organizations are usually less representative of local diversity. Regional groups potentially combine the strengths of scaling up with closer ties to local bases. Horizontal networks within and between such regional groups, in sum, have the capacity to offset the threat of the "iron law of oligarchy" inherent in vertical pyramidal structures.
- In societies where the vast majority lack access to independent mass media, autonomous regional organizations are often the only means for transmitting information about shared problems and common enemies that is the precondition for broader inherent articulation and collective action.

Regional collective action may be necessary to offset the power of authoritarian elites, but these are precisely the kind of movements most likely to be targeted for repression. To sum up, historical legacies of horizontal organization are necessary but not sufficient to accumulate social capital. The scale of horizontal organization matters as well, and this is in turn conditioned largely by the political opportunity structure (which determines the availability of external allies to provide support and to offset the threat of repression).

2. A POLITICAL CONSTRUCTION APPROACH¹⁶

These three conceptual building blocks—political opportunities, social energy, and scaling up—can be assembled into an iterative "political construction" approach to the emergence and consolidation of social capital under authoritarian rule. This framework involves cumulative cycles of conflict as well as cooperation. The key conflict is between the promoters and the enemies of horizontal collective action, both usually embedded in the state as well as society. In this approach, horizontal social organizations are able to grow and spread in inhospitable environments through iterative cycles of conflict between three key actors: the "social capitalists" themselves, authoritarian elites unwilling to share power, and reformist allies based either within the state or elsewhere in society. Reformists are defined here as those state or societal elites willing to accept (or encourage) increased associational autonomy among excluded groups in society.¹⁷

The point of departure is that as long as authoritarian elites remain united, there is little room for the construction of basic citizenship rights, which in turn are a precondition for consolidating autonomous representative organizations. If authoritarian elites split, however, for whatever reason—succession problems, economic crisis, or war—they will differ over whether to respond to societal challenges with repression or concessions. Intraelite divisions can be triggered by societal pressure from below. For example, the Zapatista rebellion, based in a handful of remote municipalities, led to a deep split within Mexico's national political class over whether to respond militarily or politically.

The first step in the argument, then, is that reformists, defined by their greater concern for political legitimacy and resulting preference for negotiation over coercion, may conflict with hard-line colleagues over whether and how to cede access to the state. Second, if and when such cracks in the system open up, social organizations often attempt to occupy these spaces from below, demanding broader access to the state while trying to defend their capacity to articulate their own interests autonomously. These efforts at social capital formation usually provoke an authoritarian backlash, which in turn ends the cycle of opening from above. Third, over time, these

recursive cycles of bargaining between ruling hard-liners, reformist elites, and societal groups can gradually increase official tolerance for autonomous social organizations, often in a "two steps forward, one step back" pattern.

From the point of view of social capital accumulation, the key issue is how much societal political residue—whether organized or informal—is left after each window of opportunity closes and how it can be sustained until the next one opens. Even though societal actors often fail to win their immediate demands, if they manage to conserve some degree of autonomy in the troughs between cycles of mobilization, they retain a crucial resource to deploy at the next political opportunity.

This process is highly uneven within nation-states. Societal groups gain legitimacy and leverage at very different rates and in different bargaining arenas. The iterative nature of this pattern helps to explain why such different patterns of state-society relations can coexist simultaneously within the same nation-state: redoubts of persistent authoritarian clientelism can coexist with new enclaves of pluralist tolerance, as well as large grey areas of "semi-clientelism" in between. The authoritarian and pluralistic poles of this proposed continuum from clientelism to citizenship are easily defined, but the multiplicity of political relationships "in between" challenges analysts to develop categories more appropriate to systems in transition (especially since many regimes in transition tend to get stuck short of a democratic threshold). This framework suggests that the category of "semi-clientelism" might be useful to frame those state-society relationships that fall in between authoritarian clientelism and pluralist citizenship rights. Semi-clientelist authorities attempt to condition access to state benefits on political subordination. In contrast to conventional authoritarian clientelism, however, their leverage is the threat of the withdrawal of carrots, without the threat of the stick.

3. INDIGENOUS CIVIL SOCIETY IN RURAL MEXICO

Rural Mexico has experienced a wide range of processes through which social capital "thickens" where it might seem "thinnest." Conditions for social capital formation seem most daunting for the more than one in ten Mexicans who speak an indigenous language. They are the poorest of the poor, and they lack representation in the broader society and political system. Mexico's indigenous population is the largest in the hemisphere, including over ten million people in fifty-six officially recognized ethno-linguistic groups.

When one looks closely at the village level, however, social capital is widespread. In much of indigenous Mexico, communities have reproduced longstanding traditions of horizontal cooperation, reciprocity, and self-help. Thousands of villages make community decisions about resource allocation and justice by consensus, and they maintain powerful norms of accountability between leaders and community members. ¹⁹ There are increasing religious and class cleavages within many communities, as well as cultural differences provoked by emigration, but the overall degree of survival of horizontal organizations and norms of reciprocity in indigenous Mexico is quite remarkable. ²⁰

Putnam's "societal historical determinist" approach would lead one to expect that these dense horizontal local associational webs would lead to extensive social capital accumulation throughout indigenous Mexico. If most communities survived with strong inherited stocks of social capital, then this capital should have grown over time through the cycles of "virtuous circles" he posits for northern Italy. Instead, until very recently most of indigenous Mexico looked more like historical southern Italy (dominated by vertical, authoritarian power relations). Incorporation into the national economy and political system led to increased micro-level subordination, and most local efforts at building autonomous representative organizations beyond the village level were repressed. If one turned to the other extreme, a "state-sanctioned repression dismantles horizontal organization" argument would predict no scaled-up social capital formation at all. Until recently, that is what one found in most of indigenous Mexico, with social capital limited to the micro level. When one looks at the last two decades, however, it turns out that neither explanation is complete because in practice, both processes have been going on at the same time. For more than two decades, indigenous organizations have been coming together from below and then been dismantled from above, as competing state actors have pushed for both outcomes.²¹

The result is a very uneven map, with extreme variation in the relative thickness of civil society in indigenous regions. Civil society is very thin in some regions, with citizens subordinated and divided by vertical, authoritarian, clientelistic power relations, while other regions have vibrant civic movements for local-level political democracy and sophisticated producer and consumer cooperatives with thousands of members. The result is that within the broad category of indigenous civil society, there is great variation both between and within states.²²

Tables 1 and 2 synthesize the results of on-going empirical research on contemporary rural Mexican politics, showing that social capital formation in indigenous regions follows several different paths, though seen historically they may end up being different stages of the same process.²³ The key descriptive variables that frame state-society relations in each region are the degree of repression and the thickness of civil society. Table 1 shows the different conceptual categories, and Table 2 shows how actual indigenous regions fit into the main scenarios in practice (as of early 1995).²⁴ Note that these categorizations refer to ethnically distinct regions rather than to "entire" ethnic groups. There is great diversity among different degrees

Table 1
POLITICAL SPACE AND SOCIAL CAPITAL OUTCOMES IN
RURAL MEXICO

| | Regional Level of Repression | | |
|---------------------------|---|---|--|
| Social Cap- ital Level | Low | High | |
| High | Pluralist enclaves (the result of successful prior mobilization against authoritarian rule) | Mobilization against authoritarian rule, unresolved (potential "dual political power" situation) | |
| Medium | Semi-clientelist competition between state and civil soci- ety (state control exercised more with inducements than with coercion) | Growing societal challenge to authoritarian rule (coercion has contradictory impact, both encouraging and dis- couraging protest) | |
| Low | Authoritarian rule rarely challenged and therefore rarely punished | Forced demobilization (aftermath of blocked challenge to authoritarian rule) | |

Table 2
SOCIAL/GEOGRAPHICAL DISTRIBUTION OF INDIGENOUS
SOCIAL CAPITAL IN RURAL MEXICO

| "Subnational Political Regimes" | States (Regions within States) |
|---------------------------------------|--|
| Pluralist enclaves | Oaxaca (Juchitán, Sierra Norte, parts of Mazateca Alta); Michoacán (parts of Purépecha region); Sonora (Yaqui region) |
| Semi-clientelist competition | Oaxaca (parts of Mazateca Alta, Central Valleys); Michoacán (parts of Purépecha region); Hidalgo (Nañhu region); Puebla (parts of Sierra Norte); most of Yucatán, Campeche, Quintana Roo, state of Mexico |
| Authoritarian rule under challenge | Chiapas (most of Altos, Lacandon, Sierra Norte, Sierra Sur), Tabasco (Chol region), Guerrero (Alto Balsas, Montaña, Costa Chica); Oaxaca (Northern Isthmus, Pinotepa, parts of Mixteca); Hidalgo (parts of Huasteca) |
| Authoritarian rule dominant | Veracruz (Sierra Zongólica, most of Huasteca), Hidalgo (parts of Huasteca); Guerrero (parts of Montaña); Oaxaca (parts of Mixteca); Puebla (parts of Mixteca, Sierra Norte); Chihuahua (Raramuri region) |

and patterns of indigenous mobilization, within as well as between ethnic groups.²⁵

At one extreme are consolidated enclaves of high levels of associational life and respect for political and ethnic pluralism. At another extreme are regions where communities are internally divided, lacking in horizontal associational life and dominated by authoritarian clientelism. In some of these regions levels of repression may be low, but only because autonomous collective action is rare. One finds other scenarios in between: regions where autonomous social organization is spreading but faces political competition from the government's new, more sophisticated semi-clientelism (Fox 1994b). Then there are areas of strong associational life that are actively attacked by hard-liners in the state or their societal allies. These areas, in the upper right box, begin to approach "dual political power," where civil society and authoritarian elites confront each other in an unstable stalemate.

"Dual political power" describes much of indigenous Chiapas—though not necessarily the original area of the Zapatista rebel-

lion. Since the army incursion occupied and demobilized most of the region in revolt, it would fall into the lower right hand box. Much of the rest of the state's indigenous regions, however, fit into the upper right hand box. Civic mobilizations and land invasions erupted throughout many areas outside the region in revolt, targeting large landholdings and authoritarian local bosses (including a broadbased independent electoral campaign for the governorship).²⁶ In the course of 1994, diverse local civic movements managed to eject the ruling party mayors from more than one-third of the state's municipalities, installing instead ad hoc, pluralistic town councils that include human rights movements, cooperatives, and ethnic rights groups. These new town councils in turned formed several "autonomous regional multi-ethnic governments" to increase their bargaining power with state and federal authorities. An even more striking example of "spillover effects" was seen in late 1995, when peace talks between the government and the Zapatistas included independent indigenous leaders from throughout Mexico.

4. ACCUMULATING SOCIAL CAPITAL: POLITICAL PATHWAYS

Less than three decades ago, Mexican indigenous communities had not formed "scaled-up" representative organizations beyond the village level. Through cumulative cycles of conflict and cooperation, the social maps of diverse regions then spread out in the varied array of political outcomes depicted in Tables 1 and 2. These distinct patterns of state-society relations constitute distinct "subnational political regimes," ranging from entrenched regional authoritarian redoubts to enclaves of pluralism, with varying shades of grey in between.

Where autonomous indigenous organizations managed to consolidate, they did so by following one (or more) of three main causal pathways. As outlined in Table 3, these three main causal paths include: state-society convergence, involving the joint production of social capital between reformist state actors and local societal groups; local/external societal groups, such as church reformers, nongovernment organizations (NGOs), or political oppositionists; and independent emergence, where social capital was produced

Table 3
POSSIBLE CAUSAL PATHWAYS FOR
SOCIAL CAPITAL ACCUMULATION

| State-Society | Local/Outsider | Independent Societal |
|---|---|--|
| Convergence: | Societal Collaboration: | Scaling Up: |
| Coproduction be- tween state reformists and local societal groups (synergistic collaboration) | Coproduction between local groups and external allies in civil society (religious, developmental, environmental, civic, or political) | Bottom-up production of social capital through autonomous local social, civic, or political/electoral initiatives in the absence of external support |

more independently by local societal movements for democratization, accountable governance, or socioeconomic development. While these three categories are conceptually distinct, they often overlapped in practice. Some analysts use the term "coproduction" as shorthand to refer to coordinated joint efforts.²⁷

(a) STATE-SOCIETY CONVERGENCE

The main patterns of collaborative production of social capital between state and societal actors took the form of successive initiatives by middle and lower level reformist government officials to recognize and to encourage relatively autonomous grassroots organization. This process of coproduction had cumulative effects, as the results of each cycle bolstered societal capacities to take advantage of the next opportunity. One can describe Mexico's diverse array of reformist programs and enclaves within programs in terms of three distinct cycles of openings from above, in the early 1970s, the early 1980s, and the early 1990s. Each reform opening was broader in some policy areas than others and stronger in some regions than in others. Social organizations also varied in their willingness and capacity to take advantage of these openings from above. Their political strategies are key here: not all allies are perceived as such, while some who seem to be are not.

Figure 1 shows a stylized depiction of three cycles of openings from above that were partially occupied by mobilization from below.²⁸ The first and third of these openings were responses to pres-

Figure 1

THREE CYCLES OF OPENINGS FOR PARTICIPATION BY AUTONOMOUS SOCIAL ORGANIZATIONS IN MEXICAN GOVERNMENT RURAL DEVELOPMENT PROGRAMS^a

| Official Channels for Participation | Cycle 1 (1973–76) | Cycle 2 (1979–82) | Cycle 3 (1990–94) |
|--|----------------------|----------------------|----------------------|
| Local project selection | | | |
| Local project implementation | | | |
| Promotion of new, autonomous regional organizations | | | |
| Monitoring of regional level government policy implementation | | | |
| Networking of autonomous groups beyond regional level | | | |
| Direct control of program resource allocation by regional groups | | | |
| Authoritarian backlash followed by purge of reform program | | | |

^aThese cycles reflect only the most "pro-participation" subset of rural development programs implemented during each period. They are therefore never "typical" of rural development policy more generally.

sures from below (as in the early-mid-1970s and late 1980s/early 1990s), while the second was driven more by independent shifts in the balance of forces within the ruling political elite (as in the early 1980s).²⁹ During each of these three periods, reformist officials managed to control part of the actual implementation of a small but significant subset of the government's diverse array of rural development programs. They were able to create institutional opportunities for grassroots participation in the implementation of development projects targeted to Mexico's poorest regions, including many

indigenous regions that had never before experienced freedom of assembly and association beyond the village level. In each cycle, authoritarian or semi-clientelist elites were usually able to capture much of even the reform subset of programs. Autonomous participation beyond the local level was therefore not representative of most actual policy implementation experiences. The kinds of participation highlighted here were the regional exception rather than the national rule. From the long-term point of view of the accumulation of social capital, however, some of these regional exceptions overlapped, cumulated, and networked horizontally, eventually accounting for many of the regions where representative indigenous groups were consolidated by the mid-1990s.

In each cycle, discreet networks of government reformists were able to reach out to those societal organizations that had survived the previous cycles, and the participatory process was sometimes able to go further toward a transfer of state authority to greater power-sharing with autonomous, representative organizations. This shift in authority proceeded furthest in the case of the Regional Solidarity Funds for Indigenous Peoples, which—unlike any other branch of the National Solidarity Program (1989-94)—were designed to transfer regional-level decision-making on issues of development resource allocation to ethnically and politically pluralistic councils of indigenous leaders. Indeed, the governor's purge of this reform program was one of the turning points along the path to the Chiapas rebellion, publicly signaling the closure of what little "political opportunity" for change within the system was left.³⁰ In consonance with the "two steps forward, one step back" dynamic of the "social capital accumulation through conflict" model sketched out above, each opening of access to the state was later closed by an authoritarian backlash—though in each case some social capital survived and not all reformists were purged.

(b) COLLABORATION BETWEEN LOCAL AND EXTERNAL CIVIL SOCIETY ORGANIZATIONS

The second causal path of social capital formation is through coproduction with other actors from civil society. The Chiapas experience illustrates this process especially well since the "state-society" partnership pathway was not open there. Not only is Chiapas one of Mexico's most authoritarian states, but it is a state where local and state-level elites managed to systematically block the operations of the same federal reform programs that were so crucial for creating new opportunities for autonomous regional organization-building in other rural states. Indeed, the survival of small but significant political spaces for autonomous grassroots organization in other comparably poor and violent regions is one reason why the rebellion's social and political resonance throughout rural Mexico was not expressed militarily.

One of the most important external allies for local efforts to consolidate representative organizations in Chiapas is the democratic wing of the Catholic Church. Because of the state's deep and longstanding penetration into the countryside, and because of Mexico's relatively small number of prodemocratization bishops, these external societal allies have managed to encourage the thickening of indigenous civil society in only a few regions, but Chiapas is one of them.³¹ As in much of rural Mexico, nonpartisan networks of long-term democratic political opposition activists also provided key allies for many local grassroots movements, along with nongovernmental development organizations (Fox and Hernández 1992).

When Samuel Ruíz became bishop of San Cristóbal de las Casas in the early 1960s, Chiapas highland communities were dominated by local indigenous elites whose authoritarian control was bolstered by their linkages with the state and national government (Rus 1994). A decade later, when the bishop convened the first autonomous, state-wide public indigenous forum (thanks to a brief rapprochement with the governor), his diocese had trained about 1,000 lay activists. These catechists promoted autonomous community organizations and local self-help projects. Fifteen years later the diocese had trained over 8,000 such local leaders.³² Organizational support from the diocese was the most important single factor permitting collective action beyond the village level. This process spread and diversified in the 1980s, as secular regional producer associations grew, encouraged by limited and erratic support from state reformists (Harvey 1988, 1990, 1994). Looking back from 1994, much of the thick web of social organizations built by the indigenous peoples of Chiapas originated with their first taste of "scaled up" freedom of expression and assembly in 1974.33

This "societal coproduction" scenario for thickening civil society in authoritarian environments also requires other kinds of external allies, both national and international. Nongovernmental development, human rights, and environmental organizations have become major promoters of local organization-building efforts around the world, though in Mexico the preemptive power of the state has kept NGO development behind many other Latin American countries. Like state reformists and religiously based societal allies, NGOs can both provide positive incentives for horizontal association as well as buffer the negative sanctions that would otherwise punish such efforts.³⁴ The internal dynamics of these alliances vary greatly, however, and both state and societal reformists often end up inducing subordinate semi-clientelism without actually engendering an autonomous thickening of civil society.³⁵ Because this risk pervades efforts to provide incentives for collective action, it is crucial to keep in mind their contribution as potential buffers for negative sanctions. It is also important to recall that such buffer efforts often fail, as the experience of liberation theology-inspired groups in El Salvador and Guatemala shows.³⁶

(c) INDEPENDENT PRODUCTION OF SOCIAL CAPITAL FROM BELOW

Social capital can also grow and thicken independent of external allies, through sustained collective action by autonomous local social and political movements. Some of these groups are socioeconomic, building community-based economic development alternatives; others are civic, fighting for nonpartisan, democratic, accountable government at the local level, while others promote a partisan opposition alternative.³⁷ Leaders of such movements often gained prior political experience far from home, but that does not mean that they brought allies home with them. In some cases they involved local defections from the ruling corporatist party, while other local movements have independently promoted alternative civic identities, often with a strong ethnic dimension, as in the case of the electoral, social, and cultural democratization of Oaxaca's Zapotec market town of Juchitán. Yet even in this "paradigm case" of bottom-up, identity-based mobilization, the movement was able to emerge in the first place by taking advantage of an opening within the ruling political class in the early 1970s. Juchitán's subsequent waves of mobilization, repression, and renewed mobilization, eventually leading to municipal electoral democratization, are quite consistent with the three-actor "political construction" approach proposed above. While mobilization from below was fundamental, the local movement developed increasingly important national political alliances and made its greatest progress when reform-oriented elites controlled state politics.³⁸

The Zapatista National Liberation Army (EZLN) is a more extreme example of social capital formation in what appears to be the complete absence of external allies. By the early 1990s, growing authoritarian attacks on the main external allies of moderate autonomous social groups in Chiapas-federal reformists and the bishop—dramatically changed the political opportunity structure seen from below. The promised path of gradual change through working within the system seemed to lead only to more repression. In this context, Zapatistas had been organizing in complete isolation from the rest of Mexico's political opposition, and they began to win over many of the already organized in Chiapas. For more than a year, many dozens, probably hundreds, of villages debated whether to take up arms in open assemblies (though they debated in their own languages and were therefore unintelligible to most government officials). This process produced a powerful indicator of the trust and loyalties woven into the dense webs of horizontal association: in spite of the fact that many communities were deeply divided over whether to take up arms, no one defected, so the government was still caught completely by surprise when the rebellion erupted on 1 January 1994. Looking at this another way, the lack of reform opportunities within the system caused broad-based societal organizations to split over the decision of whether to take up arms.

In terms of its origins, the Zapatista movement seems to be an extraordinary example of how grassroots organizations can broaden and deepen without external alliances. Two major qualifiers are in order, however. First, much of its organizing took advantage of the preexisting networks that had been created with support from the bishop and/or government reformists (the other two paths for coproduction of social capital). In addition, once the rebellion was launched, it was the mobilization of external civil society allies at national and international levels, as well as deep divisions within the ruling political class, that prompted the president to declare a

unilateral cease-fire after less than two weeks of fighting, rather than pursue a Central American-style military "solution." In the course of the ups and downs of the negotiation process that followed, it was the Zapatistas' capacity to maintain a diverse set of national and international civil society alliances that allowed them to remain a political force in spite of what turned out to be their military weakness. So even in this extreme case of "strictly" bottom-up consolidation of civil society in one of Mexico's most remote indigenous regions, external allies turned out to be crucial to the movement's capacity to survive.³⁹

5. CONCLUSIONS

While many localized rural social movements have emerged independently from below, external linkages have long been seen as crucial for their capacity to scale up and consolidate larger scale representative organizations under authoritarian conditions. In the literature, however, most of the attention to this issue is limited to one subset of the broader category of societal organizations: the emergence of revolutionary challenges to dictatorships. For example, Wolf's classic comparative analysis of rural revolutions saw societal capacity to sustain revolutionary challenges to authoritarian rule as driven by the "tactical mobility" of "middle peasants" (who are socially and geographically autonomous from the state and landlords), together with urban-based allies. 40 The difference here is the attempt to explain the thickening of rural social webs under authoritarian conditions that do not lead to revolutionary situations—that is, most of the time. 41 Indeed, one of the main lessons from the Mexican experience is the need to "unpack" the notion of authoritarian rule to distinguish both the importance of varying degrees of repression and the possibility that factions within even authoritarian regimes can produce allies for autonomous collective action from below.

More than two decades of repeated cycles of collective action have left an uneven map of social organizations in the Mexican countryside, ranging from enclaves of local democracy to large and entrenched redoubts of authoritarian rule, with complex grey areas of semi-clientelism in between. These diverse outcomes emerged through analytically distinct political pathways, though they often overlapped in practice. The first pathway was the coproduction of social capital between state reformists and local societal groups willing and able to take advantage of openings from above, involving limited but substantive participation in the implementation of government development programs. The second pathway involves external nongovernmental actors that provide support to local and regional organizing efforts, such as church, development and human rights groups. The third path is more independent of external allies and—not coincidentally—of a more overtly oppositional political character. But even this last path, as the Zapatista rebellion suggests, requires external societal support to maintain sufficient political space to survive the inevitable authoritarian backlash.

The challenge that remains is how to distinguish the different contributions made by these processes of coproduction, as well as the diverse social imprints they leave. Since state and external societal allies provide a variety of contributions to social capital formation, often simultaneously, it is both logically and empirically difficult to determine their relative weights. Cast most broadly, however, both state and external societal allies provide resources for local collective action that can be divided into positive and "anti-negative" incentives. Positive incentives range from direct individual and group material inducements, tangible and intangible rewards for the exercise of leadership, as well as enabling institutional frameworks and ideological resources that reduce "free rider" problems. "Antinegative" resources, in contrast, reduce the costs that other external actors may threaten to impose on those engaged in constructing autonomous social capital: in other words, some degree of protection from retribution. External allies often play crucial roles in limiting the state-sanctioned repression that would normally dismantle most bottom-up efforts at scaling up local representative organizations (though such protective efforts also often fail). Since the broadening and deepening of autonomous social capital requires freedom of association, the positive and anti-negative incentives provided to those groups that defend the right to associational autonomy have powerful potential "public good" multiplier effects.

Much of the research on external allies has focused on the positive resources they offer local communities, often stressing their ef-

forts at "consciousness-raising." In various countries, community organizing efforts by both state and external societal actors are widely seen as contributing greatly to the emergence of social movements and political democratization. Perhaps the spaces for group reflection created by Christian Base Communities or literacy campaigns encouraged collective action because they influenced the way people think about the world. But just because that was the goal of the external actors does not mean that it was their main effect. One could also argue that their primary contribution to collective action was to create a relatively safe opportunity for people to come together who would otherwise be afraid of state repression, which in turn permitted them to learn leadership and action skills that could then be used in other kinds of mobilization. In other words, although government-sponsored community organizers or church-linked social action may well work to "raise" consciousness at certain times and places, their greater significance may be that their presence and legitimacy can permit people who were already well aware of their oppression to expect less retribution from collective action.

The politics of fear must be a crucial element in any explanation of the inherently uneven "thickness" of civil society, especially under authoritarian rule. Those who work to reduce the fear of retribution, whether subjectively, objectively, or both, powerfully change the political opportunity structure within which individuals and groups decide whether and how to act. If so, then concerted action can-sometimes, to some degree-overcome historically inherited legacies. Coming back to the broad question about the determinants of social capital accumulation, this suggests that—in contrast to the predetermination inherent in Putnam's explanation of social capital accumulation—historical legacies are woven deeply into social fabrics, but those imprints are not necessarily fixed by history. The widely varying "thicknesses" of indigenous Mexican civil society and their diverse origins show that political conflict is critical, both within the state and between competing state-society coalitions, in explaining how representative societal organizations survive, consolidate, and develop bargaining power. Densely woven social fabrics can be unraveled by state-sanctioned coercion, on the one hand, while external allies from either state or society can help to weave or reweave them on the other.

NOTES

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- 1. Putnam's study of Italian regional governments is the most developed example of such an effort, combining cross-sectional regional comparison with study of change over time (1993). For an especially nuanced cross-national study of related issues, see Crook and Manor (1994).
- 2. This concept of "stock" has both advantages and disadvantages. While sociologists might claim that "social capital" is simply a new term for societal networks and organizations, the notion of stock has the useful implication that these relationships can be accumulated, though investment is required, as Ostrom suggested. Stocks can also be "decapitalized," through societal conflict, such as civil war. The problem with the notion of "stock," however, is that it implies that social relationships are basically homogeneous and that the density of micro levels of organization is an indicator of other kinds of "public good" societal organization. This article argues that social capital is not necessarily "continuously distributed," either horizontally "across" often segmented societies, or vertically from local to broader levels of organization.
- 3. Putnam's explanation of social capital accumulation is very historical and exclusively society-driven. He goes back to the twelfth and thirteenth centuries to compare the different ways in which northern Italian city-states organized themselves in terms of local voluntary corporations, versus the way feudal autocrats dominated southern Italy. In this view, northern society started out "horizontal" and participatory while the south was "vertical" and authoritarian. In this view, stocks of social capital grow as they are used, trust and reciprocity beget more trust and reciprocity, leading to virtuous circles of capital accumulation. Similarly, where societies are dominated by vertical power relations, authoritarian clientelism, and widespread mutual mistrust in society, one finds vicious circles that prevent the accumulation of social capital. This framework explains social capital accumulation in terms of two equilibrium scenarios for high and low "civicness," each one driven by its historical legacies. Putnam concludes: "As with conventional capital, those who have social capital tend to accumulate more—'them as has, gets'" (1993: 169). In this view, in other words, deliberate action and strategy cannot create social capital. For useful historically based critiques, see Morlino (1995) and Tarrow (1996).
- 4. For theoretical elaboration, see Fox (1992a: chapter 2). This framework is consistent with Tarrow (1994) and the emerging "state-in-society" approach in Migdal, Kohli, and Shue (1994).
- 5. One problem here is that political science lacks conceptual explanations of the determinants of varying levels of state repression against citizens. The most

common framework is a "pressure-response" model of authoritarian regimes, where increased societal mobilization provokes state efforts to control society. As Stanley points out, however, comparable levels of societal mobilization can face vastly differing levels of state repression, whether one looks over time in the same country or at similar moments in different countries (1996). He combines state-society interaction with intrastate politics, interest, and ideologies to explain state terror in El Salvador.

- 6. Thanks to Elinor Ostrom for suggesting this reference. She also observed that "fear of retribution may be weighted more heavily than the 'real' punishments that can be meted out."
- 7. See McAdam's "political process" approach (1982).
- 8. I am grateful to Gerardo Munck for this observation.
- 9. For a related but different use of the concept of "scaling up," see Annis (1988).
- 10. As Granovetter pointed out, local groups with strong internal ties may lack links with nearby counterparts, blocking the perception of broader shared interests even in the face of an immediate threat (1973).
- 11. Some neighboring villages have long histories of direct conflict, especially over land rights, though Dennis has shown that the state systematically encouraged such conflicts since the colonial period (1987).
- 12. On human rights violations in rural Mexico, see, among others, Americas Watch (1990) and Amnesty International (1986).
- 13. Olson made this point when discussing how the number of producers of certain commodities shaped their prospects for collective action, since large numbers of dispersed farmers of homogeneous crops would face much greater free-rider problems than concentrated numbers of producers of specialized crops (1986). Marx made a similar observation long before, however, in his famous comment on the collective action problems of smallholders. Their family-based mode of production, poverty, and poor means of communication "isolates them from one another instead of bringing them into mutual intercourse. . . . In so far as there is merely a local interconnection among these small peasants, and the identity of their interests begets no unity, no national union and no political organization, they . . . cannot represent themselves" (from "The Eighteenth Brumaire of Louis Bonaparte," cited in Tucker, ed. 1978: 608). Except for the assertion that the peasant mode of production makes self-representation inherently impossible, the other structural obstacles to collective action Marx cites are remarkably Olsonian.
- 14. The conventional political science view grants political parties the role of aggregating diverse interests, but in practice few political parties have actually represented the most disenfranchised members of their societies, especially in the case of ethnic minorities. Even those few programmatic parties whose ideologies drive them to attempt to represent the most excluded are susceptible to the top-down, bureaucratizing tendencies of the "iron law of oligarchy." On the problems of representation of peasants within radical and reformist political parties in Latin America, see Fox (1992c). For an analysis of the determinants

- of the ebbs and flows of the "iron law of oligarchy" and degrees of internal democracy in a prototypical regional peasant union in Mexico, see Fox (1992b).
- 15. Since the early 1980s, Mexican regional organizations have been forming state-wide and national networks that united around common socioeconomic interests while respecting each other's political differences and internal autonomy (Fox and Gordillo 1989).
- 16. This section draws from Fox (1994a), which was influenced by O'Donnell and Schmitter (1986).
- 17. Since reformists are defined here by their actions, their attitudes and interests are necessarily diverse and politically contingent. They tend to be united by a long-term view of state interests, involving a willingness to sacrifice the interests of local elites and tolerate some degree of conflict in order to incorporate social movements that might otherwise threaten political stability. This process also involves building their own potential political base. In undemocratic electoral systems, state reformists are more likely to be based in central government's social and development agencies rather than in the electoral apparatus. Reformists tend to differ between those who tolerate relatively autonomous societal organization as a means versus those who support it as an end in itself. Reformists are most likely to be able to offset more authoritarian rivals within the state when the more "instrumental" moderate manage to form coalitions with the more "ideological" democratic officials (Fox 1992a).
- 18. Societal capacity to pry windows of opportunity open further depends on both prior accumulations of social capital and conjunctural political strategies. Some opportunities are simply missed while others are creatively pushed beyond what seemed possible at the time.
- 19. For recent analyses of indigenous community decision-making in the state of Oaxaca, see Collins (1995), Díaz Montes (1992), and Fox and Aranda (1994), among others.
- 20. Hirabayashi uses the notion of "cultural capital" to explore the maintenance of local village solidarities in spite of migration to large cities (1993). Most indigenous groups that survived the conquest reacted by retreating to seek community autonomy outside of the colonized areas, in so-called "regions of refuge." Very few are truly isolated today; most became fully "incorporated" into the national market and political regime by the mid-twentieth century.
- 21. For overviews of regional indigenous movements in Mexico, see Mejía Pineros and Sarmiento Silva (1987), Moguel, Botey, and Hernández, eds. (1992), and Warman and Argueta, eds. (1993), as well as the journals *Ojarasca* and *Cuadernos Agrarios*.
- 22. For a related focus on the uneven development of democratic institutions under actually existing electoral regimes, see O'Donnell (1993).
- 23. The regional categorizations are therefore neither complete nor definitive.
- 24. If nonindigenous peasant regions were also included, the main differences would be that more regions could be counted as pluralistic, mainly where state-level electoral victories by the center-right National Action Party appear

to have dismantled much of the ruling party's clientelistic control apparatus (e.g., Chihuahua, Baja California Norte, Guanajuato). In general, however, there is a similar diversity of state-society relations in nonindigenous rural areas. Local solidarities differ widely, and those with strong inherited collective identities were shaped largely by "foundational moments" dating from the revolution and the state-structured land reform that followed in the 1930s (as Michoacán, Veracruz or La Laguna region). Many regions experienced little land reform, however, such as Chiapas.

- 25. It is difficult to sustain political generalizations across "entire" ethnic groups. One might suppose that the less assimilated groups might have the greatest capacity for resistance, but some do while others remain extremely vulnerable (the Mixe vs. the Huichol or Raramuri, for example). The larger groups are quite internally heterogeneous in terms of culture, language, and forms of political organization, such as the Nahua, Maya, Zapotec, and the Mixtec.
- 26. Not coincidentally, the secret ballot was violated in at least 68 percent of Chiapas polling places, according to Mexico's independent election observer movement (Alianza Cívica 1994). For further analysis of the politics of the secret ballot, see Fox (1996).
- 27. For an early formulation of the term "coproduction," see Parks et al. (1982).
- 28. This figure synthesizes the comparative discussion of PIDER, CONASUPO-COPLAMAR, and the Regional Solidarity Funds presented in Fox (1994a, 1994b). For a study of one regional organization's evolution in response to these shifts in political opportunities, see Fox (1992b). See Cornelius, Craig, and Fox, eds. (1994) for diverse analyses of the political dynamics of the National Solidarity Program.
- 29. See Fox (1992a). More generally, these cycles of openings are related to splits within the regime over the terms of state intervention. In spite of recent market openings, in Mexico the key issue is not whether the state will intervene to regulate markets, but rather which state-society partnership will benefit. The three cycles of rural development innovations were led by reformists willing to use state intervention to break entrenched local elite monopolies by encouraging competition from community-managed economic enterprises. Notably, the announced withdrawal of the Mexican state from intervening in rural economic life that was so widely applauded in the early 1990s actually involved a reinsertion of state intervention, in some ways even deeper than ever before. For details, see Fox (1995).
- 30. Rather than side with his own federal reformists, Mexico's president chose to accept this purge and then promoted the governor to the cabinet post responsible for the police, politics, and the upcoming presidential elections (he was removed in the aftermath of the rebellion, however).
- 31. It should be noted that the key factors that influenced the contribution of religious activists to horizontal social capital formation are often determined by far-away institutional church politics since it is the shifting balance of forces within the hierarchy that determines whether progressive clergy become bishops and where they are assigned. For example, in order for Christian Base Communities to spread sufficiently to contribute significantly to the formation

of prodemocracy movements under authoritarian regimes, they needed the support of a prodemocracy bishop. Without the sustained institutional legitimacy and resources that only a bishop can provide within a given territory, other change-oriented organizing efforts are likely to be limited to tiny, politically vulnerable enclaves, with few horizontal spillover effects. This process is also interactive. As Charlene Floyd observed, Bishop Ruíz, like his Salvadoran counterpart Oscar Romero, was greatly influenced by the grassroots communities he worked with (personal communication).

- 32. Interview with Javier Vargas, an associate of the bishop since the early 1960s and a former diocesan priest. For one of the few analyses of church-grassroots movement relations in Mexico, see Muro (1994). For an overview of religion, social movements, and development in Latin America more generally, see, among others, Lehmann (1990).
- 33. The right-wing attacks on the bishop in the months immediately preceding the rebellion brought over 15,000 indigenous people down from the mountains to march in his defense. This was the largest public protest in the history of Chiapas until that date, even larger than the 1992 protest against the five hundredth anniversary of the Spanish conquest, when the statue of the conqueror was torn down as a prelude to the 1994 rebellion.
- 34. As David Brown argues, "NGOs can play critical roles in fostering cooperation among unequally powerful parties where the aim is to solve social problems, and that cooperative problem-solving can in turn create social capital" (1994: 1).
- 35. It should be pointed out that the harmony, balance, and empowerment often attributed to NGO-grassroots relations are more often assumed than demonstrated. For example, for a powerful critique of NGO organizing styles that clashed with indigenous social organization, see Rivera Cusicanqui (1990).
- 36. The contribution of external societal actors raises the question of the role of international actors. The Catholic Church is an international organization, not to mention the human rights groups, environmental organizations, and development agencies that provide political and economic resources to local counterparts. When do these international actors simply strengthen the various local and national "vectors," and when do they play a truly independent causal role?
- 37. Empirically, this independent pathway has tended to follow the civic or political route, while the state-society partnership has encouraged the socio-economic organizations (largely because state reformists had more room for manuever to support local movements that competed with local economic elites than to support those that challenged local political elites).
- 38. For nuanced analyses of Juchitán's COCEI (Coalition of Workers, Students and Peasants of the Isthmus), see Campbell (1994) and Rubin (1994, 1996). COCEI managed an uneasy alliance with the main center-left national opposition party, at the same time that it bargained independently (and successfully) for federal resources for better municipal services.
- 39. For English language sources on the Zapatista rebellion, see, among others, Collier and Quaratiello (1994), Fox (1994c), Harvey (1994), and Hernández

- Navarro (1994), as well as the special issues of *Cultural Survival* (Spring 1994) and *Akwekon, A Journal of Indigenous Affairs* (Summer 1994). Among the many diverse Spanish-language sources, contrast Hernández Navarro (1995) and Tello Díaz (1995).
- 40. For a useful contrast, see Walton's analogous comparison of failed rebellions (1984).
- 41. The "everyday forms of resistance" approach has contributed greatly to our understanding of the hidden political subtexts of apparent subaltern "consent" (Scott 1985; Kerkvliet 1990). Perhaps a synthesis with the political construction approach would help to account for the "everyday politics of organization-building."

REFERENCES

- Alianza Cívica/Observación 94. 1994. "La calidad de la jornada electoral del 21 de agosto de 1994." *Perfil de la Jornada* (20 September): 1–8.
- Americas Watch. 1990. Human Rights in Mexico: A Policy of Impunity. New York: Americas Watch.
- Amnesty International. 1986. Mexico: Human Rights in Rural Areas. London: Amnesty International.
- Annis, Sheldon. 1988. "Can Small-Scale Development Be Large-Scale Policy?" In *Direct to the Poor: Grassroots Development in Latin America*, ed. Sheldon Annis and Peter Hakim. Boulder, Colo.: Lynne Reinner.
- Brown, L. David. 1994. "Creating Social Capital: Nongovernmental Development Organizations and Intersectoral Problem-Solving." Institute of Development Research Reports, 11, 3 (April).
- Campbell, Howard. 1994. Zapotec Renaissance. Albuquerque: University of New Mexico.
- Collins, Joe. 1995. Communal Work and Rural Development in the State of Oaxaca in Mexico. Geneva: International Labour Organization.
- Collier, George, and Elizabeth Lowery Quaratiello. 1994. *Basta! Land and the Zapatista Rebellion in Chiapas*. Oakland: Institute for Food and Development Policy.
- Cornelius, Wayne, Ann Craig, and Jonathan Fox, eds. 1994. *Transforming State-Society Relations in Mexico: The National Solidarity Strategy.* La Jolla: University of California, Center for U.S.-Mexican Studies.
- Crook, Richard, and James Manor. 1994. "Enhancing Participation and Institutional Performance: Democratic Decentralisation in South Asia and West Africa." Report to ESCOR. Sussex: Overseas Development Administration, January. Mimeo.
- Dennis, Philip A. 1987. *Intervillage Conflict in Oaxaca*. New Brunswick: Rutgers University Press.

- Díaz Montes, Fausto. 1992. Los Municipios: La disputa por el poder local en Oaxaca. Oaxaca: Universidad Autónoma "Benito Juárez" de Oaxaca, Instituto de Investigaciones Sociológicas.
- Fox, Jonathan. 1992a. The Politics of Food in Mexico: State Power and Social Mobilization. Ithaca: Cornell University Press.
- 1992b. "Democratic Rural Development: Leadership Accountability in Regional Peasant Organizations." Development and Change 23, 2 (April): 1–36.
- —. 1992c. "New Terrain for Rural Politics." NACLA Report on the Americas 25, 5 (May): 38-42.
- —. 1994a. "The Difficult Transition from Clientelism to Citizenship." World Politics 46, 2 (January): 151-84.
- —. 1994b. "Targeting the Poorest: The Role of the National Indigenous Institute in Mexico's Solidarity Program." In Cornelius, Craig, and Fox, eds., pp. 179–216.
- ——. 1994c. "The Roots of Chiapas." Boston Review 19, 2 (April–May): 24-27.
- —. 1995. "Governance and Rural Development in Mexico: State Intervention and Public Accountability." Journal of Development Studies 32, 1 (October): 1–31.
- -. 1996. "National Electoral Choices in Rural Mexico." In The Reform of the Mexican Agrarian Reform, ed. Laura Randall. Armonk: M. E. Sharpe.
- Fox, Jonathan, and Josefina Aranda. 1994. "Decentralization and Development: Community Participation in Mexico's Municipal Funds Program." Unpublished document presented to the World Bank's Participation Learning Group, Washington, D.C., September.
- Fox, Jonathan, and Gustavo Gordillo. 1989. "Between State and Market: The Campesinos' Quest for Autonomy." In Mexico's Alternative Political Futures, ed. Wayne Cornelius, Judith Gentleman, and Peter Smith, pp. 131-72. La Jolla: University of California, Center for U.S.-Mexican Studies.
- Fox, Jonathan, and Luis Hernández. 1992. "Mexico's Difficult Democracy: Grassroots Movements, NGOs and Local Government." Alternatives 17, 2 (Spring).
- Granovetter, Mark S. 1973. "The Strength of Weak Ties." American Journal of Sociology 78, 6 (May): 1360-80.
- Harvey, Neil. 1988. "Corporatist Strategies and Popular Responses in Rural Mexico: State and Opposition in Chiapas, 1970-1988." Ph.D. dissertation, University of Essex.
- —. 1990. "Peasant Strategies and Corporatism in Chiapas." In Popular Movements and Political Change in Mexico, ed. Joe Foweraker and Ann Craig, pp. 183–98. Boulder: Lynne Reinner.
- -. 1994. "Rebellion in Chiapas: Rural Reforms, Campesino Radicalism and the Limits to Salinismo." Transformation of Rural Mexico, no. 5. La Jolla: University of California, Center for U.S.-Mexican Studies.

- Hernández Navarro, Luis. 1994. "The Chiapas Uprising." *Transformation of Rural Mexico*, no. 5. La Jolla: University of California, Center for U.S.-Mexican Studies.
- ———. 1995. *Chiapas: La guerra y la paz*. Mexico City: ADN.
- Hirabayashi, Lane Ryo. 1993. Cultural Capital: Mountain Zapotec Migrant Associations in Mexico City. Tucson: University of Arizona Press.
- Hirschman, Albert. 1984. Getting Ahead Collectively: Grassroots Experiences in Latin America. Elmsford, N.Y.: Pergamon Press.
- Kerkvliet, Benedict J. T. 1990. Everyday Politics in the Philippines: Class and Status Relations in a Central Luzon Village. Berkeley: University of California Press.
- Lehmann, David. 1990. Democracy and Development in Latin America. Philadelphia: Temple University Press.
- McAdam, Douglas. 1982. *Political Process and the Development of Black Insurgency*, 1930–1970. Chicago: University of Chicago.
- Mejía Pineros, María Consuelo, and Sergio Sarmiento Silva. 1987. *La lucha indígena: Un reto a la ortodoxia*. Mexico City: IIS/Siglo XXI.
- Migdal, Joel, Atul Kohli, and Vivienne Shue, eds. 1994. *State Power and Social Forces: Domination and Transformation in the Third World*. Cambridge: Cambridge University Press.
- Morlino, Leonardo. 1995. "Italy's Civic Divide." *Journal of Democracy* 6, 1 (January): 173–77.
- Moguel, Julio, Carlota Botey, and Luis Hernández, eds. 1992. *Autonomía y nuevos sujetos sociales en el desarrollo rural*. Mexico City: Siglo XXI/CEHAM.
- Muro, Victor Gabriel. 1994. *Iglesia y movimientos sociales*. Mexico City: Red Nacional de Investigación Urbana/Colegio de Michoacán.
- Nagengast, Carole, and Michael Kearney. 1990. "Mixtec Ethnicity: Social Identity, Political Consciousness and Political Activism." *Latin American Research Review* 25, 2: 61–91.
- O'Donnell, Guillermo. 1993. "On the State, Democratization and Some Conceptual Problems: A Latin American View with Glances at Some Postcommunist Countries." World Development 21, 8: 1355–69.
- O'Donnell, Guillermo, and Philippe Schmitter. 1986. *Transitions from Authoritarian Rule: Tentative Conclusions about Uncertain Democracies*. Baltimore: Johns Hopkins University.
- Oliver, Pamela, Gerald Marwell, and Ruy Texeira. 1985. "A Theory of the Critical Mass: I. Interdependence, Group Heterogeneity and the Production of Collective Action." *American Journal of Sociology* 91, 3 (November): 522–56.
- Olson, Mancur. 1986. "Space, Agriculture and Organization." American Journal of Agricultural Economics 67, 5: 928–37.
- Parks, Roger, Paula Baker, Larry Kiser, Ronald Oakerson, Elinor Ostrom, Vincent Ostrom, Stephen Percy, Martha Vandivort, Gordon Whitaker, and Rick

- Wilson. 1982. "Coproduction of Public Services." In *Analyzing Urban-Service Distributions*, ed. Richard C. Rich. Lexington, Mass.: Lexington Books.
- Putnam, Robert. 1993. Making Democracy Work: Civic Traditions in Modern Italy. Princeton: Princeton University Press.
- Rivera Cusicanqui, Silvia. 1990. "Liberal Democracy and *Ayllu* Democracy: The Case of Northern Potosí, Bolivia." In *The Challenge of Rural Democratisation:* Perspectives from Latin America and the Philippines, ed. Jonathan Fox, pp. 97–121. London: Frank Cass.
- Rubin, Jeffrey. 1994. "COCEI in Juchitán: Grassroots Radicalism and Regional History." *Journal of Latin American Studies* 26, 1 (February): 109–36.
- . 1996. Decentering the Regime: History, Culture, and Radical Politics in Juchitán, Mexico. Durham: Duke University Press.
- Rus, Jan. 1994. "The 'Comunidad Revolucionaria Institucional': The Subversion of Native Government in Highland Chiapas, 1936–1968." In *Everyday Forms of State Formation: Revolution and the Negotiation of Rule in Modern Mexico*, ed. Gilbert Joseph and Daniel Nugent, pp. 265–300. Durham: Duke University Press.
- Scott, James C. 1985. Weapons of the Weak. New Haven: Yale University Press.
- Stanley, William. 1996. *The Elite Politics of State Terrorism in El Salvador*. Philadelphia: Temple University Press.
- Tarrow Sidney. 1994. Power in Movement: Social Movements, Collective Action and Politics. Cambridge: Cambridge University Press.
- ———. 1996. "Making Social Science Work across Space and Time: A Critical Reflection on Robert Putnam's *Making Democracy Work." American Political Science Review* (June).
- Tello Díaz, Carlos. 1995. La rebelión de las Cañadas. Mexico City: Cal y Arena.
- Tucker, Robert, ed. 1978. The Marx-Engels Readers, 2d ed. New York: W. W. Norton.
- Tversky, Amos, and Daniel Kahneman. 1990. "Rational Choice and the Framing of Decisions." In *The Limits of Rationality*, ed. Karen Schweers Cook and Margaret Levi, pp. 60–89. Chicago: University of Chicago.
- Walton, John. 1984. Reluctant Rebels: Comparative Studies of Revolution and Underdevelopment. New York: Columbia University Press.
- Warman, Arturo, and Arturo Argueta, eds. 1993. Movimientos indígenas contemporáneos en México. Mexico City: CIIH/UNAM/Miguel Angel Porrúa.
- Wolf, Eric. 1969. Peasant Wars of the Twentieth Century. New York: Harper and Row.

THE STATE AND ECONOMIC INVOLUTION: RUSSIA THROUGH A CHINA LENS

Michael Burawoy

Summary. — Why has the Russian economy declined at the rate the Chinese economy has grown? In China the party-state has made possible the decentralization of propery relations and the hardening of budget constraints, whereas in Russia the disintegration of the party-state has led to privatization and soft budget constraints. Whereas the former combination entailed accumulation, the latter combination entailed "involution"—that is, an economy that cast away at its own foundations by funneling resources from production to exchange. Russia's involution has proceeded in a combined mode—that is, through a series of phases in which government policies try to rectify the unintended consequences of previous policies. Involution is also uneven as different industries adopt different strategies. Some rapidly exited from the old order and then disintegrated while others voiced their demands to the state and declined more slowly.

1. INTRODUCTION

Reformers in Russia and China were equally enamored of markets but their attitudes toward the state were diametrically opposed. For the Russian "reformers" the party-state was so morally and politically repugnant and its incumbents so corrupt and venal that the destruction of the state apparatus was worth any price. The Chinese "reformers," on the other hand, were prepared to go to any lengths to preserve the party-state but realized that if it were to be sustained the system of rules and incentives that connected the central state to the regions and thence to localities had to be drastically changed to allow the reconstruction of state-society ties at the local level. The jury is, of course, still out in both cases—but at the present time the Chinese

| (Percent) | | | | | | | |
|-------------------|------|------|-------|-------|-------|-------|--|
| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | |
| China (Real GNP) | 4.4 | 4.1 | 8.2 | 13.0 | 13.4 | 11.4 | |
| Russia (Real GDP) | 3.0 | -2.1 | -12.9 | -18.5 | -12.0 | -15.0 | |

Table 1

ECONOMIC GROWTH RATES FOR CHINA AND RUSSIA
(Percent)

Source: Data from *Economist Intelligence Unit*, country reports.

strategists can look back on a period of continuous growth, while Russia's reformers seem to have destroyed the economic capacity of their society in the process of saving it from the state (Table 1).

This paper uses the local dynamic of the more synergistic Chinese case as a contrasting lens to illuminate the local problems created by the Russian strategy, where disabling the state to accelerate the creation of markets has come at the cost of production. The first part shows how the Chinese party-state has promoted accumulation, while the Russian democratic state has created a developmental disaster I call "economic involution." The second part focuses on the succession of state interventions, intended to promote market economy in Russia, which have expanded the sphere of exchange but at the expense of production. The third part compares two Russian industries which have adopted opposite strategies in order to shed further light on why destroying the state to save the economy has not worked.

2. WHY CHINA SUCCEEDS WHERE RUSSIA FAILS

There is no shortage of theories that purport to explain the discrepant trajectories and outcomes of Russian and Chinese economic reforms. But as I argue below, they are all flawed by giving short shrift to the political dimension of economic transition—not only the external relation of state to economy, but also internal political processes within the economy.

NEOLIBERAL, EVOLUTIONARY, AND INSTITUTIONAL THEORIES

According to the neoliberal strategists, a market economy can be and has to be introduced at one stroke. Architects of shock therapy, Lipton and Sachs, argue that

Both economic logic and political situation argue for a rapid and comprehensive process of transition. History in Eastern Europe has taught the profound shortcomings of a piecemeal approach, and economic logic suggests the feasibility of a rapid transition (1990: 99)

What is the compelling economic logic? Lipton and Sachs itemize the Stalinist legacies which have to be superseded—state ownership of economic enterprises; state regulation of prices, taxes, investment, and interest rates; restricted private sector; distorted prices; overinvestment in heavy industry; absence of small to medium-sized firms; central regulation of entry and exit of enterprises; excess demand which creates barriers to private enterprise and leads to backward integration into supply. These defects are the product of the shortage economy, whose source is soft budget constraints and whose remedy lies in deregulating prices, tightening credit and monetary supply, introducing bankruptcy laws, privatizing state enterprises, and liberalizing trade. It must all happen at once: "the transition process is a seamless web" (1990: 99).

If economic logic calls for comprehensive and radical change, why does the political situation require it? Here Lipton and Sachs identify two barriers to the transition: populist upheaval against inevitable economic deterioration of standards of living and bureaucratic inertia from officials who were accustomed to running the old command economy. So new governments should cash in on their legitimacy by undertaking as much as possible as quickly as possible. In this way political dissent, whether bureaucratic or popular resistance, will mount their challenge only when it is too late.

In this view the creation of the new within the shell of the old is impossible. The past must be liquidated. But then how can we explain the success of China, where the party-state remains in tact and the economy continues to grow? In a fascinating defense of neoliberalism Sachs and Woo (1994) argue that Russia and China are not comparable. China is an underdeveloped agrarian society mak-

ing a transition to industrialism, whereas Russia is an overdeveloped industrial society needing to restructure its sclerotic economy. Russia requires much more drastic medicine than China. It is possible that the state can play an important role in China, but in Russia only markets can simultaneously destroy the old and create the new. Sachs and Woo never spell out how the state promotes economic growth in China, nor for that matter how markets are supposed to miraculously generate growth in Russia.

On the other hand, neoliberals have no difficulty in explaining the dramatic decline in the Russian economy. That was exactly what they seemed to desire. Indeed, the more rapid the decline, the sooner the recovery. Just as socialists used to say of capitalism "the worse the better," so now neoliberals say the same about Russia. Both take the utopian view that the radiant future will be conceived immaculately out of the ashes of the old order. As we shall see, a new order has taken root, but instead of a modern bourgeois capitalism we behold a new-fangled rentier or merchant capitalism, one that reminds us more of the Third World than the promised modern capitalism. While some neoliberals (Aslund 1994; Boycko, Shleifer, and Vishny 1995) celebrate price liberalization and privatization as setting Russia on the correct road even if at great cost, others, such as Sachs himself, are less sanguine about the future. They argue that shock therapy was improperly executed or that Western governments and particularly the United States failed to deliver on their promises (Sachs 1994a, 1994b).

In all these accounts the untheorized but very present actor is the state—its capacity and its interests. The paradox of the neoliberal position, what Kahler (1990) and others have called the "orthodox paradox," is that the anticipated resistance from the crusty old order calls for practical measures that only a strong state could implement, yet their ideology denies the state an active role. Where the Bolsheviks at least understood the problem of the state and had a theory, both of the withering away of the state and its centrality, the neoliberals take a step backward and simply refuse to countenance the state. That is why they are baffled by China's success, refusing to admit it as a comparable case.

Among economists, evolutionists offer the main challenge to neoliberals. They join the mounting chorus of criticism of neoclassical economics (the theoretical foundation of shock therapy) for its assumptions of complete information, frictionless transactions, unambiguous property rights, profit-maximizing actors, and market equilibria. Information problems are intrinsic to the operation of markets and therefore do not guarantee allocational efficiency (Stiglitz 1994). Indeed, Murrell (1991) argues from empirical data that state socialism was no less efficient in allocating resources than equivalent capitalist societies. What distinguishes capitalism from state socialism is the former's dynamic efficiency, the pressure to innovate—Schumpeter's "gales of creative destruction." But such innovation requires an institutional environment that fosters risktaking, that establishes trust and guarantees contracts, that promotes confidence in the future (Nelson and Winter 1982; North 1994).

Liquidation of the old regime, the strategy of shock therapy, destabilizes old institutions and is the worst possible context for dynamic accumulation. Therefore, evolutionary theory proposes to compromise with the past while creating the new. This two-track strategy, whose advocates include Kornai (1990, 1992), Poznanski (1993), Murrell (1991, 1992a, 1992b, 1993), and Goldman (1994), involves channelling resources into an emergent private sector while trying to harden the budget constraints of the state sector. Their strategic focus is on promoting independent entrepreneurship rather than rapid privatization of the state sector. China, with its policy of decollectivization beginning in the late 1970s and its promotion of small-scale industry, is the shining example of gradualism. Evolutionary theory certainly explains the relative success of China as compared to Russia, but it does so in very general terms. It misses the specificity of the political dimension of the reforms in each country and overlooks exactly how state policies lead to economic accumulation in the one case and its antithesis—economic involution—in the other.

There is one body of theory that does take politics more seriously, that treats the state as more than a *deus ex machina* for desirable policies. In this institutionalist view the lesson of China is that economic reforms must precede political reforms. Shirk (1993) concludes that Russia's mistake was to embark on political reforms that brought down the entire order before economic reforms could be implemented. Opening up the party-state is more dangerous than liberalizing the command economy. Such "sequencing theory" exaggerates, however, the separation of the political from the eco-

nomic—in both countries economic and political reform proceeded in tandem (Friedman, forthcoming). In studying the political logic of economic reform, Shirk may explain why the center adopted particularistic rather than redistributive reforms (profit-sharing rather than taxation), but not how this leads to economic growth. This requires going beyond a politics of economic reform to a political economy which embeds fiscal constraints and property rights in political relations.

BUDGET CONSTRAINTS: HARD AND SOFT

The Chinese economic reforms of the late 1970s were directed at both fiscal and property relations, changing who controlled the surplus produced in the economy. The 1980 fiscal reforms decentralized the control over surplus by establishing contractual revenue-sharing agreements between center and region, known as "eating in separate kitchens." According to Shirk, decentralization of the fiscal and *no-menclatura* systems led to the economic ills of overheating, inflation, price gouging, balkanization of the economy, and local protectionism.

A very different view emerges from the work of Oi (forthcoming), Solinger (1993), and Walder (1994a and 1994b). Looking below the regional level at the county, township, and villages levels, Oi discovers that decentralization of the fiscal system encourages government at these levels to promote local economic growth. Since local government is now a residual claimant—that is, it retains the surplus after remitting taxes to the central state—it has a direct interest in the prosperity of local enterprises. Rather than maximizing appropriation and then redistributing, the central state appropriates a contractually specified amount and redistributes less. On the one hand, it becomes more difficult for local government to bargain upward for resources, while on the other hand there are much greater rewards for local accumulation. Given the tax system, local government retained more revenue from industrial enterprises than from agriculture, and this in part explains the rapid expansion of township and village enterprises. In short, the county, township, and village administration have the autonomy and the interest to work out their own strategy of development because they are subject to hard budget constraints from above.1

In Russia, by contrast, the center still strives to be the residual claimant, struggling to maximize appropriation in order to redistribute. Following this redistributive logic, instead of investing in local accumulation, the region expends political energy trying to maximize what it obtains from the center and minimize what it gives up. In the northern Republic of Komi, for example, where my research took place, the regional office of the Central Bank is inundated with demands for loans to keep local industry alive. In turn, it works with regional government to demand more resources from Moscow. The Komi government seeks every opportunity and subterfuge to reduce the taxes it pays to Moscow and retain control over its own territorial resources even if this means concealing the amount it produces.

Woodruff's (1994) fascinating study of Krasnoyarsk, Vladivostock, and Samara shows how local enterprises pass their debts on to the local electrical power companies because they are the ones with the greatest power to extract concessions from the center. They can threaten to pull the plug on the region's electricity. Regional governments try to orchestrate the distribution of debt in a way that most effectively blackmails the center into distributing credits. One of the reasons miners have figured so prominently in political struggles has been their ability to paralyze industry and thus blackmail the Russian government. Chinese regions are more autarkic and less interdependent than those in Russia—that is, they pose a weaker threat to the integrity of the whole country. They have less power in bargaining with the center and have to look downward to expand their resources.

The first paradox is that in order to maintain political order without the party the Russian state reasserts central redistribution of economic resources and thereby reproduces soft budget constraints, whereas in China precisely because the party is such a powerful integrative force, the state can relax redistributive imperatives, give regions greater control over their resources, and thereby harden budget constraints.

PROPERTY RELATIONS: DECENTRALIZED AND PRIVATIZED

In China regional and local governments strategize how to generate more resources from below whereas in Russia they strategize

how to extract resources from above. But how does local government in China manage to foster economic growth? Oi (forthcoming) once more has a convincing model of how this works. She likens the local economy to a corporation, with local administrators acting as owners who seek control over managers of enterprises. The secret of the expansion of rural industry then lies in what she calls "local state corporatism." In this scheme enterprises are not privately but locally owned—a form of collective or social ownership. "A contract responsibility system" governs the relationship between local administration and managers, typified by various bidding and leasing arrangements that hold managers accountable to local government while they also retain a definite share of profits.

Social ownership is a decentralized property relation but not yet privatized. Managers cannot freely dispose the capital they use, but they may control income flows, use of capital, and production. Because we are here dealing with townships and villages, the corporate owners—that is, the local state—can both monitor enterprise managers and apply sanctions for malfeasance. Indicative planning can actually work quite effectively at this level. Even where enterprises are nominally private, they are dependent upon public enterprises, often in the urban areas, for orders and supplies, and on the local government for loans, subsidies, licenses, and so forth. The distinction between social and private ownership loses its significance.

In Russia, on the other hand, property relations have been privatized so that the state lost control over local resources. Voucher privatization has legalized *de facto* managerial control of enterprises, which lie beyond the influence of the local state. Once enterprises were handed over to their employees, then managers could pursue short-term financial interests by investing resources in the banking sphere or by selling off assets for quick returns but at the expense of long-term interests. Those concerned to keep production going are swept up in immediate problems of finding working capital to obtain supplies and pay wages. When time horizons are so short, privatization leads to the outflow of resources from the sphere of production to the sphere of circulation, whether trade or finance.

We arrive at the second paradox: in Russia markets combined with privatization led to disinvestment, whereas in China markets combined with public ownership stimulate accumulation. Behind the mutual stimulus of production and exchange lies the Chinese party-state. Behind the wanton destruction of Russian industry lies liberal democracy.

ACCUMULATION vs. INVOLUTION

Both Max Weber and Karl Marx agreed on one thing—namely, the radical distinction between modern bourgeois capitalism and its predecessors—adventure, booty, speculative, or more generally merchant capital. For Weber the distinction lay in "the rational organization of formally free labor," while for Marx it lay in the transition from the extraction of "absolute surplus value" to "relative surplus value." For both the hallmark of modern capitalism lay in the way markets generated a process of dynamic accumulation through the rationalization of work, the development of new technology, and the invention of new products. Under the auspices of the party-state such accumulation appears to be occurring in China, but not in Russia. Marx and Weber appreciated that the expansion of markets did not of itself lead to accumulation and rationalization. Indeed, it more usually entailed the preservation of precapitalist forms, as in the celebrated cases of feudalism (Brenner 1976; Dobb 1947) or the putting out systems of early industrialism (Levine 1977). Similarly, slavery in the Americas was intensified rather than undermined by the expansion of commerce (Fox-Genovese and Genovese 1983). Today in Africa, Asia and Latin America merchant capital inhibits development as it extracts profits from trade without transforming precapitalist production (Kay 1975).

A similar process is taking place in Russia today but with even more devastating consequences. Whereas in the Third World, precapitalist production often intensifies under the pressure of merchant capital, in Russia production falls as its "Soviet" form is preserved. In Third World countries production and trade are insulated from each other, whereas in Russia there is a massive exodus of human, material, and financial resources out of production and into exchange. A top-heavy superstructure of distributive transactions is erected on an ever-shrinking productive base.

I call this process of "preservation-destruction" economic involution, conceived of as an alternative to both "revolution" and "evo-

lution."² It implies profound economic degeneration in which an economy feeds upon itself. It is the opposite of accumulation. In using the concept of involution, I do not mean to imply a self-generating economic process but one that is always politically constituted. There is no escaping the political dimension of the unfolding dynamic of involution, what I call combined involution, as well as in the variation of trajectories by sector or region, or what I call uneven involution.

3. THE PHASES OF COMBINED INVOLUTION

Comparing Russia with China highlights first the importance of political relations between center and region in determining budget constraints and thus the interests of the local state in accumulation, and second, property relations in determining the state's capacity to stimulate local growth. But this comparison is a static one, and we must now study how these factors work themselves out dynamically, how successive stimuli from the Russian federal government combine with preexisting regional political economies to generate repercussions far from those intended. The interventions of the Russian government have generated three phases of economic involution—disintegration, reform, and stabilization—each phase establishing conditions that disabled the next ensemble of policies.

DISINTEGRATION: THE HYPERTROPHY OF THE SOVIET ECONOMY

We begin with the phase of disintegration which we shall place as beginning in 1989 with the national strike of the miners. Failure to repress this strike marked the beginning of the end of the Soviet state. It is commonly thought that disintegration of the party-state brought about the collapse of the old order. Nothing could be further from the truth. Many features of the administered economy were in fact strengthened. The economy had already assumed an autonomy that allowed its own reproduction, indeed expanded reproduction.

Specifically, the withering away of the party-state initially gave more power to the conglomerates that organized the economy by sector and region. The party had sought to confine the monopolistic tendencies engendered by an administered economy that regarded duplication and competition as wasteful. When these constraints evaporated, conglomerates sought to advance their own economic interests—continuing to demand subsidies while increasing their control over the terms and proceeds of sale. As part of this expansionist drive lateral barter relations flourished. Barter relations had always existed between enterprises as a way of expediting exchange of scarce resources, but they had been regulated by party supervision, which had now evaporated.

Finally, in addition to the strengthening of monopolies, the extension of barter relations, the disintegration of the party-state increased worker control over the shop floor. It had always been considerable due to both the power employment security gave to workers and management's dependence on workers for improvisation. Faced with material shortages, unreliable machinery, and rush work to meet plan targets, management relied on the cooperation of its work force. With the exodus of the party, however, management lost what was their most trusted instrument of control over the shop floor.

In short, disintegration of the party-state did not unleash new kinds of productive organization but resulted first in the hypertrophy of old economic forms. This early phase of market emergence encouraged enterprises to seek profit from trade rather than from transforming production. Since managers did not control production and at the same time could charge monopoly rents, the disintegration of the party encouraged the rise of merchant rather than modern bourgeois capitalism.

REFORM: MONETIZATION OF SOFT BUDGET CONSTRAINTS

If in the first phase markets emerged spontaneously, in the second phase they were created deliberately. Economic reform began 2 January 1992 with price liberalization. The effects of price liberalization were shaped by the preexisting economic order, in particular by the prior disintegration of the party-state and by the presence of powerful regional monopolies. The state did not have the capacity to impose bankruptcy on those who were failing in the new market environment. Conglomerates were able to extract subsidies and loans from the Central Bank, which itself operated with a will of its

own, independent of the government. Where loans were not forth-coming, enterprises simply did not pay their bills and chalked up huge interenterprise arrears which according to Ickes and Ryterman (1992, 1993), amounted to between 25 percent and 40 percent of the GDP. To attempt to impose bankruptcy in this context would create havoc within the economy. It was not possible to distinguish efficient from inefficient enterprises. More important, there was no knowing what chain of consequences would follow from any given liquidation. In short, given the relative balance of power between state and economy, price liberalization was not accompanied by stabilization. The economy was monetized but at the cost of runaway inflation, averaging over 20 percent a month.

According to reformers, the problems of the market transition lay with a predatory state. Privatization was, therefore, designed to strip the state of its economic power, to depoliticize the economy as quickly as possible (Boycko, Shleifer, and Vishny 1995). Learning from Eastern Europe, the Russian government recognized that to wait for buyers of Soviet enterprises would postpone privatization indefinitely and that the only option was to give enterprises away. Decrees in the summer of 1992 launched voucher privatization, which gave each citizen 10,000 rubles to invest in an enterprise of his/her choice. In its most popular form, privatization entailed the sale of 51 percent of the shares to employees at a nominal price. This effectively concentrated control of the enterprise in the hands of managers, who continued to pursue short-term strategies. Instead of investing in their own enterprises, however, they poured resources into the burgeoning financial and banking sector.

Banks, for their part, insofar as they operated according to hard budget constraints—and indeed many tried to—would lend out their own funds at high interest rates (although until the end of 1993 they were still negative in real terms) and for only very short time periods, a maximum of three months. Bank loans tided enterprises over during payments crises and covered shortages of working capital. Alternatively, they were given to commercial ventures with rapid turnover. Again, trade, commerce, and finance benefited at the expense of production. Investment steadily dropped each year so that by 1994 it was only 28.4 percent of the 1990 figure.

In this period (1992–93), the economy was rapidly monetized and enterprises were privatized, but the government and the Central

Bank continued to hand out low-interest credits to those who had the political capital to garner them. The recipient's bank had to guarantee these cheap credits, something it was reluctant to do but had no alternative when, as was often the case, its clients were also its owners. Those enterprises who did not have the political capital to obtain cheap state credits survived by going heavily into debt, so that interenterprise arrears spiraled upward to be only temporarily arrested by the mutual cancellation of debts in the summer of 1992.

Industrial managers invested resources in the flourishing, independent financial sector, while banks invested their own funds in commerce or in other banks. On the one hand, economic reforms accelerated the flow of resources out of production and into exchange, moving merchant capitalism from trade to finance. On the other hand, the economy was kept afloat in a sea of soft budget constraints. Price liberalization and privatization, far from turning managers into cost-cutting, innovative entrepreneurs, intensified the scramble for credit. Soft budget constraints were not hardened but only monetized.

STABILIZATION: THE RESTORATION OF BARTER AND THE RISE OF THE MAFIA

According to Aslund (1994), advisor to the Russian government, the success of economic reforms was marked by "gray apparatchiki" (typified by Prime Minister Chernomyrdin) taking over the reigns of power from the "bright young economists" (typified by Gaidar and Fyodorov). Visionaries had fulfilled their mission and they had to give way to pragmatic, consensus-building politicians who would execute the policies.³ Indeed, following the elections of 1993, when the "visionaries" Gaidar and Fyodorov lost or resigned their positions, the government did indeed move ahead with stabilization, adopting more stringent fiscal policies. Loans were harder to obtain as interest rates climbed and inflation began to fall. Given the previous two phases of the transition, however, the effects often intensified economic involution. Many enterprises turned back to barter and the mafia expanded its sphere of operations.

The restoration of barter after monetization can be attributed in part to the paternalistic state that forestalled bankruptcies and in part to the arcane legacies of the Soviet budgetary system, specifically the coexistence of two types of money—cash (nalichnye) and non-cash (beznalichnye)—which are convertible under very restrictive conditions. Interenterprise transactions for the most part operate through "non-cash transactions," regulated by banks. When an enterprise can no longer pay its debts, its bank opens up a special "deficit fund" and supervises all economic transactions. In particular, banks are responsible for ensuring that funds entering the account of such a loss-making enterprise are first directed to unpaid taxes and utility bills. Enterprises in the red, therefore, conduct transactions through their bank only when they see a brighter future or if their bank promises short-term loans that will cover working capital. As real interest rates increased and loans became more scarce, loss-making enterprises had less to gain from conducting business through banks. Instead they operated outside the banking sphere—either with direct cash transactions or more usually through barter.

This return to barter, therefore, is not a residue from the past but a strategic response to the exigencies of debt and taxation and a way of avoiding bankruptcy. Those who can continue their transactions with money, while those who cannot are forced into barter relations. Each mode of transaction tends to develop its own distinct network of enterprises which do business with one another. Some enterprises, such as the large parastatal utility companies, have a mixed profile, receiving some payments in money and others in barter and paying their workers in mixed forms too. Operating in the monetary circuit is risky when payment is so uncertain, leading to wage payment months in arrears. For example, miners striking in March 1995 were demanding payment of their November wages. Unable to compel coal consumers to pay their bills, the state extended loans to debtor enterprises, such as the steel complex at Cherepovets, earmarked for delinquent payment to the mines.

The absence of effective and legitimate public institutions to enforce contracts and compel enterprises to meet their economic obligations stimulates the appearance of agencies for private protection, loosely described as the "mafia" (Gambetta 1993). As interest rates increase and loans are harder to obtain, creditors such as banks become increasingly concerned about debtors who default on their obligations, so they enroll the services of security agencies or criminal organizations to guarantee the payment of debts. These mafiosi

divide up the economy both regionally and by sector. They are often associated with conglomerates. Within their domain they have a monopoly of protection and can force all businesses to provide a service fee or rent in exchange for protection. Of course, "protection" can become prohibitively costly as it blends into extortion. The mafia is also active as guarantor of illegal economic transactions, since these are obviously outside the purview of the state. In the illegal export of oil or importing of stolen cars the chain of transactions has to be carefully supervised at every link. Once more an organization which specializes in protection along the chain is necessary.

The mafia, its coercive means notwithstanding, provides a service without which many economic transactions might not take place. In substituting for a weak and ineffectual state, the mafia exploits the existence of surplus and underpaid state personnel to assume the work of private protection—from police to army officers, from servants of the KGB to party officials. They are all experienced in security: the use of force, surveillance, and gathering information.

If the upshot of the first phase is the disintegration of the Soviet state but the hypertrophy of Soviet organization of production, and of the second phase the monetization of transactions but the maintenance of soft budget constraints, in the third phase stabilization leads to a resurgence of barter and the extension of the mafia. In this last phase, when budget constraints harden and money becomes scarce, powerful economic actors sponsor their own "quasi state" to regulate transactions, increasing the cost of those transactions and absorbing resources that might otherwise have been devoted to production. At each step of the transition the absence of an effective state explains the unintended consequences of reform as the acceleration of economic involution.

4. UNEVEN INVOLUTION

If disintegration of the party-state, economic reform, and stabilization combine in succession to produce economic involution, they do so in an uneven way. Based on their internal structure and their bargaining power with the state, industries respond differently to the opportunities offered by soft budget constraints and privatization.

At one end of the spectrum we find industries that pursue pure privatization at the cost of losing subsidies. They follow the strategy of exit—that is, they leave the conglomerates that still regulate the economy, giving up protection and subsidy for the sake of freedom to produce what they want, buy what they need, and sell to whom they wish. Privatization is a key to their strategy. At the other end we find industries that cling to their nationalized property status for fear of losing subsidies, secure supplies, and guaranteed markets. In order to maximize what they extract from the state while minimizing what they give up, they follow the strategy of voice.

There are many examples of mixed strategy, but here I focus on two cases, one of exit and one of voice, drawn from a five-year study in the northern Republic of Komi. Specifically, I examine why the timber industry, where privatization strategies of exit prevail, has undergone rapid decomposition whereas the coal industry, which clings to nationalization and voice, has experienced a more gradual decline. Thus, whereas coal output fell by only 25 percent during 1990–94, the production of raw timber fell by 44 percent during 1990–93 and a further 42 percent in the first six months of 1994. One might have expected the opposite, given the multiple uses of timber and the dependence of Vorkuta coal on a single consumer—the steel industry at Cherepovets. We shall see how the internal organization of the conglomerate and its external relations to the state determine very different patterns of involution.

TIMBER: EXIT AND THE POLITICS OF PRIVATIZATION

The Republic of Komi is located in northern European Russia—that is, to the west of the Urals. Its contribution to the Soviet economy came from its rich natural resources, preeminently oil, coal, and timber. Although it had long been a favorite Czarist region for exiled prisoners and political dissidents, labor camps were most extensively developed during Stalin's reign.

The lumber villages, scattered in remote areas throughout the region, are particularly well suited for prison labor. They are grouped around timber farms, which collect and sort the timber. From there it is transported mainly by river but sometimes by road to processing plants or to the huge paper plant located near the

capital city of Syktyvkar, or the timber may be directly exported. Processed wood is then used in fabricating plants, such as the furniture factory where I worked in 1991 (Burawoy and Krotov 1992). We have here a simple commodity chain which, under the Soviet regime, was organized by the Komi Timber Conglomerate.

All industries were grouped together into such "conglomerates," under the direct control of ministries, regional in the case of timber and all-Soviet in the case of coal. Every enterprise in the wood industry had to be attached to the conglomerate, which dictated the distribution of resources along the chain. In return for timber delivered by the lumber camps, the conglomerate would guarantee supplies of food, housing, equipment, and materials, as well as employee wages. The conglomerate organized the sale of the raw and processed wood and invested the proceeds in those enterprises that would bring the greatest "advantage" to the industry as a whole. In this redistribution, the processing and fabricating plants benefited at the expense of the timber farms and their lumber camps.

With price liberalization at the beginning of 1992, the timber enterprises along the chain, particularly the lumber camps and timber farms, were keen to escape their exploitative subordination to the conglomerate. They began to sell their wood outside the conglomerate to the highest bidder. Privatization plans, which were initiated in the second half of 1992, accelerated the impetus toward autonomy. With privatization they were now released from any obligations to the conglomerate. Accustomed to a seller's market, each timber farm, indeed each lumber camp, assumed it would be able to make a windfall. While true for any individual exit, when all exited, the conglomerate collapsed and the lumber camps quickly found themselves without buyers for their wood. As the timber chain collapsed, the shortage economy became a surplus economy. Bound by local rationality, lumber camps and timber farms had pursued their self-interest at the cost of their collective interest. Many became insolvent and found themselves without working capital. To make matters worse, freight charges increased at such a rate as to make it unprofitable to sell wood outside the republic. At first the state bailed them out with special loans, but when these ran out in the third phase of involution, their bank accounts were frozen and they resorted to barter.

With the collapse of the conglomerate, the planning and coordinating center of the industry also disappeared. The conglomerate

split into two: one part was absorbed into the Komi Ministry of Industry, Transportation, and Communications while the other part became a private company providing services to and making small investments in the industry. A myriad of commercial operators, among them mafia-like organizations and joint ventures headquartered in Moscow and St. Petersburg, swarmed around the decaying industry trying to exploit the disappearance of the conglomerate. Such piecemeal attempts at reconstructing the wood chain from below had only limited success.

In a belated attempt to rebuild the wood chain from above in 1995, the government used its residual ownership of the timber industry to reorganize the industry into six financial companies. The idea was to bind timber suppliers to one another and to the processing plants. Market forces, however, have so far proved much stronger than property relations, and the timber camps continue to sell to the highest bidder. The timber industry has been given a temporary boost by the doubling of the international price of paper and cellulose, leading Syktyvkar's paper mill to begin buying up wood from all over the territory. Given the declining demand at home and the collapse of local manufacturing industries, the timber industry is now subject to the whims of the export market.

In short, the manifest redistribution of resources along the timber chain led those at the bottom to exploit privatization and open markets by exiting from the conglomerate. In attacking the conglomerate's redistributive function, the timber enterprises also destroyed its coordinating and interest representation functions, spelling the demise of the entire industry. Enterprises that left the conglomerate to enhance their autonomy found themselves either out of business or subordinated to an even more capricious monopsonistic buyer (the paper mill), itself struggling to find a place in an increasingly competitive global arena.

COAL: VOICE AND THE POLITICS OF REDISTRIBUTION

Where the timber industry is scattered over the entire area of Komi, the size of California, mining is concentrated in two neighboring cities, Hinta and Vorkuta, beyond the Arctic Circle. Vorkuta, the larger and more important of the cities, has a population of 200,000.

Its only reason for existence is its coal, most of which is sent to the large steel complex at Cherepovets. There are thirteen mines. One has already been closed, and there are plans to close down four more. Since its inception in the 1930s and particularly since World War II, when the Ukraine was cut off by the German occupation, the Vorkuta coal industry has been regarded as a national industry. Vorkuta, therefore, always looked to Moscow rather than to the capital of Komi, Syktyvkar, for its resources. Its managers often came from Moscow for a stint in the provinces before being promoted to the commanding heights of the administrative apparatus back in the capital. Miners themselves came from all over the Soviet Union, a large percentage from Ukraine but also from the Baltics, Tartarstan, Byelorussia, and Siberia. Until the mid-1950s workers were locked in labor camps, populated by war prisoners as well as internal political exiles and criminals. Labor later came to Vorkuta voluntarily, attracted by its high wages. In short, since the beginning of World War II Vorkuta has been a cosmopolitan, multiethnic, multinational city.

In 1989 and then again in 1991 Vortuka was the center of a militant working-class movement linked to other coal centers in Siberia and the Ukraine. The miners not only demanded better working conditions and the end of the feudal disciplinary code which bound them to their mine, but also the reorganization of the Soviet political and economic order. They called for an end to central planning and party political monopoly to be replaced by greater control of their mines, the right to retain the proceeds of their labor. Their anarcho-syndicalism was couched in the demand for a market economy and democratic elections to all significant positions in government. These were radical demands indeed.

In 1991 Yeltsin ascended to the lofty position of President of Russia, in part by successfully negotiating on the miners' behalf with the Soviet government. With each strike wave the miners managed to attract greater attention and more resources for the industry. Not only did wages increase, but in 1992 the economic reforms allowed mines to export up to 17 percent of their coal to the West in return for consumer durables that were offered to employees at heavily discounted prices (Burawoy and Krotov 1993).

Holding the government for ransom, through actual or threatened strikes, was an effective way of garnering resources, maintaining subsidies, and obtaining higher wages only so long as the Russian government was concerned about the loss of Vorkuta's coal supplies or about the demonstration effect of strikes. This was the case in the first phase of involution. But as the economy worsened and their political influence in Moscow began to wane in 1993, miners turned from unconditional supporters of Yeltsin to the opposition. Notwithstanding conflicts between the conglomerate and the mines, and between workers and managers, the Vorkuta coal industry managed to maintain a united front in the face of the threatened withdrawal of subsidies.

The differences between timber and coal make voice a much more effective strategy in the latter. First, coal has had a long history as a key and favored industry with lavish subsidies from the central government. Komi's timber industry, by contrast, is not a national but a regional industry, competing with other regional timber industries all over Russia. It did not receive subsidies from Moscow around which the conglomerate could rally support. The timber industry had to fend for itself after price liberalization in 1992. Second, the concentration of mines into a single city fosters a working-class unity and community solidarity that is impossible to achieve in the timber industry, composed as it is of numerous tiny centers scattered all over Komi. Working together with managers and the conglomerate, miners could effectively shut off the supply of coal to the steel and energy industries.

Apart from external relations to the state, another difference makes voice a more likely strategy in coal than timber—namely, the internal relations among enterprises. The individual mines of Vorkuta were not arranged in an interdependent hierarchical chain but existed as autonomous units not bound to one another but to the conglomerate. They were not trapped at the bottom of an expropriating hierarchy but lay at the end of spokes radiating horizontally from a center that was Vorkuta Coal, the coal conglomerate. Mine managers saw their interests, therefore, in presenting a united front to the state in order to maximize subsidies. Privatization was rejected as it might have jeopardized their bargaining power with the state.

Nevertheless, there were internal conflicts that made exit tempting. The richer mines resented the way the conglomerate redistributed resources to the poorer mines. Indeed, miners at the richest mine, Vorgashor, struck for its independence at the end of 1989. It left the conglomerate to forge direct links to the Ministry of Fuel and Energy in Moscow. In 1992 another group of mines was plotting its separation from the conglomerate, resentful that the coal industry subsidized the social sphere—hospitals, kindergartens, canteens, dairy farms, water and sewerage works. By breaking away, they hoped to create their own autonomous association and to take with them the bulk of government subsidies. They began by creating their own bank to exercise greater control over their financial transactions. In the end these plans came to nothing since they could never challenge the conglomerate's control of subsidies from Moscow.

In the third phase of involution, the phase of stabilization, the position of the coal industry, and Vorkuta in particular, became weaker. The Russian government accepted the World Bank's proposals for downsizing the industry, so the exit option became even less attractive. The mines regrouped even more solidly around the conglomerate. In an unparalleled show of unity, official and independent trade unions joined forces with the mine managers to support the conglomerate's bargaining in Moscow. All parties were now fighting for the very existence of Vorkuta (Burawoy and Krotov 1995). Here, at least, there was still the possibility of voice, long since eclipsed in the timber industry, where fissiparous tendencies had led to spiraling involution.

Vorkuta Coal did not collapse because it managed to monopolize access to state resources. Its redistributive function in tact, it could continue to coordinate the collective interests of the community as a whole. Rather than fighting mine closures—five out of the thirteen mines—the conglomerate sought to conduct the restructuring in a rational manner, redistributing labor, dispensing benefits to retirees, and redirecting investment toward the more profitable mines. The coal conglomerate could still organize, what Oi calls "local state corporatism," a role denied the timber conglomerate, which disintegrated as the industry over which it had reigned fragmented.

The timber industry destroyed itself; the coal industry is being destroyed. The government has endorsed World Bank proposals to cut production—already down from 428 million tons in 1988 to 320 million tons in 1992—to 230 million tons by 1996. This would mean closing 100 of the 300 mines and reducing the labor force by 40 percent. The intended effect is produced by cutting subsidies to the

conglomerates and thereby decentralizing the responsibility for "restructuring." The World Bank reports plot the demise of the coal industry on the basis of the decline of the whole economy. In the neoliberal vision liquidation has to be planned but new industry will rise spontaneously, like a phoenix out of the ashes of the old order.

Planned or anarchic, slow or fast, combined or uneven, involution is involution. In both cases industry declines without the new being born. This is not creative destruction but ruinous destruction. Price liberalization, monetization, privatization, and stabilization may transform and modernize the sphere of circulation but at the expense of production.

5. THE STATE AND TRANSITION TRAJECTORIES

Instead of conceiving of the Russian transition as revolutionary or evolutionary, we see it as a process of economic involution—the decomposition of production brought about through the recomposition of exchange. In looking at Russia through a Chinese lens, we awarded central importance to the role of the state in the organization of the economy, in establishing budget constraints and property relations. That is, the state mediates between the market and its effects—accumulation in China and involution in Russia. The failure of the Russian state to organize the market economy has led to a coordination and entrepreneurial vacuum into which have stepped conglomerates, banks, and mafia, siphoning off surplus from production to exchange.

Table 2 places the comparison between Russia and China in a broader context. Here we compare the configuration of budget constraints and property relations in China and Russia with those of ideal typical "capitalism" and "socialism" (as it once existed). The first point to notice is that the form of ownership (public or private) does not determine the tightness of budget constraints (Cui 1994a, 1994b). This is not to say that ownership is unimportant but rather that what is important is the way property rights are embedded in political and economic relations. By decentralizing property relations under the umbrella of the party-state the Chinese government gives local states the resources to monitor and guide accumulation,

Table 2
TRAJECTORIES OF TRANSITION

| Budget Constraints | | | |
|--------------------|-------------------|--|--|
| Hard | Soft | | |
| "Capitalism" | Russia | | |
| China | "Socialism" | | |
| | Hard "Capitalism" | | |

much as owners of capitalist corporations control their managers. Furthermore, by decentralizing control over surplus, the Chinese government has created incentives for the local state to act as an entrepreneur, promoting local economic growth through hardening budget constraints. In Russia the opposite situation pertains. Privatization has put local enterprises outside the control of local states, which in turn are encouraged to seek the redistribution of resources from higher levels of the state. Far from hardening budget constraints, privatization reproduces soft budget constraints.

If property rights do not determine budget constraints, then we can also say that budget constraints do not determine economic growth. Again the missing variable is the underlying political and economic relations. While in China hardening budget constraints have indeed promoted local accumulation, in Russia's third phase of involution hardening budget constraints increased transaction costs as a result of the restoration of barter and the rise of mafiosi. Since the expansion of the mafia and barter leads to regional autarky, I would expect the Russian government to relent on its stabilization policies, attempt a remonetization of the economy through central loans and credits, and thus soften budget constraints again.

If the Russian state has failed to establish the conditions for accumulation, this is not because it is not sufficiently autonomous or because it is not embedded in the economy (Evans 1995). Rather it is because the national state seeks to use the economy for political ends. The Russian and Chinese polities face a common problem—namely, how to govern vast and diverse regions in the process of transforming the national economy. The Russian state has no Communist Party to fall back on in its project of national integration, and therefore it has sought to use economic concessions and soft

budget constraints to contain centrifugal pressures. The result has been economic involution. The lesson is an old one that Karl Polanyi taught us long ago: there is no market road to a market economy; a "hard" state (Unger and Cui 1994) is an essential player in the transition.

Because they fail to appreciate the significance of the state, both local and national, neoliberals deem infeasible the cells occupied by Russia and China in Table 2. As far as they are concerned, these forms can only only be temporary and unstable aberrations. I argue that they are emergent and enduring types, that there is nothing inherently unstable about them. Adopting the neoliberal view that there are only two alternatives—failed communism and successful capitalism—Russia's reformers attempted to leap straight from one to the other, and they plunged the economy into the abyss of involution. Rejecting this Manichean view, China has manufactured a more effective transformation of socialism, creating a fourth alternative, which for all its problems offers some optimism for the future. Table 2 instructs us not to reduce the future to the past, nor marginalize originality in the present.

NOTES

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1. There is considerable disagreement over the performance of the large state enterprises. Many, such as Sachs and Woo (1994) or Qian and Weingast (1995), are convinced that the state sector is dominated by "standard socialist dinosaurs~" and all the dynamism has come from the growth of town and village enterprises (TVE). Others, such as Groves et a1. (1994), McMillan and Naughton (1992), and Naughton (1994), argue that large state owned enterprises have also shown significant increases in productivity as they have obtained greater control over their revenues. Shirk (1993) and Rawski (1994) also observe state enterprises seeking to partake in economic growth. Those who would compare

the TVEs and the old state-owned enterprises miss the symbiotic relationship between the two. Many of the TVEs have subcontracts from large state enterprises, while others are direct spinoffs from the state sector. It is therefore misleading to contrast dynamism of the collective and private sector with stagnation in the state sector.

- 2. I borrow the concept of "involution" from Geertz's study of Indonesian agriculture. He defines involution as "the overdriving of an established form in such a way that it becomes rigid through overelaboration of detail" (1963: 63). Geertz is referring to the way capital-intensive cultivation of an export crop (sugar) reproduces rather than transforms dependent, labor-intensive cultivation of a subsistence crop (paddy). In Russia the analogous process is the reproduction of the old system of production alongside a transformed and expanding sphere of circulation. Geertz's work has spawned an enormous, largely critical literature that contests his understanding of Java and of underdevelopment more generally.
- 3. In his earlier writings these same "apparatchiki" bore the brunt of his attack as incorrigible opponents of reform: "The Russian state directors seem to have all the characteristics that we would like to avoid: they have little knowledge of economics; they are firmly molded by the old Soviet command economy; they know nothing of the outside world; their purpose for coming to power is to gain wealth for themselves and their narrow constituency. It is difficult to imagine any grouping that would be less suitable for governing a country in transition, and it is strange that these obvious arguments have not won the Russian debate" (Aslund 1993: 33).
- 4. Figures are from the respective conglomerates, the Komi Timber Industry and Vorkuta Coal.

REFERENCES

Aslund, Anders. 1993. "The Gradual Nature of Economic Change in Russia," in Changing the Economic System in Russia, ed. Anders Aslund and Richard Layard, pp. 19–38. London: Printer Publishers.

-. 1994. "Russia's Success Story." Foreign Affairs 73, 5: 58-71.

Boycko, Maxim, Andrei Shleifer, and Robert Vishny. 1995. Privatizing Russia. Cambridge, Mass.: MIT Press.

Brenner, Robert. 1976. "Agrarian Class Structure and Economic Development in Pre-Industrial Europe." Past and Present 70: 30-75.

Burawoy, Michael, and Pavel Krotov. 1992. "The Soviet Transition from Socialism to Capitalism: Worker Control and Economic Bargaining in the Wood Industry." American Sociological Review 57: 16–38.

- —. 1993. "The Economic Basis of Russia's Political Crisis." New Left Review, no. 198: 49-69.
- —. 1995. "Russian Miners Bow to the Angel of History." Antipode 27, 2: 115-36.
- Cui, Zhiyuan. 1994a. "Can Privatization Solve the Problem of Soft Budget Constraint?: 'Monetary' vs. 'Real' Perspectives on East European Reforms." In Changing Political Economies, ed. Vedat Milor, pp. 213–28. Boulder, Colo.: Lynne Rienner.
- —. 1994b. "Soft-Budget-Constraint and Inclusive Property Right." Unpublished manuscript, Department of Political Science, MIT, Cambridge, Mass.
- Dobb, Maurice. 1947. Studies in The Development of Capitalism. New York: International Publishers.
- Evans, Peter. 1995. Embedded Autonomy. Princeton, N.J.: Princeton University Press.
- Fox-Genovese, Elizabeth, and Eugene Genovese. 1983. Fruits of Merchant Capital. Oxford: Oxford University Press.
- Friedman, Edward. Forthcoming. "Is China a Model of Economic Success?" Economic Development and Cultural Change.
- Gambetta, Diego. 1993. The Sicilian Mafia: The Business of Private Protection. Cambridge, Mass.: Harvard University Press.
- Geertz, Clifford. 1963. Agrarian Involution. Berkeley: University of California Press.
- Goldman, Marshall I. 1994. Lost Opportunity. New York: Norton.
- Groves, Theodore, Yongmiao Hong, John McMillan, and Barry Naughton. 1994. "Autonomy and Incentives in Chinese State Enterprises." Quarterly Journal of Economics 109, 1: 183-209.
- Ickes, Barry W., and Randi Ryterman. 1992. "The Inter-Enterprise Arrears Crisis in Russia." Post Soviet Affairs 8, 4: 331-61.
- —. 1993. "Roadblock to Economic Reform: Inter-Enterprise Debt and the Transition to Markets." Post-Soviet Affairs 9: 231-52.
- Kahler, Miles. 1990. "Orthodoxy and Its Alternatives: Explaining Approaches to Stabilization and Adjustment." In The Economic Crisis and Policy Choices: The Politics of Adjustment in the Third World, ed. Joan Nelson. Princeton N.J.: Princeton University Press.
- Kay, Geoffrey. 1975. Development and Underdevelopment: A Marxist Analysis. New York: St. Martin's Press.
- Kornai, János. 1990. The Road to a Free Economy. New York: Norton.
- —. 1992. "The Postsocialist Transition and the State: Reflections in the Light of Hungarian Fiscal Problems." American Economic Review 82, 2: 1–21.

- ———. 1994. "Transformational Recession: The Main Causes." *Journal of Comparative Economics* 19: 39–63.
- Levine, David. 1977. Family Formation in an Age of Nascent Capitalism. New York: Academic Press.
- Lipton, David, and Jeffrey Sachs. 1990. "Creating a Market Economy in Eastern Europe—The Case of Poland." Brookings Papers on Economic Activity 1: 75–147.
- ——. 1992. "Prospects for Russia's Economic Reforms." Brookings Papers on Economic Activity 2: 213–65.
- McMillan, John, and Barry Naughton. 1992. "How to Reform a Planned Economy: Lessons from China." Oxford Review of Economic Policy 8, 1: 130–43.
- Murrell, Peter. 1991. "Can Neoclassical Economics Underpin the Reform of Centrally Planned Economies?" *Journal of Economic Perspectives* 5, 4: 59–78.
- ———. 1992a. "Evolution in Economics and in the Economic Reform of the Centrally Planned Economies." In *The Emergence of Market Economies in Eastern Europe*, ed. Christopher Clague and Gorden C. Rausser, pp. 35–54. Oxford: Basil Blackwell.
- ———. 1992b. "Evolutionary and Radical Approaches to Economic Reform." Economics of Planning 25: 79–95.
- ———. 1993. "What Is Shock Therapy? What Did It Do in Poland and Russia?" *Post-Soviet Affairs* 9, 2: 111–40.
- Naughton, Barry. 1994. "What Is Distinctive about China's Economic Transition? State Enterprise Reform and Overall System Transformation." *Journal of Comparative Economics* 18, 3: 470–90.
- Nelson, Richard R., and Sidney G. Winter. 1982. An Evolutionary Theory of Economic Change. Cambridge, Mass.: Harvard University Press.
- North, Douglass C. 1994. "Economic Performance through Time." *American Economic Review* 84, 3: 359–68.
- Oi, Jean. C. Forthcoming. *Rural China Takes Off: Incentive for Reform.* Berkeley: University of California Press.
- Poznanski, Kazimierz Z. 1993. "Restructuring of Property Rights in Poland: A Study in Evolutionary Politics." *East European Politics and Societies* 7, 3: 395–421.
- Qian, Yingyi, and Barry Weingast. 1995. "Institutions, State Activism and Economic Development: A Comparison of State-Owned vs. Township-Village Enterprises in China." Unpublished manuscript.
- Rawski, Thomas. 1994. "Progress without Privatization." In *Changing Political Economies*, ed. Vedat Milor, pp. 27–52. Boulder, Colo.: Lynne Rienner.
- Sachs, Jeffrey. 1994a. "Toward Glasnost in the IMF." Challenge 47, 3: 4-11.
- ———. 1994b. "Betrayal: How Clinton Failed Russia." *New Republic* 210, 5: 14–17.

- Sachs, Jeffrey, and Wing Thye Woo. 1994. "Structural Factors in the Economic Reforms of China, Eastern Europe and the Former Soviet Union." Davis: Department of Economics, University of California. Working Papers Series no. 94–1.
- Shirk, Susan L. 1993. *The Political Logic of Economic Reform*. Berkeley: University of California Press.
- Solinger, Dorothy. 1993. China's Transition from Socialism. New York: M. E. Sharpe.
- Stiglitz, Joseph. 1994. Whither Socialism? Cambridge, Mass.: MIT Press.
- Unger, Roberto Mangabeira, and Zhiyuan Cui. 1994. "China in the Russian Mirror." New Left Review 208: 78–87.
- Walder, Andrew. 1994a. "Corporate Organization and Local Government Property Rights in China." In *Changing Political Economies*, ed. Vedat Milor, pp. 53–66. Boulder, Colo.: Lynne Rienner.
- . 1994b. "The Varieties of Public Enterprise in China: An Institutional Analysis." Washington, D.C.: World Bank. Unpublished manuscript.
- Woodruff, David. 1994. "Putting Moscow to the Test: The Politics of Barter and Non-payments in Russia's Electrical Power Sector." Berkeley: Department of Political Science, University of California. Unpublished manuscript.

GOVERNMENT ACTION, SOCIAL CAPITAL AND DEVELOPMENT: REVIEWING THE EVIDENCE ON SYNERGY

Peter Evans

Summary. — Instead of assuming a zero-sum relationship between government involvement and private cooperative efforts, the five preceding articles argue for the possibility of "state-society synergy," that active government and mobilized communities can enhance each other's developmental efforts. This article draws on these articles to explore the forms and sources of state-society synergy. I argue that synergy usually combines complementarity with embeddedness and is most easily fostered in societies characterized by egalitarian social structrues and robust, coherent state bureaucracies. I also argue, however, that synergy is constructable, even in the more adverse circumstances typical of Third World countries.

1. INTRODUCTION

"State-society synergy" can be a catalyst for development. Norms of cooperation and networks of civic engagement among ordinary citizens can be promoted by public agencies and used for developmental ends. Figuring out how such public-private cooperation might flourish more widely should be a priority for those interested in development. The preceding articles by Lam, Heller, Ostrom, Fox, and Burawoy offer an excellent start on this agenda. This essay tries to look across the five articles, highlighting some general findings that resonate across the different settings and perspectives of the individual articles. In addition, I have drawn on some of the other work discussed at the conference where the original versions of the five articles were presented. For example, I will

make substantial use of Judith Tendler's forthcoming work on "good government" in Northeast Brazil.

First, I examine the structure of synergistic relations, focusing on the distinction between synergy based on complementary actions by government and citizens and synergy based on ties that cross the public-private divide (embeddedness). In the second part of the essay I explore the social and political circumstances that facilitate the emergence of synergy. How crucial is the underlying stock of social capital? How important is the character of the state apparatus itself? What difference do formal political rules or the overall shape of the social structure make? Can synergy be constructed in the short run, or does it require historically deep institutional and normative foundations? Generalizations derived from a small number of cases have to be considered exploratory. Still, common themes derived from such a diverse set of analyses certainly must be considered useful clues by those trying to organize public-private relations more productively, as well as warranting further testing by other researchers. Collectively, these articles raise a welter of new ideas about how and under what circumstances civic actors can more fruitfully engage with public institutions in pursuit of developmental ends.

2. STRUCTURE OF SYNERGISTIC RELATIONS

Mutually reinforcing relations between governments and groups of engaged citizens can take a variety of forms. I begin with a simple dichotomy which I think is useful in clarifying what we mean by synergy—an analytical distinction between complementarity and embeddedness. The two concepts not only imply different forms of synergy, but also different connections between the idea of synergy and prior theories of relations between public and private institutions.

Complementarity is the conventional way of conceptualizing mutually supportive relations between public and private actors. It suggests a clear division of labor, based on the contrasting properties of public and private institutions. Governments are suited to delivering certain kinds of collective goods which complement inputs more efficiently delivered by private actors. Putting the two kinds of inputs together results in greater output than either public or

private sectors could deliver on their own. The idea of complementarity fits nicely with existing paradigms in institutional economics and public administration and forces no rethinking of the public-private divide.

The idea that synergy may be based on "embeddedness"—that is, on ties that connect citizens and public officials across the public-private divide—is more novel. Can networks which trespass the boundary between public and private be repositories of developmentally valuable social capital rather than instruments of corruption or rent-seeking? Despite the difficulties it creates for conventional wisdom, the evidence that has been presented in these articles suggests that the permeability of public-private boundaries must be acknowledged as an inescapable part of many developmentally successful programs.

Acknowledging embeddedness does not make analysis of complementarities obsolete. To the contrary, complementarity and embeddedness turn out to be mutually supportive. Most concrete cases of synergy involve combinations of complementarity and embeddedness. The aim of separating the two is not to privilege one over the other, but to get better analytical purchase on the complexities of synergistic relations.

Complementarity is given a new dimension when social capital is included along with goods and services as a desired outcome of public-private cooperation. New research on states and the formation of social capital suggests new kinds of complementarities and innovative ways of seeing traditional complementarities.

The most universally acknowledged kind of complementarity is exemplified in the quote from Nugent (1993) cited in the introduction. Effective states deliver rule-governed environments which "strengthen and increase the efficiency" of local organizations and institutions. The state's contribution to social capital is general and from a distance. Productive informal ties, like market exchange, require a basic ambience of rule-governed behavior. The state provides the necessary ambience, but public agencies are not directly linked to societal actors.

Traditional analysis of the benefits of a rule-governed environment—from Weber to Douglass North—emphasizes its role in eliciting entrepreneurial behavior from economic elites. The work being discussed here suggests that the "rule of law" may be even more

important as a complement to the efforts of less privileged groups to organize themselves. Both Heller and Fox argue that the provision and enforcement of universalistic rules is an invaluable organizational resource for the less privileged. Fox underscores the centrality of simple legal norms such as freedom of assembly and association in making civic organization possible for indigenous peasants. Heller sees "drawing traditionally disenfranchised workers within the purview of the law" as critical to the process of mobilization in Kerala. Conversely, as O'Donnell (1993: 1365) has eloquently argued, the destruction of "the state as law" in many parts of Latin America has led to an "angry atomization of society" which leaves no space for self-organization at the bottom.

Complementarity based on the public provision of intangibles can also take forms quite independent of the provision and enforcement of rules. The creation and diffusion of new knowledge by agricultural extension services is a standard example. More novel examples of complementarity based on the provision of intangibles are offered by Tendler in her recent (forthcoming) work on "good government" in Northeast Brazil.2 Tendler makes the point that another kind of intangible collective good with very large economies of scale is media publicity. Because media publicity is subject to manifest economies of scale, it is the kind of public good that it makes sense for the state to provide. One of the most important aspects of this complementary input was that it enhanced the extent to which government programs were able to combine social capital formation with the delivery of services. In Ceará's successful preventive health program, the state government's blitz of positive media publicity bolstered the health agents' sense of "calling" and made them more willing to engage in the kind of diffuse public service that helped generate new relations of trust between them and the community. It also affected the way in which they were viewed by members of the community, again increasing the likelihood of relations of trust. Similar effects were observed in the case of agricultural extension workers trying to organize drought relief. According to Tendler (forthcoming: 116; see also Tendler and Freedheim 1994),

As with the health agents, the state government's actions [in promoting a supportive media campaign] elicit public-minded be-

havior by creating a strong sense of "calling" around particular public jobs and civic responsibilities .

Complementarity of a more prosaic and tangible variety can also play a significant developmental role. Irrigation is the classic case, in both historical and contemporary analysis. Contemporary work, however, adds the positive impact on social capital formation as one of the important byproducts of complementarity. This perspective extends the standard analysis of public goods to include the possibility that provision of such goods, in addition to facilitating private production of conventional goods (crops in this case), may also contribute to "enhancing farmers' capability and willingness to relate to, and to work with, one another" (Lam 1994: 288). Efficient provision of the tangible main facilities and channels has the intangible consequence of making it more worthwhile for farmers to organize themselves. Other kinds of tangible complementarities can also stimulate social capital formation. In Fox's discussion of "reformists" and peasant organizations in rural Mexico, one of the state's contributions to "scaling up" peasant social capital is simply providing transportation so that peasants from different local areas can get together.

Looking at these examples, it is clear that complementarity is not just about government providing inputs that its scale and bureaucratic organizations allow it to provide more effectively and leaving it to citizens to do the rest. Complementarity supports day-to-day interaction between public officials and communities, which is in turn essential to organizing complementarity. In addition to promoting social capital formation in civil society, complementarity supports embeddedness.

Embeddedness complicates the analysis of synergy. If synergy depends on day-to-day public-private interactions and the norms and loyalties that build up around them, then its institutional forms become more complex. Unfortunately for analytic simplicity, however, embeddedness appears to be just as common a feature of synergy as complementarity.

Again, irrigation provides a nice way to start. In Lam's earlier (1994) analysis of Nepal, complementarity without the intrusion of public officials at the local level seemed to be the ideal. Farmers needed inputs that they could not supply themselves in order to

make it worth their while to organize, and it was also helpful if the state provided intangible collective goods in the form of legal recognition of local farmers' groups. The state was useful as long as it kept out of the day-to-day operation of irrigation systems at the local level. Direct involvement of the state bureaucracy in the operations of local systems undercut the development of the collective institutions that farmer-managed systems depended on and reduced the likelihood of effective water delivery. The lesson seemed to be that the state can help most by providing inputs that local people cannot provide for themselves and then maintaining a "hands-off" stance with regard to activities that are within the scope of local action.

Lam's article here on Taiwan presents a very different kind of story. Taiwan's irrigation system operates much more efficiently and effectively than the one Lam studied earlier in Nepal,³ but it is certainly not an instance of "hands off" complementarity. Lam's work confirms Moore's earlier assessment (1989: 1748,) that "enmeshment" in the form of a "dense network of social relationships which exist among IA staff and IA members" is the key to the system's effectiveness at the local level. According to Moore (1989: 1742), "IAs are overwhelmingly staffed by people who were born in the locality, have lived there all their lives, and, in many cases, also farm there." Therefore, "IA staff are so much part of local society that they can neither escape uncomfortable censure if they are seen to be conspicuously performing poorly, nor ignore representations made to them by members."

Lam's account further spells out the multifaceted set of ties which bind together local public officials and local farmers.⁴ His analysis makes clear the extent to which those who make their careers the local field offices rely on the experience and local knowledge of the farmers to allocate water among the fields, to carry out local operations and maintenance, and to provide the voluntary labor and voluntary monetary "chip-ins" which "were important sources of resources for irrigation management at the local level." At the same time, local farmers depend on their public sector counterparts. The local field station is responsible for integrating local needs into the overall plan for the entire irrigation association and, even more important, for making sure that the promised water is actually delivered to the local area. Farmers and local officials are engaged in a shared project aimed at making sure that enough water reaches

their area at the right time. There is a division of labor, but it is among a set of tightly connected individuals who work closely together to achieve a common set of goals.

Once again, Tendler's work in Northeast Brazil reinforces the insights gained from East Asian irrigation systems. The health care program she describes in Ceará epitomizes the way in which embeddedness plays a role in the success of public programs. Creating new ties between 7,000 newly hired health agents and their communities was the key to the health program's success. Starting out in a civic climate in which people were reluctant to even open their doors to anyone working for the government,⁵ the new health agents made building relations of trust between themselves and their "clients" a central part of their jobs. To this end, they even helped with mundane household tasks without direct relation to health (e.g., cooking or cutting a baby's hair). According to Tendler (forthcoming: 76), "they saw their clients not only as subjects whose behavior they wanted to change, but as people from whom they wanted respect and trust." Not surprisingly, the health agent's approach generated reciprocal attitudes, with clients describing them as "true friends." Individual ties helped generate in turn a generalized commitment to the community. Tendler reports (forthcoming: 73) that "health agents took on, of their own accord, community-wide activities meant to reduce public health hazards—in addition to their job of visiting households." As one health agent put it, "I was ready to leave and look for a job in São Paulo, but now I love my job and I would never leave—I would never abandon my community."

In Tendler's description of Ceará's health campaign, as in Lam's description of the Taiwanese irrigation system, social capital is formed by making some who are part of the state apparatus more thoroughly part of the communities in which they work. The networks of trust and collaboration that are created span the public-private boundary and bind state and civil society together. Social capital inheres, not just in civil society, but in an enduring set of relationships that spans the public-private divide.

The interweaving of ties across the public-private divide to create developmentally effective social capital can even characterize what are usually thought of as institutions rooted strictly in civil society, like Grameen Banks. In May 1992, a Grameen Bank-type rotating credit association was begun in the environs of Ho Chi Minh

City. Participation was limited to poor households, and 95 percent of the participants were women. They used the loans for working capital in petty trading ventures (e.g., selling vegetables) or to buy equipment for craft production (e.g., sewing machines). The loans had a substantial impact on the women's income earning capacity, and the reported repayment rate on the loans was an astonishing 100 percent.⁶

Such results are not, of course, unusual for Grameen Bank-type projects.7 What makes this project interesting and relevant to the analysis of synergy is that it was organized by the Institute of Economic Research (IER), an agency of the city government of Ho Chi Minh City (with support from an international nongovernment organization). The IER enlisted the support of the people's committees (local government) in the villages covered by the scheme but continued to provide training and technical support. The local village secretaries provided the organizational skills and energy that actually got the project rolling. The organization of the individual credit groups depended on pre-existing ties (friends, relatives, etc.), but the initial organization of the scheme as well as its organization and administration depended on the interaction of local government staff and officials and their relationships with the local women who became members and group leaders. Adding concrete ties across the state-society boundary to pre-existing kin and friendship ties helped transform traditional ties into developmentally effective social capital.

Embeddedness is not just a feature of developmentally effective relations between public agencies and the powerless. It is even more pervasive in successful projects that join the state with elite actors. The "local state corporatism," which Burawoy, following Oi, sees as underpinning China's surprising rates of rural industrial growth, depends on a set of local ties which bind local state officials and nascent entrepreneurs around a joint project of rural industrialization. Oi notes that in most of the localities where she has done fieldwork, "it is the local party bosses—the first party secretary of the county, township or village—who are at the helm of the drive for economic development" (Oi 1992: 124). Not only are the ties between local enterprise managements and local officials important, but also the web of relations that allows local officials to work through officials and agencies in the central state apparatus to gain access to

credit and scarce raw materials that local entrepreneurs need (Oi 1992: 120–21).

The central role of ties that cross public-private boundaries in China's "transition" success story echoes the pivotal role of embeddedness in the biggest capitalist success story of the twentieth century—the transformation of the economies of East Asia from lowproductivity agrarian backwaters to the most rapidly growing industrial economies in the world. Even the official World Bank interpretation (1993) concedes that state/society linkages played a central role in this "East Asian Miracle." Institutional descriptions of East Asian industrialization, from Johnson's (1982) classic work on Japan to Amsden (1989) and Robert Wade (1990) on the East Asian newly industrializing countries (NICs), paint a picture of dense networks that span public-private boundaries. From Okimoto (1989) to the World Bank (1993), analysts stress the dense networks of ties that connect state agencies and private capital. From joint business-government "deliberation councils" to "the maze of intermediate organizations and informal policy networks where much of the time consuming work of consensus formation takes place" (Okimoto 1989: 155), it is social capital built in the interstices between state and society that keeps growth on track. This profusion of concrete ties between officials in organizations such as Taiwan's Industrial Development Bureau, Japan's MITI, or Korea's Ministry of Communications and those who manage private industrial corporations generates in turn a "joint project" of industrial transformation (Evans 1995).

In these archetypal capitalist successes, as in China's would-be market economy, the social capital that is most critical to the outcome is formed once again in networks that are neither public nor private but fill the gap between the two spheres.⁸ Far from being a pattern that emerges only when the state develops ties to the less privileged or during the transition from nonmarket to market-based economic relations, synergy based on embeddedness is the essence of the most important contemporary instances of market success.

The centrality of embeddedness to synergy across a range of different settings is undeniable, but none of this negates the importance of complementarity. Instead, this multiplicity of examples should be taken as a reminder that even the most obvious division of labor must be sustained by shared orientations and concrete interactions among the actors involved. A better sense of how comple-

mentarity and embeddedness can come together is the key to understanding synergy.

Embeddedness and complementarity are not competing conceptions of synergistic relations but are themselves complementary. A few examples will suffice to make the point. "Coproduction," which forms the conceptual framework for both Lam and Ostrom's analysis, sets out the interdependence of complementarity and synergy most clearly. In the coproduction model, complementarity creates a basis for productive interaction, but without embeddedness the potential for mutual gain is hard to realize.

As Ostrom's production functions (Figures I and 2) show graphically, complementarity is the essential prerequisite of coproduction. When public agents and citizens have sufficiently different (but equally necessary) kinds of inputs, they can produce more efficiently by combining their efforts than by either producing everything privately or everything publicly. Complementarity is the precondition for coproduction. Without complementarities there would be few incentives (other than rent-seeking) for trying to organize collective actions across the public-private divide. Nevertheless, production functions convey only the complementarity half of the coproduction story. The embeddedness half of the story comes across only in concrete examples.

Ostrom's sewer condominium case illustrates the point. Complementarity was clear. The technology of producing trunk sewer lines was beyond the collective efforts of local neighborhoods, so neighborhoods had to rely on government to produce trunk lines. By the same token, public sector fiscal problems put the resources necessary to deliver the entire system out of reach of the government. Without citizen collaboration the full network would not be built. This, however, is only the complementarity half of the story. Complementarity created the potential for synergy but not the organizational basis for realizing the potential. Embeddedness in the form of direct involvement of the public officials was a key component in getting citizen efforts organized and sustaining citizen involvement. The organizational "start-up costs" of setting up neighborhood meetings, explaining options, and mediating conflicts required substantial time and effort on the part of public officials. Likewise, once the sewer systems were constructed, monitoring and maintenance required continuous face-to-face interaction between an ongoing, familiar set of public agency staff and collaborating neighborhoods. In short, a relationship very much like the one that unites farmers and local irrigation staff in Taiwan delivered sewers to urban neighborhoods in Northeast Brazil.

Irrigation systems, like sewers, are characterized by complementarity as well as embeddedness. The role of embeddedness in the Taiwanese case has already been highlighted; the importance of complementarities needs to be underlined as well. Dams, reservoirs, and other "lumpy collective goods" are provided by state agencies that are quite separate from the embedded Irrigation Associations. As Lam points out, one of the reasons for Taiwan's success is that, in contrast to South Asian irrigation systems, it has left responsibility for the construction of major irrigation projects in the hands of a separate organization, so that operation and maintenance do not become "stepchildren" in a construction-dominated bureaucracy. Here again, Lam's analysis parallels that of Moore (1989: 1741), who notes that, "The key feature is the institutional separation of major irrigation construction, which is the responsibility of national agencies, from routine maintenance and operation of irrigation systems."

Even in the maintenance and operation of the system, there is clear recognition of the complementarities between what the public agencies can do and what self-organized citizens can do. The bureaucratic hierarchy constructs the overall plan of water delivery (after the basic inputs of information have been constructed jointly by local officials and farmers). The organization of the system recognizes that trying to have local communities settle on an overall plan would lead to a cumbersome, ineffectual political process in which local communities were forced to make decisions involving the unfamiliar circumstances of other areas. By the same token, state officials do not infringe on the role of the water guards at the village level or become involved in micro-level allocational decisions among farmers. To do so would stretch even the very well-organized Irrigation Association bureaucracies beyond their capacity, and they still would not be able to replicate the efficiency of community initiatives. Everyone realizes that even local officials with long tenure in a particular area cannot replicate the local knowledge (social as well as topographical) of the water guards and irrigation group leaders. In sum, intimate interconnection and intermingling among public and private actors is combined with a well-defined complementary division of labor

between the bureaucracy and local citizens, mutually recognized and accepted by both sides. Tendler's health campaign is yet another example of complementarity combined with embeddedness. The Ceará state government's media campaign was a very useful complementary input, but without the thousands of day-to-day interactions between health care workers and community members to give it substance, the media campaign would have been fruitless. If the government had limited its role to the provision of the complementary input and assumed that local citizens would provide the appropriate responses without the involvement of public sector workers in the construction of a set of reinforcing ties, the campaign would almost certainly have failed.

In the end, the analytical distinction between complementarity and embeddedness is useful primarily in that it reminds us to look for both elements. There may be cases in which synergy is created solely on the basis of complementarity. Or, though this seems even less likely, cases where synergy is built around network connections which do not involve complementarity. Nonetheless, the best way to understand synergy is as a set of public-private relations built around the integration of complementarity and embeddedness.

This preliminary description of the forms of synergy is useful in thinking about how synergy works in practice, but it does not illuminate the social and political conditions that make synergy possible in the first place. To explore the origins of synergistic relations it is necessary to look more broadly at the circumstances under which synergy has emerged, searching for commonalities across different contexts.

3. CONTEXT AND CONSTRUCTION IN THE CREATION OF SYNERGY

The most basic issue in analyzing the origins of synergistic relations is the question of endowments versus constructability. Does the possibility of synergy depend primarily on sociocultural endowments that must be taken as givens? Or can the application of imaginative organizational arrangements or institutional "soft technologies" produce synergy over relatively brief periods of time? If synergy is an outcome that depends on the prior existence of social and cultural

patterns historically rooted in particular cultures and societies, then it may well be out of reach for most groups. A "constructability" perspective is more optimistic. Synergy becomes a latent possibility in most contexts, waiting to be brought to life by the institutional entrepreneurship. Optimistic assumptions, precisely because they are attractive, must be approached skeptically. Assuming constructability if endowments are really the key would only produce failure and frustration. Nonetheless, if possibilities for construction exist, they should be exploited.

The most obvious endowment that might set limits on synergy is the stock of social capital within civil society, but there are others. The relevant properties of government institutions may take decades or generations to change, in which case they are best considered as endowments. Likewise, basic, hard-to-change features of the social structure, like the degree of inequality, may put synergy out of reach for certain societies. The possibility of synergy might be also preconditioned on the prior existence of particular kinds of political regime. Singly or in combination such factors must constrain the possibility of constructing synergistic relations. The question remains: how much room is left for agency?

In order to assess the relative weight of endowments and constructability, I begin with a look at the role of endowments of social capital in civil society, then move to a focus on administrative structures and the question of whether robust, efficacious bureaucracies constitute prerequisites for synergy. I then turn to politics and social structure and the ways in which political regimes and the basic patterns of interest conflicts in society impinge on the possibility of synergy. Finally, I return to the issue of constructability and whether we can point to any "soft technologies" of institutional change that enhance the possibilities for joint projects that bring together government and civil society in the short run.

Endowments of social capital are obviously crucial to synergy. Putnam's (1993a) original analysis of the Italian case suggested that stocks of social capital accumulated over long periods of time (perhaps hundreds of years) were the crucial ingredient in creating the "virtuous circle" in which civic engagement nurtured good government and good government in turn fostered civic engagement. The question remains whether in most Third World settings the requisite social capital is in such short supply as to exclude the possibility of

synergy or whether the norms and networks that characterize "normal" Third World communities constitute sufficiently fertile ground for the construction of developmental projects that span the public-private divide. The cases analyzed here suggest that prior endowments of social capital are not the key constraining factor. The limits seem to be set less by the initial density of trust and ties at the microlevel and more by the difficulties involved in "scaling up" micro-level social capital to generate solidary ties and social action on a scale that is politically and economically efficacious.

Starting once again with Taiwan's irrigation system, it is hard to make the argument that the system's unusual efficiency derives from historically exceptional levels of social capital in Taiwanese rural communities. Lam is quite explicit about this, saying "farmers in Taiwan do not stand out as having unusual levels of trust and solidarity." This is not to say that solidary community ties are irrelevant to the local functioning of the irrigation system. Water guards and irrigation group leaders could not perform their functions in the absence of supportive community norms. The point is rather that such community norms are probably no stronger in Taiwan than they are in Nepal, where irrigation is a much more problematic affair.

The same argument applies even more strongly to the Northeast of Brazil, which is the site of both Ostrom's and Tendler's examples of synergy. Neither Tendler's rural communities nor the city neighborhoods in Recife that are the site of Ostrom's sewer condominiums are known as historically exceptional repositories of civic engagement. Ethnographic descriptions suggest that Northeast Brazil is as prone to conflict and suspicion as most areas of the Third World. Nor, for that matter, did exceptional endowments of social capital appear to play a role in the successful Vietnamese Grameentype bank mentioned earlier. In all of these cases, cooperative patterns of interaction among friends, kin, or neighbors no doubt antedate and facilitate particular instances of synergy, but the stock of social capital is not exceptional.

Heller makes the point more forcefully. Disputing analyses which see Kerala's extraordinary levels of contemporary mobilization as the result of the area's historic "proliferation of community associations," Heller argues that traditional associations based on caste and community ties could never have produced the kind of developmental transformation that Kerala has experienced. In fact,

as he points out, the natural outcome of a "vigorous civil society rooted in interests bounded by parochial loyalties" is not development but the kind of "demand overload" that has been such a crippling problem for India as a whole. Kerala's tradition of caste and community activism provided a useful foundation for subsequent mobilization, but in order to produce the results that were achieved the activist tradition had to be harnessed to a more universalistic set of identities. Translating social ties from engines of parochial loyalties into vehicles for more encompassing forms of organization was the real key to synergy.

Fox places the strongest emphasis on historical endowments of social capital, noting that "the overall degree of survival of horizontal community organization and norms of reciprocity in indigenous Mexico is quite remarkable." Nevertheless, Fox, like Heller, emphasizes that the key problem is not social capital at the level of local communities but rather "scaling up" such personal and community ties to form organizations that can be developmentally efficacious. To be politically effective, Fox argues, autonomous peasant organizations have to have a regional scope, bringing internally solidary communities together with a broad set of other villages who share similar interests.

As in Heller's case, Fox points to the role of state actors in translating local networks into developmentally relevant "scaled-up" organizations. Just as in Kerala, "reformists" within the state apparatus were crucial to the process of translating parochial loyalties into more encompassing forms of organization. Fox recounts an iterative pattern of interaction between state social policy initiatives and social mobilization. Each round brought higher levels of popular mobilization. In the first case (PIDER) state-sponsored rural development organizations "successfully organized peasant protest against regional bosses for broader distribution of credit and fertilizer" (Fox 1994: 162-63). The second (CONASUPO) was even more surprising in its effects: "For one to two million of Mexico's most impoverished rural people, the food councils [created by CONASUPO] were among the first genuinely mass-based, regionwide representative organizations of any kind" (Fox 1994: 165). The third cycle (PRONASOL) continued the process of "objective alliance' between social movements and reformists" (Fox 1994: 165) through which reformist social programs "offered political and economic resources that fostered the

consolidation of growing representative and autonomous social organizations" (Fox 1994: 177).

Fox's reformists in the state apparatus support and transform mobilized groups in civil society much in the same way (if not as thoroughly and unreservedly) as party activists and their government allies did in Kerala. Rural Mexico is not, however, Kerala. While parts of the state were "coproducing" autonomous associations of rural peasants, other parts of the state were working with rural elites to suppress the same organizations. Reformists were always engaged in an implicit or explicit struggle against politically authoritarian groups within the state apparatus and their private allies. The state of Chiapas offered a particularly telling example. Threatened by the state reforms in the National Indigenous Institute (INI), "the governor jailed three top INI officials on trumped-up charges of fraud." Seeing their state allies in jail, "autonomous indigenous organizations marched to defend them" (Fox 1994: 175–76).

None of these examples negate the importance of micro-level social capital in the construction of synergy. Ties among friends and neighbors based on trust and rooted in everyday interactions are essential foundations. Without them there would be nothing to build on. The key point is that such ties seem to be a resource that is at least latently available to most Third World communities. Based on these cases, it seems reasonable to argue that if synergy fails to occur, it is probably not because the relevant neighborhoods and communities were too fissiparous and mistrustful but because some other crucial ingredient was lacking.

The most obvious candidate for the missing ingredient is a competent, engaged set of public institutions. If synergy can regularly emerge out of communities that seem quite ordinary in terms of their stock of social capital, but governments vary dramatically in terms of their ability to act as counterparts in the creation of developmentally effective civic organizations, then perhaps the limits to synergy are located in government rather than in civil society. Fox's Mexican case shows that even a somewhat schizophrenic government apparatus can occasionally produce instances of synergy, but the character of the state apparatus may still be the weak link in the generation of synergistic relations.

Government organizations vary fundamentally across countries in ways which shape the possible forms of state-society relations. The

nature of the connection is, however, less obvious than it might appear. There are at least two competing perspectives on what kind of government organization makes for the most effective relations between state and society. Some analyses focus on the importance of corporately coherent Weberian bureaucracies in making sure that embeddedness does not degenerate into clientelism (e.g., Evans 1995). Others focus on the importance of decentralization and opening up bureaucratic hierarchies to inputs from below. There is support for both perspectives in the material considered here and some hints as to how the two views might be reconciled.

Undoubtedly, the absence of coherent, dependable public institutions makes synergy harder. Burawoy's analysis of the demise of the woodworking conglomerate in Komi illustrates the point. The demolition of the Russian state left the woodworkers of Komi without an effective public sector counterpart.¹⁰ Consequently, self-organization moved in the opposite direction from the trajectory that Heller reports from Kerala. Divisive interests prevailed and the gains from interdependency were ignored. Whatever social capital existed in the prior woodworking conglomerate was dissipated, and individual companies were left to the mercy of global commodity markets. The Chinese case makes the converse point. While Russia's government was dissolving into disarray, China's retained sufficient coherence to purposefully restructure the system of incentives at the local level in a way that promoted self-organization and entrepreneurship.

The civic advantages of having a coherent government bureaucracy are conveyed even more clearly in Lam's analysis of Taiwanese irrigation. A tightly organized and quite traditional bureaucratic hierarchy provides a supportive carapace for the self-organization of the farmers. The robustness of government organization gives the farmers confidence that the higher levels of the apparatus will in fact deliver the water they have been promised and increases the incentive for forward-looking cooperation at the local level. At the same time, a well worked-out hierarchical division of labor within the bureaucracy leaves farmers and local officials free to work out their problems at the local level without interference from above.

The importance of robust bureaucratic structures is amplified in analyses of East Asian industrialization. When individual officials are enmeshed in a set of close relations with elites who command vast private resources, attractive opportunities for rent-seeking are inevitable. Unless such opportunities are constrained by powerful internal norms and a dependably rewarding system of long-term career benefits, corruption is indeed likely to become the prime consequence of embeddedness. In the East Asian cases, careful attention has been paid to the traditional Weberian requisites of bureaucratic organization. Public institutions are characterized by traditional Weberian features such as meritocratic recruitment, good salaries, sharp sanctions against violations of organizational norms, and solid rewards for career-long performance. Corruption is still common, but it has not been allowed to overwhelm the joint public-private project of industrialization.

Cases in which traditional bureaucratic forms are vehicles for synergy must, of course, be juxtaposed with the more familiar story in which bureaucracy is the enemy of both social capital and development. Ostrom's story of Nigerian primary education is a paradigmatic example, so much so that it is worth breaking down this case of "anti-synergy" into its constituent elements. To begin with, there is no complementarity. Bereft of resources itself, the state provides little in the way of tangible support to local public institutions. To make matters worse, bureaucratic organization, instead of being used as the rationale for a liberating hierarchical division of labor, as in the Taiwanese case, is interpreted as demanding a uniform, simplistic application of inflexible rules which leave no room for initiative or imagination on the part of either local officials or their counterparts in civil society. This kind of bureaucracy eliminates the possibility of synergy.

On reflection, this crude exercise of bureaucratic power is, like the absence of material benefits, an indication of the state's poverty—in this case its organizational poverty. Uniformity is the simplest rule; constructing the kind of intricate interplay of hierarchy and latitude that characterizes a Taiwanese irrigation association requires much more capacity and sophistication. The overcentralized Nigerian education ministry actually demonstrates the same lesson as the East Asian cases. Robust, sophisticated public institutions are an advantage both in the formation of local social capital and in the pursuit of developmental ends, not because they are instruments of centralization but because they are capable of formulating more nuanced ways of distributing power and therefore of supporting decentralization and openness to local self-organization.

Another aspect of the Taiwan/Nigeria contrast takes the analysis down a different road. Alongside the question of bureaucratic structures and rules there is the question of public sector attitudes. Ostrom suggests that one of the reasons public bureaucracies are ineffective is that "Public sectors typically rely on incentive systems that send very weak signals about performance to staff." Put another way, many public bureaucracies give public sector workers little reason to pay attention to the people they are serving. While the articles I am drawing on here do not contain much direct evidence on the attitudes of public sector staff toward the communities they work with, 12 gross differences are evident. In Kerala there is a strong identification of party and state officials with their constituents. In the East Asian cases constituents are also important. Lam reports that "the image that farmers are the boss of the IA is very clear in the minds of IA officials." The importance of private sector entrepreneurs to the bureaucrats that worked with them in creating the East Asian miracles goes without saying. In Ostrom's discussion of Nigerian primary education, on the other hand, bureaucratic behavior radiates indifference. Finally, in Fox's Mexico, it is clear that in the eyes of a large number of state officials, nonelite constituents are the enemy. This range of attitudes is not just a reflection of differences in administrative structures or governmental competence. It is a reminder that we cannot analyze synergy without considering questions of politics and interests.

Politics and interests often get relegated to the background in discussions of social capital. Most discussions implicitly assume a group, relatively homogeneous in terms of its interests, whose members must overcome collective action problems in order to realize their shared interests. Shared norms of trust and cooperation are a means of overcoming the collective action problems. If a community is riven by conflicting interests, the nature and meaning of social capital becomes more complicated.

The idea of synergy, as it has been developed to this point, implicitly takes the assumption of homogeneous interests further by assuming that public sector actors share interests with their constituents. In fact, the degree to which interests are shared across the public-private divide varies substantially from case to case and plays a central role in determining the potential for synergy. Introducing the question of conflicting interests raises in turn the question of

whether conflicts are fought out in open political competition or contained by repression. Political regimes no less than bureaucratic structures condition the possibility of synergy and social capital formation. The question of political competition is the best place to begin the discussion.

In the cases reviewed here, political competitiveness seems to have a salutary effect on possibilities for synergy. Heller emphasizes the centrality of persistent political competitiveness in sustaining the commitment of parties (whether in or out of government) to mobilization and the construction of encompassing organizations among subordinate groups. Tendler emphasizes the connection between the reinitiation of democratic elections in Brazil and the government of Ceará's new-found enthusiasm for building connections with common citizens. Even in the Taiwanese case, Lam argues that, despite one-party rule at the national level, political competitiveness (among factions) is quite pervasive at the local level and helps to generate pressure on the IAs to remain responsive to the interests of local communities.

Before accepting unreservedly the idea that political competitiveness enhances synergy, some caveats are in order. First, in order for political competition to have positive effects, it must be constrained by mutually accepted ground rules that channel political energies into efforts at mobilization or attempts to convince the citizenry of governmental efficacy. Second, there is an interaction between the administrative issues discussed above and the consequences of political competition. Incentives derived from political competition are hard to actualize without an adequate administrative infrastructure. Finally, the incentives generated by political competition are not necessarily the most salient factor in motivating specific efforts to "coproduce" particular goods or services. I will start with the motivations of public sector workers and work back to the question of "rules of the game."

At least in the cases examined here, the public sector workers who build the social and organizational infrastructure of synergy "on the ground" appear more motivated by a desire to realize their own organizational objectives than by an interest in preserving the standing of a particular party or faction. The satisfactions of the Brazilian engineer that designed the condominium sewer idea were technocratic rather than political. Tendler's health care workers, ex-

tension agencies, and small business consultants did not see the payoff to their efforts as justified primarily by their impact on the interests of a particular political faction. The technocrats in Japan's MITI or Taiwan's Industrial Development Bureau could hardly be more different from Tendler's health agents, but they share a relative disinterest in contributing to the political advantage of particular political factions.

None of this is to say that political competition conveys no benefits to public officials and organizations trying, for whatever reason, to deliver services. Political competitiveness is useful first of all because it contributes to a climate in which citizens count. The effective delivery (or coproduction) of public services is only valued if citizens' reactions make a difference in the eyes of government leaders. In short, political competition helps mitigate what Ostrom calls the "signals problem" that has already been mentioned. Finally, political competition is important because it helps check the ability of individual members of the elite to interfere with efforts to foster social capital among the less privileged.

Just as the presence of engaged public agencies may allow synergy to proceed in concrete cases independently of incentives generated by political competition, the positive possibilities that flow from political competitiveness are likely to be sterile if public institutions are organizationally incapable of delivering what people need. Post-Soviet Russia allows more political competition than China, but the ineffectual Russian state provides no dependable vehicle to "deliver the goods." Individual state officials have no reason to believe either that their efforts will produce the intended effects, or that producing the intended effects will be rewarded by their superiors. In short, without an effective administrative apparatus, the more positive orientation toward citizens associated with political competition is hard to translate into results .

The rules of the game issue is perhaps the most important caveat with regard to political competition. As Fox underscores, entrenched elites (inside and outside of government) are likely to interpret increased political competitiveness as a threat and respond with repression. Without that quintessential complementary good—the rule of law—private thugs and official means of repression commandeered for particularistic ends become the principal tools of political competition. Unless force and corruption can be

made marginal to the repertoire of competitive strategies, increased political competition has perverse effects. Once again, Kerala provides a nice counterpoint to rural Mexico. In Mexico the official means of violence are routinely diverted to pursue essentially private ends. In Kerala, despite the anti-Communist bias of the national government of India, the Indian state was unwilling to allow Kerala's landlords to commandeer the official means of violence to counteract mobilization. Class warfare was fought on the terrain of ideology and organization, which meant positive spillovers for both social capital formation and synergy.

The forms and nature of political competition depend, of course, not only on the effective normative context but also on the nature of underlying social conflicts. Looking at the cases under review here, it is clear that a relative equality of circumstances is an advantage, not just in building social capital, but also in creating societal foundations for synergistic relations with the state. From Taiwan to Kerala, relatively egalitarian social structures are as much of an advantage for synergy as is political competitiveness.

Taiwan enjoys, of course, one of the lowest Gini indexes in the Third World, and its rural sector is internally more egalitarian than the overall society. Building solidary organizations oriented toward increasing output in an agricultural sector "mainly comprised of small family-owned farms" where landlords have "virtually disappeared" (Lam) is a qualitatively different task than trying to do the same thing in rural Mexico, where large landowners dominate an excluded peasantry. There are economically advantaged "local notables" in Taiwanese farming communities, but their income and status do not derive from controlling the land or labor of their neighbors. Instead, they are likely to see their neighbors as a potential political base. Lam contrasts this situation with the typical South Asia context, where divisions between rich and poor agriculturalists are the source of sharp conflicts around the management of irrigation.

Kerala post-land reform is also exceptionally egalitarian. This point has been made repeatedly with respect to agriculture. Heller extends it to industry. He points out that one of the things that makes industrial relations in Kerala exceptional is that the vast gap that in the rest of India separates the organized sector from the informal sector has been largely closed in Kerala. Gaps among different cate-

gories of workers within each sector have also been substantially narrowed. In such a context, generalized mobilization and the construction of synergistic relations with the state flourish, in sharp contrast to the rest of India, where, as Heller puts it, "A fragmented and dependent labor movement has spawned atomized and disaggregated strategies and . . . labor management relations in general have become increasingly chaotic and ungovernable."

These cases replicate on a societal scale what is also true in microcosm in the more specific studies of Ostrom and Tendler. The societal context of Northeast Brazil is starkly inegalitarian, but the groups which become organized and connected to state initiatives in the examples offered by Ostrom and Tendler share similar circumstances and problems. In Tendler's rural communities and Ostrom's urban neighborhoods, the constituencies involved share relatively homogenous interests with respect to the problems they are trying to solve.¹³

To the extent that egalitarian social structures facilitate synergy, social structure may be an important obstacle to constructing synergistic relations, or at least in constructing such relations with subordinate groups. Unfortunately, rural Mexico is more typical than rural Taiwan or Kerala. In most Third World countries, the interests of the privileged intrude fundamentally on relations between the state and less privileged groups. The ways in which public officials deal with elites and the conflicting interests that separate elites from the rest of the citizenry have to be factored into the equation.

In rural Mexico, Fox sees the state apparatus as generally allying itself with private elites at the expense of the peasantry. What needs to be explained then is why, even in this class-divided society, there are so many significant exceptions in which state actors ally themselves with subordinate groups. Why are there "reformists" who foster social capital formation among the oppressed, not just in opposition to the interests of landowners, but at some risk to their own positions within the government?

To begin with, state actors interested in changing the status quo need allies in civil society. For public officials who harbor visions of changing the societies they govern, building synergistic ties with subordinate groups may be the best way of circumventing the power of entrenched elites. Conversely, ties to the state give communities that are powerless new leverage in their conflicts with local elites.

Fox (1992) lays out this possibility in his discussion of the "sandwich strategy," in which reformists within the state apparatus and autonomous civic organizations outside it ally with each other in a mutual struggle against local defenders of the status quo both inside and outside of the state apparatus. Tendler describes an analogous dynamic. In Ceará, "reformists" at the level of state government gave public sector workers and citizens in local communities leverage to counter the power of local political bosses.

Ties to the less privileged are attractive for another related reason. For "normal" Third World states that lack the kind of powerful, autonomous bureaucracies that enabled East Asian industrializers to create synergistic ties with entrepreneurial groups, clientelistic capture is the natural consequence of tight public-private ties involving elites. Ties with the poor and powerless are much less threatening to the institutional integrity of state organizations. Indeed it might be argued that one of the prime advantages of mobilizing ordinary citizens is that mobilization helps balance the inevitable ties with elites and thereby protects the integrity of the state as an institution.

Overall, looking at the political and social structural factors positively associated with synergy is somewhat discouraging. If egalitarian societies with robust public bureaucracies provide the most fertile ground for synergistic state-society relations, most of the Third World offers arid prospects. Since highly inegalitarian social structures presided over by fragile, fragmented government apparatuses are the general rule, it is no wonder that most studies of statesociety relations abound in negative examples. Having begun by rejecting the pessimistic proposition that only areas with exceptional endowments of social capital would be able to enjoy the benefits of synergy, I seem to have fallen into an equally pessimistic appraisal based on a different set of arguments. The conclusion seems bleak given the relatively optimistic cases from which it is derived. It is time to reassess the idea of constructability. Does it still seem possible that synergy can be constructed out of small-scale changes implemented in relatively compressed periods of time, even in adverse environments?

Constructability looks less out of reach if we focus on the content of particular synergistic successes. They suggest that even when the social and political context is inauspicious, creative cultural and organizational innovations can still produce results. Sometimes building synergy depends on transforming established worldviews. Sometimes it involves introducing innovative "soft technologies" at the organizational level. Sometimes it involves simply rethinking the nature of the problem that a government agency is trying to address. Any of these strategies can make synergy constructable.

The first cornerstone of constructability is that social structures depend on people's perceptions of themselves and their neighbors and that these perceptions are malleable. Social identities are constructed and reconstructed on a regular basis and can be reconstructed in ways that enhance prospects for synergy. This possibility lies at the heart of the kind of "scaling up" process that Fox and Heller emphasize. In Mexico, villagers who define their interests in terms of defending traditional land rights against infringements by neighbors in adjacent villages can also see themselves as peasants who need to cooperate with other communities in order to defend themselves against landowners and the impersonal forces of commodity markets. In Kerala, members of particular subcastes and religious communities can also see themselves as landless laborers who need to unite across caste and community boundaries in order to get out from underneath the indignities of feudal patron-client relations. New definitions of identity and interest have to be built on new experiences and interaction, but they can be constructed in years rather than decades or centuries.

The second aspect of constructability worth underscoring is that "soft technologies" of organizational design can have large effects. Tendler's careful analysis of the "spillover" effects of the methods used in recruiting agents for Ceará's health care program is an excellent case in point (Tendler forthcoming; see also Tendler and Freedheim 1994). The intricate ways in which hierarchy and latitude are combined in Taiwanese irrigation authorities offer a more complex illustration of how organizational details make a difference. One simple example of the importance of organizational form is the choice between keeping staff in the same local area or transferring them. In India frequent shifts were instituted with the intention of insulating the irrigation bureaucracy and ended up creating a pervasive system of corruption (see Robert Wade 1985). In Taiwan, insulation was secured by other means so that permanent placement of local staff could be used to enhance embeddedness in local communities.14

Finally, constructing synergy can begin with simple redefinitions of problems. Ostrom's sewer example is a fine case in point. The innovative organizational form of the sewer condominium depended first of all on reconceptualizing "sewers" as consisting of two different, complementary kinds of construction. From there it was possible to formulate a set of synergistic relations based on "coproduction." To take another, very different, example, a key element in allowing synergistic relations of "local state corporatism" to emerge in China was the fiscal redefinition of local governments as the residual claimants on increases in local profits.

The effects of specific innovations are not context free. Anyone who plucks what appears to be a very effective soft technology out of the setting where it was developed and inserts it in a different sociopolitical context is running a risk. Nonetheless, contexts are not immutable. Specific innovations depend on context for their effects, but they also change the contexts in which they are introduced. The effectiveness of Kerala's Industrial Relations Committees (IRCs) depended on the preexisting context of labor relations, but IRCs also helped change that context in a way that enabled Kerala to take better advantage of the human and social capital it had amassed over the years. Even if contextual properties of different settings remain unchanged, they may still be sufficiently similar to make organizational innovations transplantable. Ostrom notes, for example, that the effectiveness of condominium sewer systems is not confined to Northeast Brazil but has transplanted well to Kenya, Paraguay, and Indonesia. There is every reason to believe that synergy is constructable. The trick is to temper the optimism inherent in a constructability perspective with the legitimate pessimism of contextual constraint. Small-scale successes can be achieved even in divided societies without robust public institutions; generalizing them is more difficult. Even in small-scale efforts, it would be foolish to ignore adverse sociopolitical circumstances. Still, prudence should not be an excuse for paralysis. In the end, ignoring the evidence of returns to enterprising and imaginative efforts to construct synergy is probably a worse mistake than underestimating the sociopolitical obstacles to be overcome.

4. CONCLUSION

The value of synergistic strategies is evident. Creative action by government organizations can foster social capital; linking mobilized citizens to public agencies can enhance the efficacy of government. The combination of strong public institutions and organized communities is a powerful tool for development. Better understanding of the nature of synergistic relations between state and society and the conditions under which such relations can most easily be constructed should become a component of future theories of development.

Synergy usually consists of a combination of complementarity and embeddedness. Active citizens are hamstrung unless their governments dependably supply them with inputs that they cannot produce on their own. These range from lumpy tangible products such as dams to essential intangibles such as the rule of law. Citizens contribute local knowledge and experience that would be prohibitively costly for outsiders to acquire. As the beneficiaries of the final product, community members can also contribute their time at implicit wages that public employees should not be forced to match. These obvious complementarities provide a potential basis for synergy. Complementarities create the potential but do not provide an institutional basis for realizing it. Most examples of synergy involve concrete ties connecting state and society which make it possible to exploit complementarities. Norms of trust built up from intimate interaction are not restricted to relations within civil society. People working in public agencies are closely embedded in the communities they work with, creating social capital that spans the public-private divide.

Pre-existing endowments of social capital are valuable resources in the construction of synergistic relations, but they do not appear to be the decisive scarcity. Communities that enjoy the benefits of synergy do not necessarily enjoy exceptional prior endowments of social capital. More crucial in practice is the question of "scaling up" existing social capital to create organizations that are sufficiently encompassing to effectively pursue developmental goals.

A competitive political system helps overcome barriers to synergy, as long as the means of competition are constrained by some set of mutually recognized rules. Egalitarian social structures and

robust bureaucracies also facilitate its emergence. The rarity of this combination of circumstances in the Third World does not, however, make joint state-society projects unattainable chimeras. Small-scale successes are constructable even within broader contexts that are adverse. Even in class-divided societies suffering under disorganized, authoritarian governance, innovative institutional tactics can foster synergy on a limited scale.

The vision of synergy that has been presented here, however preliminary, has strong implications for both theory and practice. Theoretically, it reinforces the call for an approach to development that is framed in the broadest institutional terms. Nothing else will capture the complicated interactions among social identities, informal norms and networks and formal organizational structures that are involved in creating synergy. For explanations of development to continue to exclude such institutional factors because they do not lend themselves to "well-behaved growth models" is inexcusable. Synergy is too potent a developmental tool to be ignored by development theories. Like social capital, it magnifies the socially valued output that can be derived from existing tangible assets but requires minimal material resources in its own creation .

On the practical side, this analysis implies that those interested in fomenting social capital, even among groups that are normally excluded and oppressed, should not automatically assume that "the state is the enemy." The state may often be the enemy, but only in exceptional circumstances is it monolithically the enemy. Even in relatively authoritarian regimes, alliances with "reformists" within the state can offer resources to popular organizations that are unavailable anywhere else. The implications for "reformists" working with or inside governments are, as we would expect, complementary. The image of the good bureaucrat—carefully insulated from constituents—has its usefulness, but openness to the role of the "coproducer," whether of sewer systems or social capital, may be the best way to increase effectiveness and ultimately the best way to preserve the integrity of increasingly besieged public institutions.

Finally, there are implications for researchers. While it is always fun and often useful to expose the perfidies of public sector actors, this kind of news is already in oversupply. What is needed is more research on positive cases. There are many innovative efforts that cross "the great public-private divide," but they are scattered. Inno-

vators in one area are likely to be unaware of similar efforts elsewhere. Systematic investigation and comparison of cases across diverse sectors and contexts would be a boon to those in search of "soft technologies" to apply to concrete problems. Research has an important role to play in diffusing the idea that synergy is a real possibility for Third World countries trying to enhance the welfare of their citizens.

NOTES

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- 1. It goes without saying that what often passes for the rule of law in Third World countries is simply the invocation of universalism to mask using the repressive power of the state in the interests of the powerful. Nonetheless, even a flawed approximation of a universalistic rule of law is a potent collective good from the point of view of the powerless.
- 2. Tendler's work draws in turn on the research of her students: Amorim (1993), Damiani (1993), Freedheim (1993), and Ruth Wade (1993).
- 3. In addition to Lam, see also Moore (1989: 1741), who says that Taiwan's irrigation system "is widely admired and is perhaps the most efficient in the world."
- 4. This kind of embeddedness is, as Thorbecke (1993) points out, a feature of Taiwan's highly productive agriculture more generally. The farmers' associations which were a key institutional feature in original efforts to increase agricultural productivity in Taiwan constituted "a good example of a successful GONGO (a hybrid organization blending together characteristics of a Government institution and an NGO)" (Thorbecke 1993: 597). At their origins, the farmers' associations were an arm of the government's Joint Commission for Rural Reconstruction and Development. The associations facilitated the ability of extension agents to channel the results of agricultural research to farmers. They were channels for supervised credit originating in the state apparatus as well as enabling joint buying of inputs and selling of outputs.
- 5. "Mothers would not answer their knocks on the door, or would hide their children when the agent crossed the doorstep" (Tendler forthcoming: 59).

- 6. This description is based on interviews done in Tan Chanh Hiep Commune, Hoc Mon District, in August 1994 with local organizers of the credit scheme and loan recipients, plus the information contained in three brief reports produced by the IER: "The Poverty Issue in Ho Chi Minh City and the First Results of the Credit Savings Model" (December 1993); "Preliminary Report on Implementation of the Project 'Credit Savings' for the Poor—First Year—Tan Chanh Hiep Commune" (May 1994); and "Preliminary Report on 1 Year Implementation of the Project 'Credit-Savings' in Tan Chanh Hiep Commune Branch" (June 1994).
- 7. See, for example, Shanmugam (1991); Myrada (1992).
- 8. Indeed the analogies between the market-oriented socialist version and the established capitalist version are striking. Oi (1992: 119), for example, notes that in the localities she studied, "The strategy of selective support of certain enterprises is reminiscent of Japan's administrative guidance."
- 9. The concepts of "coproduction" and synergy are very closely related. Talking about "coproduction" tends to focus attention on outputs of goods and services, whereas "synergy" shifts attention more to the social and institutional consequences of joint action across the public-private divide. Even in this respect, however, the difference is not clear-cut. Fox, for example, talks about "coproduction" of social capital.
- 10. Burawoy's description of the coal miners of Vorkuta, on the other hand, shows that higher levels of mobilization can at least partially compensate for the decay of public institutions. The coal miners could not turn the tide of "economic involution," but their exceptional levels of mobilization did slow the pace of decline and give the community more time to adjust.
- 11. Unbridled individual maximization is not only detrimental to developmental performance, but also undermines trust and social capital among the sectors of civil society that are connected to the state. Instead of reinforcing the efficacy of private sector associations and expanding their scope, it encourages the primacy of individual ties to particular bureaucrats and undercuts associational life.
- 12. The discussion by Tendler and Freedheim (1994) of health care workers is an exception.
- 13. Lack of invidious distinctions between local public sector workers and the constitutents of the projects they work on may also facilitate synergy. The local irrigation officials in Taiwan are more economically secure than the average farmers, but their economic position probably lies somewhere in between the average farmer and the more affluent members of the communities they deal with. Lam contrasts their position with that of the low-status patrollers in the South Asian context. Likewise, Tendler's health agents are definitely the economic and political equals of the people they serve.
- 14. Robert Wade (1982) makes the same point in contrasting the organization of irrigation in Korea and India.

REFERENCES

- Amorim, Monica Alves. 1993. "Lessons on Demand: Order and Progress for Small Firms in Ceará, Brazil." M.A. thesis, Department of Urban Studies and Planning, MIT, Cambridge, Mass., May.
- Amsden, Alice. 1989. *Asia's Next Giant: South Korea and Late Industrialization*. New York: Oxford University Press.
- Coleman, James. 1990. Foundations of Social Theory. Cambridge, Mass.: Harvard University Press (Belknap).
- Damiani, Octavio. 1993. "Learning from Collective Experience: Successful Small Farmer Associations in Northeast Brazil." M.A. thesis, Department of Urban Studies and Planning, MIT, Cambridge, Mass., June.
- Evans, Peter. 1995. Embedded Autonomy: States and Industrial Transformation. Princeton, N.J.: Princeton University Press.
- Fox, Jonathan. 1992. The Politics of Food in Mexico: State Power and Social Mobilization. Ithaca, N.Y.: Cornell University Press.
- . 1994. "The Difficult Transition from Clientelism to Citizenship: Lessons from Mexico." World Politics 46, 2 (January): 151–84.
- Freedheim, Sarah. 1993. "Why Fewer Bells Toll in Ceará: Success of Community Health Worker Program in Ceará, Brazil." M.A. thesis, Department of Urban Studies and Planning, MIT, Cambridge, Mass., June.
- Heller, Patrick. 1994. "The Politics of Redistributive Development: State and Class in Kerala, India." Ph.D. dissertation, Department of Sociology, University of California, Berkeley, November.
- Johnson, Chalmers. 1982. MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925–1975. Stanford, Calif.: Stanford University Press.
- Lam, Wai Fung. 1994. "Institutions, Engineering Infrastructure, and Performance in the Governance and Management of Irrigation Systems: The Case of Nepal." Ph.D. dissertation, School of Public and Environmental Affairs and Department of Political Science, Indiana University, Bloomington.
- Moore, Michael P. 1989. "The Fruits and Fallacies of Neoliberalism: The Case of Irrigation." World Development 17, 11: 1733–50.
- Myrada. 1992. The Myrada Experience: Alternative Management Systems for Savings and Credit of the Rural Poor. Bangalore, India: Myrada.
- Nugent, Jeffrey B. 1993. "Between State, Market and Households: A Neoinstitutional Analysis of Local Organizations and Institutions." World Development 21, 4: 623–32.
- O'Donnell, Guillermo. 1993. "On the State, Democratization and Some Conceptual Problems: A Latin American View with Glances at Some Postcommunist Countries." World Development 21, 8: 1355–69.
- Oi, Jean. 1992. "Fiscal Reform and the Economic Foundations of Local State Corporatism in China." World Politics 45, 1 (October): 99–126.

- Okimoto, Daniel. 1989. Between MITI and the Market: Japanese Industrial Policy for High Technology. Stanford, Calif.: Stanford University Press.
- Putnam, Robert. 1993a. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, N.J.: Princeton University Press.
- ———. 1993b. "The Prosperous Community." *American Prospect*, no. 13 (Spring): 35–42.
- Shanmugam, Bala. 1991. "Socio-Economic Development through the Informal Credit Market." *Modern Asian Studies* 25, pt. 2 (May): 209–25.
- Judith Tendler. 1993. "Tales of Dissemination of Small-Farm Agriculture: Lessons for Institution Builders." World Development 21, 10: 1567–82.
- ———. 1995. "Social Capital and the Public Sector: The Blurred Boundaries Between Private and Public." Paper presented to the American Academy of Arts and Sciences Conference of the Economic Development Working Group, Social Capital and Public Affairs Project, Cambridge, Mass., May.
- ———. Forthcoming. *Good Government in the Tropics*. Baltimore, Md.: Johns Hopkins University Press.
- Tendler, Judith, and Sarah Freedheim. 1994. "Bringing Hirschman Back In: A Case of Bad Government Turned Good." Subsequent version published as "Trust in a Rent-Seeking World: Health and Government Transformed in Northeast Brazil." World Development 22, 12: 1771–92.
- Thorbecke, Erik. 1993. "Impact of State and Civil Institutions on the Operation of Rural Markets and Nonmarket Configurations." World Development 21, 4: 591–605.
- Wade, Robert. 1982. Irrigation and Agricultural Politics in South Korea. Boulder, Colo.: Westview Press.
- ———. 1985. "The Market for Public Office: Why the Indian State Is Not Better at Development." *World Development* 13, 4: 467–97.
- . 1990. Governing the Market: Economic Theory and the Role of Government in Taiwan's Industrialization. Princeton, N.J.: Princeton University Press.
- Wade, Ruth. 1993. "Dry Solutions for Drought Relief: Institutional Innovations in Relief Delivery in Ceará, Brazil." M.A. thesis, Department of Urban Studies and Planning, MIT, Cambridge, Mass., June.
- World Bank. 1993. The East Asian Miracle: Economic Growth and Public Policy (A World Bank Policy Research Report). New York: Oxford University Press.

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