

Complex Organizations

A Critical Essay

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Power in Organizational Analysis: Illustrations, Summary, and Conclusions

A SUMMARY MODEL OF A POWER VIEW

As we have learned, theories simplify, and this last chapter will be no exception. In it I will try to do the following: first, I will lay out the basic assumptions that should guide organizational analysis. This constitutes a brief summary of the theory that has survived the critiques I have made in the book. Second, I will indicate how some of the extended examples and discussions in the book reflect the role that power plays in these basic assumptions. We could end there, but I will review two additional theoretical thrusts—the role of myths and symbols, and that of historical evolutionary accounts. Both are new, and both grow out of the theories discussed in Chapters 5 and 6. I treat them separately here in order to illustrate how a power view would modify their emphasis and enrich them. I should note that I am not proposing a theory of organizations; technically, theories are quite specific things with assumptions, propositions, and “operationalizations.” This discussion is closer to the idea of orienting assumptions, or basic perspectives. Its key notions are that organizations are tools and that power makes them go; power should be neither as neglected nor as implicit as it has been.¹

Power

There are many definitions of power. We encountered an attractive one in the work of Arnold Tannenbaum at the end of Chapter 3—a non-zero-sum view in which the amount of power generated within an organization could vary from low to high. An organization that allows its employees autonomy and a broad scope for action will have larger resources to draw on than one that doesn't. An organization that

¹The emphasis on power here is certainly not novel, though it is far from widespread. It is, I hope, consistent with such widely different books as Stewart Clegg and David Dunkerley's attempt to relate organizations to society, and Jeffrey Pfeffer's more internally oriented essay on power in organizations, and with much more in between. See Stewart Clegg and David Dunkerley, *Organizations, Class and Control* (London: Routledge & Kegan Paul, 1980); and Jeffrey Pfeffer, *Power in Organizations* (Marshfield, Mass.: Pitman, 1981). See also the equally valuable book by Jeffrey Pfeffer and Gerald Salancik, *The External Control of Organizations* (New York: Harper & Row, 1978).

convinces its employees that their goals are compatible with those of the leaders will generate more capacity for action and in this sense more power. While a non-zero-sum view is important and useful, I would argue that this constitutes a subcategory of power, a variable that comes into play only after a more basic, zero-sum definition is applied. Most resources in organizations and society can be expanded; much effort is wasted in unproductive conflict and even shirking, which often requires effort. Organizational theory should attend to this problem. But there is a larger one: the distribution of risks and benefits among all. Here the power of some is at the expense of others. Organizations facilitate the generation of zero-sum power.

Consider a system as generating valued outputs (goods, services, profits, wages, interesting work, social status, or whatever) based on its resources (capital, equipment, employees, markets, legitimacy, and so on). In my scheme, power is the ability of persons or groups to extract for themselves valued outputs from a system in which other persons or groups either seek the same outputs for themselves or would prefer to expend their effort toward other outputs. Power is exercised to alter the initial distribution of outputs, to establish an unequal distribution, or to change the outputs. We could put it in terms of goals: there is a struggle over either the content of the output or the distribution of it. This is a "power over" rather than a "power with" view; it deals with the type of pie and the division of the pie, not its size. The question of the size of the pie, increasing the output no matter who gets it, is an important one, but it cannot operate independently of the distribution issue and the content issue, which are prior and thus the more important concerns.

It is true that power "gets things done," but what must be done and what is done with the output is more important than power as "empowerment" or capacity. In more concrete terms, a tight labor market gives job seekers the power to extract higher wages or better working conditions. A cohesive group generates the resources to increase the output of a product line the members produce, thus increasing their ability to extract the outputs of job security, wages, and working conditions over those of groups producing a different product line. A regulatory agency, using laws and enforcement agencies, may have the power to lower a company's emission of pollutants and thus make the air cleaner for all and command more job security and employment benefits for agency members. The company may find, as is commonly the case, that the investment it must make in antipollution devices actually lowers its long-run costs, but it did not know this initially and viewed the lowered emissions as contrary to its economic interests. These are all examples of zero-sum power. We would have a non-zero-sum gain, with a bigger pie, were the regulatory agency able to convince the company that it was (1) in the company's own economic interests to install the equipment, since the output of profits that it controls would rise; (2) in the public's interest, since health would improve; and (3) in the agency's interest since it would lower enforcement costs and improve the agency's goal-achievement record. This is an important issue, but note how it is framed by the prior issue of zero-sum power; the company and the agency must be convinced that each will not lose.

Power, as used here, is zero-sum, relational (over someone); exercised both inside and outside the organization, and concerns an output of organized activity that is valued and an output that is produced only at some cost.

Descriptive Propositions

The argument of this book may be summarized for the most part by three major propositions:

1. Basically, an organization is a tool that masters use to generate valued outputs that they can then appropriate. The most essential theory to explicate this is bureaucratic theory, as outlined in Chapter 1. This theory emphasizes hierarchy, specialization, formalization, and standardization. Nothing is as important as the master's ability to imperatively specify and coordinate the work of employees. The formal structure of the organization is the single most important key to its functioning, no matter how much it may be violated in practice; the violations themselves reflect the constraints of the formal structure. Imperative coordination is achieved primarily through direct controls (orders, associated with hierarchy) and bureaucratic controls (standardization, specialization, and formalization). Bureaucratic theory, based on the work of Max Weber and subsequently elaborated by others, is the single most essential element of a theory of organizations.

It is not possible to discuss imperative coordination without emphasizing power as we have defined it. A bureaucratic theory takes as given an unequal distribution of resources in the initial state and thereafter. Power maintains the inequality.
2. The first and most major *qualification* of the bureaucratic model is, as discussed in Chapter 4, bounded rationality: shifting and unclear preferences, limited information, and limited knowledge of cause-and-effect relations. It has consequences for both the master and the employees.
 - 2a. For the master, bounded rationality means that the ambiguities about cause and effect and personal preferences that reside in the employees permit the master to use unobtrusive controls and premise setting. Were employees fully informed and completely rational, they would be unlikely to allow the surplus from their labor to be retained by the master. (The matter of public organizations would require a more complicated formulation.)
 - 2b. Bounded rationality makes the employees susceptible to unobtrusive controls, but since the master is also subject to bounded rationality, there is a limit on the effectiveness of his or her control—and thus a source of power for the employees. They have leverage to realize some of their own ends, even when these conflict with those of the master. Employees are not passive, even if they are not formally or informally organized to resist authority; they can contest authority and, to a minor degree, shape the premises of superiors and, to a still more minor degree, affect organizational goals.
 - 2c. Bounded rationality ensures considerable change in the behavior of the organization as a whole, though largely as a result of the unintended consequences of purposeful actions. Some of the change is undesired by

all; some is innovative and beneficial to at least some groups. Bounded rationality is not the only, or even the most important, source of change; since there will be changes in the environment and in the goals of the masters. But some change is due to unexpected events that are inevitable because of bounded rationality. The more the analysis is concerned with small groups or parts of the organization, the more change and fluidity will be apparent; the more the analysis is concerned with organizations or an industry over time, the less important is this (or any) source of change, because some internal changes dampen the effect of others and because external constraints are powerful for all organizations.

3. Given bureaucracy with bounded rationality, the next most important qualification is group usage, as distinct from individual usage of the organization by masters and employees. Group usages are internal and external.

3a. Internal formal groups, such as departments or work groups, seek to use the organization for such ends as promotion of ideological positions or public policies, protection of groups and expansion of group power, control of working conditions—including degree of effort, safety, interpersonal interactions, and job security—and satisfaction of personal goals. Internal informal groups do the same, but the membership cuts across that of formal groups and tends to offset the centrifugal effects of multiple group strivings by binding groups together, sometimes in unexpected ways. Group usage both responds to bounded rationality and overcomes it; it may facilitate imperative coordination, as Barnard saw —“oiling the mechanism,” so to speak—but more likely it interferes with imperative coordination. Owners and managers are forever trying to convince both formal and informal groups of workers that employee ends should support those of their superiors. Groups mobilize resources to change, control, or use the multiplicity of outputs of organizations, and this can never be of indifference to the masters.

3b. External formal and informal interest groups seek to use the organization and its power to affect public policy and values, to appropriate the organization's surplus, to support other organizations or groups, to sell its goods and services, to control its impact on the environment (e.g., plant location, wage rates, pollution policies, civil rights practices, tax payments, and so on). A variety of mechanisms exist to enable others to use the formal organization. Generally these are formal organizations themselves, such as voluntary associations, clubs, business associations and trade groups, consumer groups, schools and colleges, unions, political parties, government bureaus, and organized crime.

The master or masters of the organization are the chief focal point for external groups, but the boundaries of organizations are very permeable; allowing access at any level, sometimes linking an internal group with an external one. A scientific association, for example, may influence the behavior of scientists in the organization; national unions clearly penetrate

through the local affiliate; most managers have professional associations that seek to influence them and that they influence in turn. The influence mechanisms range from ideology to corruption; they reflect the inability of the master to exercise full control, and the contest for power goes on not only within the organization but among groups that seek to use it.

The lack of full control is due to bounded rationality, and also to the dependence of the organization on external resources and clients or consumers. Since the organization must ceaselessly make exchanges with the environment, groups in the environment have access to it and seek to use it.

Levels of Analysis

So far our perspective has been limited to explicating a single organization. Once exchange with the environment is considered, analysis can focus on the interaction of organizations rather than on the interactions of groups inside and outside the organization. In view of the importance of the environment to organizational theory in the last decade, the scope of interactions between organizations should be roughly specified. The nature of power will shift as one moves up to higher levels of analysis that take in broader interactions. The higher the level, the more controls that are unobtrusive and premise-setting are used. We saw in Chapter 6 how radically different the explanation of the organizational behavior of a hospital became when the focal concern shifted from the organization to the networks in which it existed. Here, we shall identify the levels of networks, the state, and the cultural system. Each has substantial impact on any organization, and each conditions the struggle for power.

1. Depending on the problem at hand, the interaction of organizations can be conceptualized as (a) a network of actual *direct* exchanges by organizations (and interest groups, which will be treated as organizations here), which is the most limited concept; (b) an organizational field, which includes *indirect* interactions with other organizations—that is, those that occur through an intermediary organization; (c) an industry, in the case of economic organizations, which includes unorganized consumers, suppliers, competitors, trade associations, and regulatory agencies, where the contacts may be direct, indirect, or symbolic (such as through laws), or through “structural equivalences” (see page 199); (d) or finally a sector, which includes all of the above but also political phenomena, culture, symbols, and myths. Delineating a sector, when so much is included in one, is difficult, but the term is more restricted than “society” or “region” and broader than “industry,” since two industries may be shaped by the same cultural and political forces while a third is shaped by different ones. Some sectors, such as the health-care sector, will be quite large and include components as diverse as polluting industries and unemployment policies. The recreational sector would be comparatively small. A sector analysis (discussed below) forces us to consider political and cultural factors.
2. At a still more general level, the state itself is a part of the interactions of organizations and conditions the form of interaction of all organizations.

Major changes in resource flows, development of technologies, interactions with foreign governments, regulatory and tax policies, redistributive income policies, and the like flow from local and national state policies, and sectors and the organizations within them seek to control or influence state actions.

3. Beyond even this grand level is the cultural system of symbols, values, and cause-and-effect beliefs that are society-wide and common to all sectors. The cultural system is greatly conditioned by bounded rationality; indeed, our limited rationality gives rise to the cultural system of symbols, values, and beliefs about causation. This is a major option-setting context of interest groups, organizations, and sectors. Some examples of this pervasive cultural system are: acceptance of employee status by 85 percent of the working population; acceptance of giant corporations and (more recently) giant government; and acceptance of rapid technological change and the view that problems will succumb to "technological fixes."

Another example is the decline over two centuries of group and community referents for justifying actions and the rise of the individual as the measure of good. This shift has been gradual, and some outrage about excessive individualism still surfaces. In the 1984 presidential election, the Republican campaign theme "Aren't you better off now?" was criticized because its referent was the well-off individual, which seemed to ignore the poverty of voiceless groups, the decay of cities, and heightened international tensions. But the notion of collective freedoms and collective responsibilities is on the decline. (It is ironic that individual rather than community welfare is now a major value when great collectivities, in the form of organizations, have come to dominate our lives; it may even be an uncomprehending reaction to the absorption of the family, neighborhood, and independent groups by the large organizations.) Finally, there is the cultural reluctance, given our view of individual liberty, to assess the externalities, or social costs, of organized activities.

All of these cultural aspects are challenged at times; acceptance may be grudging and initially under duress, as in the case of the gradual acceptance of wage dependency in the nineteenth century. Changes are generally gradual but may involve sharp breaks, as in the sexual revolution of the 1960s and 1970s.

This perspective on organizations has been used in much of this book. It may help to recall some of the specific cases and arguments we have introduced. In Chapter 5 on the institutional school, I insisted that while "drift" occurs, as the result of incompetent leadership, the assumption of good will with incompetence on the part of leaders may not be correct in most cases. Our perspective indicates that we should always examine the possibility that organizational masters prefer unofficial goals over official ones and may even make sure that official goals are not achieved. We should then search for extraorganizational interests that are served by what appears to be, from a leadership perspective, drift or goal displacement. This may not be a problem that can be corrected by making organizational practices more efficient; it may be an intentional outcome. By examining the setting in which the organization functions, including the values available in the sector, we may find

explanations for an apparent lack of leadership or of "proper" organizational practices.

In Chapter 6 on the environment, the changing market conditions in the popular music industry were interpreted in terms of a confluence of sector and industry changes that the majors could not control. Changes in technology produced changes in entry costs for the industry, and this tapped suppressed cultural demands in the sector as a whole. The response was decentralization and uncertainty, but the power of the major firms gradually reasserted itself to control the industry again and even to shape cultural tastes to some extent. Here we had considerable bounded rationality as well as new groups, with their own interests, that could emerge for a time. Organizational efficiency had little to do with the dynamics; market power and financial resources did. In Hirsch's comparison between pharmaceuticals and record companies, the level of access to state power appeared to explain the different rates of profitability and stability of the two industries. The reinterpretation of Westwood Hospital's expansion involves power at all levels, including leadership of the various hospitals, the network of interacting hospitals, the health industry, and the sector, which included state activity. At each ascending level we found more powerful explanations for the expansion program and the form it took. Indeed, a focus on only one of the hospitals would very likely have produced incorrect interpretations.

We criticized Barnard and the human relations school because they neglected power as a variable. Barnard was willing to use power under the guise of rational and correct analysis in describing the food relief program, but he denied its existence when discussing the cooperative nature of organizations. The human relations school, by assuming a natural convergence of goals among participants, saw inefficient organizational practices as the main problem organizations faced. We suggested that goals were not shared, and while it was certainly better to treat employees with respect than not, there might still be quite legitimate grounds for conflict between managers and the managed, that the question of the uses (goals) of the organization was completely neglected, and that for some technologies an authoritarian, bureaucratic structure appeared to produce more outputs for the masters and less for the workers.

The human relations school is at least concerned with problems of supervision and a few other aspects of working conditions; the economic theories of organizations reviewed in Chapter 7 gave it scant attention. Again, the issue of unacknowledged power differentials appeared to undermine the analysis of the economists. The work of this school generally assumed that managers and owners are at the mercy of opportunistic workers, whereas it would appear that the superior resources of the former encourages exploitation of the latter. Efficiency was said to account for the appearance of giant corporations, whereas our analysis suggested that it was irrelevant and that market power and government aid or tolerance, given certain structural conditions, were much more plausible arguments.

Even the bounded rationality formulation of March and Simon in Chapter 4 on the neo-Weberian model had its limits. It inadequately considered the question of how the power of masters is enhanced by their capacity to set premises, because of the bounded rationality of subordinates, and limited, though to a lesser extent, by their own bounded rationality. The analysis of accidents that concluded that chapter involved the low power of operators, resulting in inappropriate attributions of error; the power of organizational elites to create technologies that will support

a hierarchical, bureaucratic structure where such a structure is not necessary; and the power of elites in society to define risks and benefits in such a way that others bear the risks while the elites reap the benefits—an example, in addition, of the role of myths and symbols, when we move to a cultural level of analysis, in interpreting what is happening in an industry or organization.

All of these are grand claims for the importance of a power analysis, but let me note that they are not inconsistent with more mainstream concepts of bureaucracy, contingency theory, resource dependence, and some concepts of the evolutionary and the economic interpretations of organizations. All of these schools had things to teach us and concepts and theories to add; not all their notions need to be rejected. But almost all of them miss, some narrowly and some widely, the notion of power. Organizations generate power; it is the inescapable accompaniment of the production of goods and services; it comes in many forms from many sources; it is contested; and it is certainly used.

ORGANIZATIONS AS MYTHS AND SYMBOLS

As yet one more example of a body of theory that needs to be recast in terms of a power theory, consider the quite new and popular one of organizations as symbols and myths, sometimes referred to as a cultural interpretation. Its roots lie in the institutional school, one of the oldest in our field and considered in Chapter 5. It stresses values and symbols and is firmly in the "expose" tradition of that school. In this section I will examine the application of the myths and symbols to public schools, arguing that a cultural approach is necessary, but it must be informed by an awareness of political and organizational power. After a critical examination of the role of schools in society, I will indicate some of the promising leads that the theory of organizational myths and symbols has given us.

In the early 1970s a group of researchers from the School of Education and the Department of Sociology at Stanford University carried out a large survey of superintendents, principals, and teachers in San Francisco school districts. The initial reports indicated something was amiss in these organizations. Reforms were announced with enthusiasm, and then they evaporated. Rules and requirements filled the cabinets, but teachers taught as they pleased, and neither principals nor superintendents took much notice. State and federal money was flowing in, and elaborate reports suggested compliance with the conditions set by government, but little seemed to change in the classroom. Studies of child-teacher interactions indicated that children and teachers were unaffected by what teachers and students in the next classroom did, by what the principal said or did, by the school district, by the sources of outside funds, or by the teacher-training institutions. Rationalistic theories of organizations were clearly inappropriate in this setting; the bureaucratic controls were simply not working, and no one seemed to notice or care. Rationalistic theories would never predict such loose coupling in a hierarchical system, but existing notions of informal organization, open systems, the environment, human relations models, and so on were also irrelevant.

Later in the decade John Meyer and Brian Rowan addressed the puzzle by

arguing that the real function of education is to sort and certify people; imparting skills and knowledge is not really that important.² But since our cultural values insist that skills and knowledge *are* important, these must be affirmed, regardless of the reality. So the classroom activities are sequestered from the view of principals, districts, and government at all levels, and the appearance of educational outcome is measured by meaningless statistics on the number of students processed, the qualifications of teachers, the curriculum, and the number of programs for the disadvantaged. Nothing really measures what students have learned. The public is reassured, the social class system is stabilized, the teaching profession is protected, the cost is low, and a minimally sufficient degree of socialization and knowledge is produced. Meyer and Rowan call the reassurance a "rationalizing myth" and see the function of the schools as largely symbolic.

Meyer and Rowan's article is one of the most powerfully argued organizational history pieces in the sociological literature, despite its brevity. Yet there are problems with it. First, while school personnel are seen to benefit from the failure to measure outputs and thus bring about improvements, it is not clear that the self-interest of school personnel, or of anyone else, is the source of the problem. No adequate explanation for the state of affairs appears; it is almost as if myths and symbols are given causal efficacy, as if they constitute some force that creates the situation. I will try to show that a power view of organizations can provide some explanation for the discrepancy between goals and actualities in the school system. The second problem is that when parts of the public and the government, both at local and federal levels, attempt to change the behavior of the schools, Meyer, in later work, uses his cultural interpretation to dismiss the attempt as a myth-creating enterprise itself. Rational action, it appears, cannot exist; all is myth. But a power view would reject this. Finally, the symbolic view neglects the irrelevance of much education, given today's economic and social class systems; the discrepancy between goals and reality might be seen as primarily protecting the economic and political system, and only incidentally protecting the school personnel.

How can we explain the gap between the symbols and the reality of education? Assuming, for the moment, that the schools actually teach very little, or that even if they do teach something it has no relationship to credentialing students, what would create and sustain this condition? In the nineteenth century schools taught people to read, "Americanized" foreign immigrants, and prepared children for the discipline of the factory. The schools were quite successful at this, and despite struggles over culture and religion in the classroom, the public supported them for good reasons. But even if the schools had performed very poorly in terms of making students literate, acculturated, and socialized into a society of organizations, there were powerful groups that came to depend on the schools, regardless of their official success. The public schools offered, and still do offer, employment for educated women with few other career opportunities; employment for minorities and other upwardly mobile groups (much public-sector activity presents job opportunities for

²John W. Meyer and Brian Rowan, "The Structure of Educational Organizations," in Marshall W. Meyer and associates, *Environments and Organizations* (San Francisco: Jossey-Bass, 1978), pp. 78-109; the essay has been reprinted in John W. Meyer and W. Richard Scott, with the assistance of Brian Rowan and Terrence E. Deal, *Organizational Environments: Ritual and Rationality* (Beverly Hills, Calif.: Sage, 1983).

these groups); opportunities for colleges to establish training programs and recruit students; and work for the construction industry. Schools are steady consumers of supplies of all sorts, from bathroom tissue to books; they provide space for public functions and recreational groups, and they are also babysitters for working mothers. But most important of all, as the twentieth century matured, schools delayed entry into the labor market for 12- to 17-year-olds, who had always worked since time immemorial. Our economy could not have absorbed these millions of adolescents, and the massive idleness of the unemployed youth would have created grave social problems. Thus, irrespective of the school system's performance, a number of groups found that institution useful.

But so far this "group usage" view tells us only that outputs other than education made the schools viable. This is important, for it explains lack of protest in terms other than myths and symbols. But why was there not, in addition, an insistence on real education, instead of on mere certification? I would suggest that the answer is that the kind of output that Meyer and Rowan think would match the reality with the goals is increasingly irrelevant. In the schools that they studied in the 1970s, there were fewer and fewer academic goals that were relevant for students, in terms of employment or even citizenship. The real "myth" is not that schools educated, but that education was at all still relevant for many urban youths. This myth is deliberately created by groups who need an "operator error" explanation, so to speak—one that blames the victims of an evolving economy or, in this case, the schools and especially their students. *The economy does not need many skilled people, and it has an excess of unskilled job seekers*; and perhaps conservative economic and political elites find the polity can function increasingly well without informed citizens. The schools are left to the usages of those who have no particular concern with their quality. These are rash claims, and I cannot do justice to them in this book. I can sketch an organizational power interpretation, however, that is consistent with them.

But first let me review an extension of Meyer and Rowan's historical article. It appears in an important book on organizations and environments by John Meyer, W. Richard Scott, and various co-authors.³ In this book Meyer and Scott (primarily the former) discuss attempts to reform the schools in the 1960s and 1970s and treat these attempts as myths themselves. The actual record appears to be quite different. I will first explain how I see these events; then I will examine their interpretation.

Since the 1960s there has been considerable protest by insurgent groups about the treatment of minorities, the handicapped, and the poor in the nation's school systems. Until 1981 when its role began to decline, the federal government was pressured to act with the carrot of federal funds and the stick of performance reporting. Social-action groups such as the civil rights movement and federal agencies concerned with the War on Poverty demonstrated that public schools were discriminating against the poor, the minorities, females, and the handicapped, or at least the needs of these groups were not being met. Here, at last, was some attention to the discrepancy between classroom activity and professed goals. Federal money was allocated to fund special programs that would correct discrimination and improve education. Indeed, the research of the Stanford University group that highlighted the discrepancy was a part of this movement. As the Stanford group and

³Meyer and Scott, *Organizational Environments*.

many others discovered; the schools made few changes; in fact, they often diverted the money to servicing the already advantaged. The government got tougher and established more and more requirements, paperwork, auditors, and so on—what we usually call bureaucracy. (Much of it was inefficient and fumbling, as many attempts to change the behavior of entrenched organizations will be.) The schools rebelled, called for local autonomy (but still expected federal funds; though they didn't want dollars for special programs for the disadvantaged), and told horror stories about the federal bureaucracy. Many local interests outside the schools preferred to discriminate against the disadvantaged and supported the schools' revolt. Frustrated and defeated, the federal government turned to largely unrestricted and unmonitored block grants; concern about the disadvantaged had declined during the Nixon years (and seems to have evaporated entirely under the Reagan administration), and the local schools were either strong enough to resist performance monitoring or were too amorphous to control.

This is an organizational usage-and-power interpretation. Meyer and Scott present a quite different one. They treat the pressure exerted by community groups and the federal government to improve the lot of poor, black, and handicapped students with ill-concealed disdain. Mere myths, they assert, explain the growing rules accompanying the federal government grants, such as the myth of rationality; the problem of insufficient compliance with these regulations is not mentioned. That the poor might be helped by more resources directed at them, rather than channeled off to the advantaged, is also treated as a myth, since schools don't teach but only accredit. There are some distressing examples of blaming the victims and of cynicism about the reformers' motives. There are sour complaints about lack of standards in schools but pity for the teacher commanded to spend more time working with the poor. The traditions and identities of local groups are treated as absurd, and the term "hillbilly school board" is used. But when the reformers do likewise and charge that local boards are recalcitrant and opposed to reforms, Meyer does not accept the charge as legitimate and treats it as merely a way of legitimizing the unwarranted intrusion of the reformers. Reformers are scorned; they are the "disorder-discovering interest groups" that are concerned with the poor or the pregnant, and they opportunistically "quickly adapt to the language of equality," manipulating a supine Congress that "almost at random emits equalization programs for ever more groups." Meyer has scorn for all those "new types of handicapped pupils (some undiscovered as of a decade or two ago)." What are we to make of this phrase: "the treatment of putatively unequal groups of students (e.g. minorities, the poor, female students, and the handicapped)"? Is there any serious doubt that these groups are not equal with the rich, whites, males, and the healthy?⁴

Thus does an unrestrained myths-and-symbols view gloss over unpleasant realities, group interests, and power. It can be the unwitting carrier of a conservative laissez faire analysis that ignores basic inequalities in our society. The ultimate cynicism about organizations is to say that those who are damaged by them are merely creating legitimizing myths by their protest. The important problem is not the documentation of myths and symbols that substitute for education, though that

⁴Ibid., pp. 220, 211, 209, 218, 255, 244, 225, 236.

is a beginning, but how a society can tolerate functional illiteracy in one-third of its adult population (16 percent of whites, 44 percent of blacks, and 56 percent of Hispanic peoples, according to a book by Jonathan Kozol⁵). The role of symbols is crucial, but we should search for powerful interests behind the distortions that the symbols hide. As Chapter 6 on the environment argued, the results we get may not be due to organizational failures but organizational successes.

◊ Symbols in particular and culture in general are not politically neutral; they can be created and propagated by political and economic elites. In a society of organizations, a theory of organizations is needed to appreciate this fully. This brings us to my assertion that schools may be the scapegoats of political and economic policies; we may have less use for them as imparters of skills and training for citizenship than we had in the past and more use for them as storage centers, delaying the impact of idleness and defeat for 20 percent of their graduates. The myth in this case is the "crisis in the schools," proclaimed in the 1980s by presidential commissions and policy groups that represent both conservative and middle-of-the-road political interests. Illiteracy is mentioned, but the emphasis is on the failure of the schools to prepare students for our high-technology future; students are not taking enough math and science, these critics complain. The Japanese and the Russians are far ahead of us in math and science, and Japan may win the economic contest and Russia the military race. But the emphasis on failing schools may simply disguise a failing economic system that cannot use an abundance of skilled young people. We cannot even absorb literate job seekers, let alone place well-educated ones in jobs that would use their skills. Perhaps 25–35 percent of recent college graduates are overqualified for their jobs, and the percentage is increasing, since 25 percent of the young entering the labor force have four years of college. (They are overwhelmingly white and not of the lower class.) In the booming 1960s, 75 percent of college graduates seeking employment found professional or managerial jobs. But in 1980 only 60 percent did. Education is now only weakly related to productivity; as years spent in school have lengthened over the last several decades, productivity has declined. Perhaps the quality of education is not as high as it once was, and perhaps more emphasis on basic skills and science and mathematics would help. But it seems far more likely that the movement to service industries, where few skills are required and productivity is hard to increase, weakens the correlation of education and productivity.

◊ Similarly, there is only a weak relation between what is learned, measured by test scores, and what is earned. A recent study of high-school graduates compared those testing in the 97th percentile with those in the 50th percentile; the high-testing group earned only 10–20 cents an hour more than the low-testing group. ◊ Perhaps the skills of the high scorers are not utilized by their employers; perhaps the employers do not need them. (Recall that routine is the touchstone of bureaucracy and service jobs are the source of labor-force increases.) Vocational education rose by 33 percent between 1972 and 1979, while the appropriate job opportunities rose by only 15 percent. For example, two-year vocational education degrees rose by 690 percent, while jobs in those areas increased by only 12 percent. We are not

⁵Jonathan Kozol, *Illiterate America* (New York: Anchor, 1985).

Here is the hitch to mgt needs cooperation
argument: deskilling of society: deskill so you
don't need cooperation.
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exporting high technology or even skilled jobs to other countries, as might be expected if we lacked skilled labor here. Instead, we are exporting the lowest-skilled jobs; those for which we have an abundance of manpower.

The prevailing assumption is that our labor-force skills must be upgraded to fill the high-technology positions. But high-tech industries *reduce* skill requirements and demand only minuscule numbers of highly skilled personnel. For example, while jobs for computer programmers will expand by 150,000 between 1978 and 1990, we will need 1,300,000 more janitors, nurse's aides, and orderlies; there will be nine unskilled jobs in these categories alone for every computer programmer. The biggest single growth category is a high-technology one—data-processing machine mechanics—but it will expand by only 100,000, while kitchen helpers and fast-food employees will expand by eight times as much. If you are thinking of a career in the expanding high-technology sector, you may be encouraged to know that of the five fastest-growing occupations in the economy as a whole in relative terms (that is, the percentage increase, rather than the absolute number), four are indeed in this area: data-processing machine mechanics, computer systems analysis, computer operation, and office-machine servicing. (Paralegal services are the fifth.) Between 1978 and 1990, 518,000 of these high-growth positions will become available. But if you miss one of these you may instead end up in one of the five occupations where the *absolute* growth is largest—2,934,000 instead of 518,000: janitors, nurse's aides and orderlies, sales clerks, cashiers, and waiters and waitresses. An eighth-grade education will suffice for most of these; only two require much literacy.⁶

Our society is creating a permanent underclass of people who may never have any need for the skills they learn in the eleventh and twelfth grades, if they last that long, and whose functional illiteracy is hardly a handicap in a life on the welfare rolls or in the world of crime. This underclass could comprise 20 percent of the popula-

⁶These summaries, ironically, are from a Stanford University institute, the Institute for Research on Educational Finance and Governance, *Policy Notes*, 4, no. 3 (Summer 1983), pp. 1-7. For a technical article with references to the research, see Russell W. Rumberger, "The Changing Skill Requirements of Jobs in the U.S. Economy," *Industrial and Labor Relations Review* 34 (1981): 578-590, and his *Overeducation in the U.S. Labor Market* (New York: Praeger, 1981). There is also a substantial literature on training and on certification. See, for example, Ivar Berg, *Education and Jobs: The Great Training Robbery* (New York: Praeger, 1970); and Randall Collins, *The Credential Society: A Historical Sociology of Education and Stratification*. (New York: Academic Press, 1979).

Harold Wilensky and Anne Lawrence are among those who disagree with this picture of employment prospects, arguing that the first jobs of well-educated high-school graduates and of college graduates are bound to be below their qualifications because they are entry-level jobs, but the studies reported consider this. Employers, they say, choose entry-level employees who have the skills to move up the job ladder, so education eventually pays off. But there are no job ladders for janitors, nurse's aides, orderlies, or most fast-food workers—the positions in which most jobs are becoming available. Wilensky and Lawrence argue that education inculcates discipline, and this is true, but reform schools might be more relevant for future food handlers than secondary schools that emphasize math and science. Finally, these authors argue, without evidence, that education promotes the fast learning needed in high-technology industries. This is probably true, but not much fast learning of new tasks is required for cashiers or sales clerks. Many also point to the wild diversity in the quality of education, especially the low quality of inner-city schools. Just so. If teenage unemployment is greater than 50 percent in our inner cities, it might help to explain, better than a failure of the schools, the high dropout rate in those areas and the classroom discipline problems that make any learning even harder. See Harold L. Wilensky and Anne T. Lawrence, "Job Assignment in Modern Societies: A Re-Examination of the Ascription-Achievement Hypothesis," in *Societal Growth: Processes and Implications*, Amos H. Hawley, ed., (New York: Free Press, 1979), pp. 202-248.

tion if no major structural changes are made in the next few decades.⁷ The voting rate of this group is very low, so members are not a political threat. Increasingly, the census takers cannot even find them. The schools cannot hold them, and upgrading the schools will not help them. Employment will not increase if everyone gets a meaningful high-school diploma. We do not compete with other nations in service sectors of the economy, so better education for the masses will not help us in international competition. Better education should produce a more informed citizenry, ready for "lifetime learning," but if I were an elite concerned with my income, class position, and the opportunities for my offspring, I would think twice about a more informed citizenry in an economy that survives on defense and service jobs with an increasingly polarized income distribution and a growing permanent underclass. The political scene of the mid-1980s suggests that reassurance, not information, is the key to political success.

Thus the symbolic nature of schooling is overstated. There is a large element of myth and ritual in it, and Meyer and Rowan's historical account is brilliant. But that account may be appropriate only to the past, when literacy, Americanization, and socialization into a permanent wage status may have been all that the schools really needed to do. In the 1970s and 1980s, though, the cultural approach to organizations requires that powerful interests outside of organizations, including the state, must be taken into account. The view I sketched at the beginning of this chapter would ensure this larger perspective.⁸

The cultural approach of John Meyer and his associates is given to excesses, I have argued, if it does not consider power. But a cultural approach is still essential. I noted earlier how important it is to recognize the cultural level of symbols, values, and cause-and-effect relationships. Meyer and Scott in fact lay out in their book the beginnings of a very useful scheme that classifies organizations in terms of their emphasis on technical versus institutional evaluations of effectiveness. Technical organizations, such as manufacturing firms, are judged by their outputs; they monitor production and protect their technical core from the environment. Institutionalized organizations, such as schools, are judged by their forms rather than their output; they do little monitoring of production, and they protect their forms or structures from the environment, since these are the main sources of their legitimacy. Technical organizations use structures to make their work efficient, but institutionalized organizations use structures to indicate conformity to social and cultural expectations. The actual work processes can be decoupled from the structure. Meyer and Scott also develop the notion of "sectors," which discriminates on the basis of the mix of technical and institutional criteria and includes institutional factors (laws, government relations, public visibility, and prestige), support organizations, and legitimating organizations. Medical care, for example, is a sector that combines organizations with both technical and institutional criteria, as does bank-

⁷William Julius Wilson, "The Urban Underclass, Social Dislocation, and Public Policy," in *American Minorities and Civil Rights: Where Now and Where Headed*, ed. Leslie Dunbar (New York: Pantheon, 1984).

⁸The Meyer and Rowan article we have been discussing was followed by a much more famous but quite misleading piece by them, "Institutionalized Organizations: Formal Structure as Myth and Ceremony," *American Journal of Sociology* 83 (1977): 440-463. Here virtually all organized activity is seen as myth creating; it is an unfortunate example of overextension of an important insight.

ing. Neither technical nor institutional criteria are particularly relevant for evaluating the personal service sector. Schools are low on technical but high on institutional criteria. This is a realistically complex way to subdivide the world of organizations, and I believe it deserves much development. If power relations are explicitly recognized, a sectoral analysis of education—one that recognizes the low impact of technology on structure and the importance of structure for legitimizing the system—should be very valuable.⁹

The cultural approach has also been used to good effect, with appropriate attention to other factors, by Paul DiMaggio and Walter W. Powell. They explore the institutional pressures that make organizations within the same field resemble one another, independent of any efficiency reasons. These pressures include the power of dominant organizations and the state to coerce conformity in structure and practices, consistent with a power model; the drive to imitate seemingly successful organizations to try to achieve similar success or merely to look acceptable, consistent with a cultural model; and the role of professionals and their networks in demanding and producing similarities in background and orientation, a structural and power interpretation. DiMaggio and Powell avoid the extreme of saying that structural reorganizations, such as divisionalization, are always imitative or merely signals of modernity, but they give examples that appear to make signaling the main motive, and efficiency can suffer as a result. Their viewpoint alerts us to processes that are easily neglected, but it does not insist that these imitative, coercive, and professional power processes are the only ones. At least implicitly the bureaucratic core identified at the beginning of this chapter remains intact.¹⁰

AN EVOLUTIONARY THEORY OF BUREAUCRACY

Our last illustration of the importance of a qualified power model of organizations concerns evolutionary and population-ecology theories, which we discussed in Chapter 6. There I argued that social systems can avoid the life cycle of natural systems,

⁹The sectoral analysis undercuts many of the book's other excesses—for example, the tendency to treat hospitals as only institutionalized, with effective medical treatment being seen as "less important" than ritual procedures (Meyer and Scott, *Organizational Environments*, p. 39). (In Chapter 6 of that book, hospitals are recognized as both technical and institutional.) Unfortunately, at many places the analysis resembles those of schools that I have criticized strongly; it treats serious problems such as worker safety, pollution, and discrimination against women and minorities in the workplace as myths. Attention to power in society and careful consideration of the mix of technical and institutional criteria would avoid these excesses.

¹⁰Paul J. DiMaggio and Walter W. Powell, "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," *American Sociological Review* 48 (1983): 147–160. Support for the cultural model of Meyer and Scott and DiMaggio and Powell also comes from a surprising source—the highly rationalistic field of accounting. There has been a recent surge in what was once called "behavioral accounting" (that is, look at what is done, not what is theorized). The lively British journal *Accounting, Organizations, and Society*, edited by Anthony Hopwood, explores a variety of myths of accounting, its highly political character, the great discrepancy between theories of accounting and actual practices, and the way accounting practices can prevent an organization from, for example, conceptualizing market changes and responding to them. Mainstream professors of accounting are now paying some attention. See the important articles by Carnegie-Mellon and Harvard professor Robert J. Kaplan, "Accounting Lag: The Obsolescence of Cost Accounting Systems," unpublished manuscript, Harvard University, March 1984, and "The Evolution of Management Accounting," *The Accounting Review* 49 (1984): 390–418.

since many very large businesses and industrial organizations have survived for several decades, and many public organizations, such as public schools, are not allowed to die, though they may be merged. I also called for attention to the power to create environments and thus control the conditions for survival. Since their appearance in the mid-1970s, population-ecology theories of organizations have become more sociological and, indeed, increasingly resemble traditional organizational theories as they factor in institutional variables and recognize the insights of the older school of human ecology. The work that we will examine now, by John Langton, is especially promising, since it deals with the origins of bureaucracy. It even includes a discussion of such neo-Marxist concerns as deskilling and the exploitation of labor. Thus power is not ignored. But power plays an extremely weak explanatory role; the central dynamics are still variation, selection, and retention. Furthermore, Langton's account illustrates only a faint attention to the last set of variables in the qualified power model outlined at the beginning of this chapter: the larger system in which the organization is embedded. It is for this reason I have chosen the model to conclude this chapter and book.

John Langton's article on the Wedgwood pottery firm in eighteenth-century England is a very good piece in several respects. It covers a long time period, as an evolutionary, population-ecology study should, but rarely can do because of data limitations: It deals with a historically important industry that significantly shaped the development of bureaucracy in England, rather than with a population of relatively trivial organizations over a decade or two. It acknowledges some power issues. And it is quite learned in the best sense of the word.¹¹

Langton's account begins with the general rise in the British standard of living in the eighteenth century. This rise brought about an increase in tea and coffee drinking, which created a demand for inexpensive, good-quality earthenware pots and cups that the existing potteries could not fill. One potter, Josiah Wedgwood, after much experimentation, produced an inexpensive but good product, "Queen's Ware." He then sought high-volume production to meet the demand, and this required better roads for safe shipment, a canal adjacent to the new factory for moving raw materials, and a labor force that could be made to work for long hours under intense discipline for low wages.

Wedgwood and other potters pressured Parliament to build the turnpike, and then Wedgwood pressured Parliament to build the canal. He acquired a site on it when he was sure it would be built. The work force, Langton notes, was produced by the enclosure movement, in which the nobility began to use their land for raising sheep instead of for agriculture, forcing the tenants who had farmed these lands for generations to look for other means of support. However, this work force needed disciplining, since, according to contemporary accounts accepted by Langton, it was accustomed to bouts of idleness, drinking, games, and gambling. Discipline was provided by the local preacher John Wesley, who offered the workers the alternatives

¹¹John Langton, "The Ecological Theory of Bureaucracy: The Case of Josiah Wedgwood and the British Pottery Industry," *Administrative Science Quarterly* 29 (1984): 330-354. Page references in parentheses in the text refer to this work. My own source for British history in this period is largely Francis Hearn, *Domination, Legitimation, and Resistance: The Incorporation of the Nineteenth-Century English Working Class* (Westport, Conn.: Greenwood Press, 1978).

of eternal damnation or subordination to authorities. Discipline was also provided by adopting the techniques of an industrialist Wedgwood knew—a rudimentary form of bureaucracy involving task specialization, formalization of authority, standardization, and hierarchy. The result, after much experimentation and development, was high-volume production and extremely large profits for Wedgwood. Potters who did not follow his example failed; others survived, but none on the scale of Wedgwood. The example illustrates a behavioral evolutionary account of the development of bureaucracy.

All these steps bear closer examination before we conclude that Wedgwood was an example of variation (discovering how to make Queen's Ware), selection by the "environment" as the best fit, and retention of the innovations. An alternative explanation is that the state favored such institutions as large factories producing luxury goods for private profit and that it provided the resources, including the labor. When Wedgwood started his first small operation in 1759, the state still reflected the interests of the landed nobility; it was not until the early nineteenth century that the growing merchant and new capitalist classes gained control. But in the period of Wedgwood's growth, the new commercial interests achieved many victories in Parliament and in the courts. These triumphs helped Wedgwood and bureaucracy quite directly.

Going back to the beginning of Langton's account, it can be equally well argued that consumption of nonnutritious coffee and tea was an upper-class affectation that spread to the middle classes and served no survival function for society. Expenditures of physical and social resources on more elegant pots and cups might be seen to be inefficient in a society with pressing health and social problems. (Langton does not assert that good pottery and tea drinking were necessary for the survival of society, of course, but because of the character of some evolutionary thought it is worth making this point in passing.) While the turnpike and canal that Wedgwood pressed for no doubt served important trade functions for necessities as well as luxury goods, they were provided by the public, and their capital costs were not fully reflected in the price of goods that traveled on them (i.e., the state did not recover its costs in building them by charging merchants for their use). One or a few pottery firms, then, extracted public resources not available to others. Presumably no inquiry was made as to whether Wedgwood (and any other potters that benefited) was more deserving of the particular location of these facilities than, say, many agricultural areas producing necessities.

Certainly the enclosure movement, which provided the labor supply, was resisted by those who were dispossessed and by social critics, was sanctioned by the state, and bestowed large economic benefits on the large landholders. They no longer had to honor traditional norms or the actual laws that bound communities together. Langton describes the movement in functional and positive terms as making "labor more mobile and more free to move about" (341), but the peasants did not see it that way at all. Many were forced either to work unaccustomed hours for low wages in factories or to starve. (Indeed, there is some evidence that during a recession Wedgwood prevented his idled workers from seeking other employment, even though he was not paying them; he curtailed even this freedom.) The negative description of the work force as brutal, ignorant, drunken, and given to idleness, a

view prominent among the upper classes at the time, is not questioned by Langton, but should be. There was a great emphasis on sports and games (brutal by our standards, but traditional for the working class), fairs, wakes, family time, rest, and leisure. All were eliminated with Wedgwood's ten-hour day, six days a week, with perhaps two holidays a year. Langton goes further in siding with the employers over the employees. Referring to Wedgwood's work force he says: "Certainly they felt no *ethical* obligation to work in diligent, conscientious, and regular fashion." (342, *italics added*) Since they were poorly paid, had lost much of their leisure, and were producing very large profits for Wedgwood, one wonders why Langton assumes the ethical obligation was the workers', and not Wedgwood's. It may even be that excessive drinking appeared with dispossession, desperation, long hours, and unwholesome work and was thus a dysfunctional consequence of the dislocations accompanying industrialization.

Preacher Wesley's influence appeared to be to demand long hours of work under intense discipline, under threat of damnation and hellfire. It is possible that the success of Wesley and Wedgwood depended on the disruptions of the enclosure movement and the increasingly repressive tactics of the central government as it tried to put down unrest. Most important, the greatly increased hours and hard work did not swell the wages of the workers, as they would have under subsistence farming and even tenancy, but only the profits of the owner. This was a relatively new phenomenon, since in most other forms of livelihood until then (such as farming and skilled trades), the returns from harder work and longer hours primarily benefited the worker. Langton acknowledges that the workers produced unprecedented profits for Wedgwood, but he neglects to add that they did so even as they gave up their traditional form of work, pace, and hours, as well as much of their social and recreational lives.

Thus, in this examination of the key factors in the "evolution of bureaucracy" and enterprise success, we find state power and considerable dysfunctions for a large segment of society rather than efficient adaptation to a vague "environment." Langton notes some of the dysfunctions for the workers, but he explains their acquiescence to the system by appealing to the concept in behavioral psychology of "reinforcements," provided by Preacher Wesley with fear of hellfire and by employer Wedgwood with fear of unemployment. I would prefer to call these "reinforcements" threats, symbolic and real, and add that they were buttressed by state power that was putting down rebellions all over England by the end of the eighteenth century. Langton also makes no critical analysis of the consequences for the families of the workers, their communities and culture, and above all, how bureaucracy shaped their future options by legitimating wage dependence. The new "environment" Wedgwood was presumably merely adapting to was novel and repugnant to much of the population. Wedgwood was not trying to get an efficient fit with this environment; he was forcefully helping to create it.

That this evolutionary explanation rests on unexamined assumptions about the environment and the neglect of social costs can also be seen by imagining, to use evolutionary language, an alternative history. We should not assume a "historical necessity"; constructing what historians call a counterfactual inquiry will indicate outcomes that were possible but did not happen. Let us assume first, in order to get

the story going, that no effective outcry was heard as the upper and then the middle classes began to engage in the nonnutritious and quite idle practice of drinking tea and coffee in large volume. No Methodist preacher was there to assail this waste of social resources or this personal indulgence, and no Langton to remind them of their "ethical obligation." However, we will assume that the state did determine that the enclosure movement was an unreasonable violation of the peasants' traditional rights and the nobility's traditional obligations, and that such a movement could easily create a dependent, vagrant population with poor health and radical proclivities, all in the name of private profits. Pretend that the state concluded that the costs of almshouses, relief for the poor, health problems, family disruption, and a loss of cherished independence for those dispossessed would be too great for society as a whole to bear. Thus converting commons to sheep runs would be possible only if those dispossessed of their traditional rights and livelihood were given sums of capital to enable them to move and take up new trades. (Manufacturing at this time required very modest capital investment; barriers to entry consisted largely of government favors such as those Wedgwood probably received.) Just as, in Langton's account, the state permitted land to be taken from peasants, in our example it now permitted peasants to be reimbursed. (Actually, this assumption is not so ridiculous. For a time, Parliament levied a small tax on those landowners who drove off their farmers; it was to help with the growing expenses of local almshouses and charities. It was a beginning, but both landholders and the new bourgeoisie fought it.)

The wool industry would not reap the immense profits that it actually did, but it could grow at a modest rate as long as the expected profits were distributed fairly to those who bore the burden of enabling it to grow. Scattered about the land would be peasants with the means to start, say, potteries. They would be the beneficiaries of what Langton calls "a particular reinforcer (reward, resource)." There is no reason to limit state reinforcers to large, established capitalists. With so many well-capitalized potteries, evolutionary theory would predict a very good chance that some firms would eventually invent something like Queen's Ware. Indeed, it might have appeared earlier under such conditions.

This salutary distribution of the wealth to be made from the wool trade would foster the growth of numerous trades. Let us say that Wedgwood were such a peasant, starting a pottery. Petitioning the state for a turnpike and canal, the state would say: "Users of specialized, indivisible goods, such as a canal by the property you have bought, will be required to pay a part of the capital costs as well as user fees. If what you produce is not deemed a necessity, and is not in sufficient demand to command a price that includes reimbursement for capital and upkeep, it probably should not be sheltered by a free grant. Pottery need not be shipped great distances; it is inefficient to build roads for it, unless the cost is reflected in the price of your Queen's Ware. Furthermore, we wish to encourage decentralized industry, in the interests not only of more equitable distribution of wealth, but of the variety that fosters innovation and selection. You also may have speculated on the land near the canal you wish; speculation is dysfunctional for social evolution. Valuable information, such as our likely favorable action on your petition to have us build you a canal, should be available to all, for otherwise it restricts variation and natural selection, leads to speculation, and promotes great extremes of wealth. If the canal is neverthe-

less built, for reasons other than your pottery, you shall contribute to its cost in accord with your speculative benefit."

Let us say the transportation system does evolve, and the demand for pots and cups is so great that even with the costs internalized, Wedgwood's firm threatens to expand to over 200 employees. Now the state would interfere with evolution, from one point of view, but merely be a part of evolution from another, by declaring that in the interest of preventing riots, revolts, poverty, child labor, mendicancy, and ill health (and perhaps alcoholism or even coffee drinking), no member of the firm, including the owner, shall make more than four times as much as the most poorly paid worker. (In Wedgwood's case, the poorest would be the 25 percent of the work force that were children, mostly girls, whose low wages surely contributed much to the "efficiency" of his bureaucracy and its fit with the environment.) Such an action would not be unusual; in Wedgwood's time the state regularly used its power to affect wages, generally to prevent their rise. By 1795 it was passing acts that imposed fines equivalent to six months wages on any two people who met to conspire to raise their wages, and fines on those who lent these people money to defend themselves against the charges. The state could just as well control the ratio of returns to effort by setting a maximum spread of wages and income. It had already upheld the enclosures, punished those who met together to seek increased wages, eliminated employer responsibility for industrial accidents (through the fellow-servant rule), and so on. Increasingly the state was protecting Wedgwood at every turn, so it could now, in our imaginary history, protect workers. Whether this fits evolutionary theory, or not is an open question; but evolutionary theory generally ignores state power.

The consequences would perhaps be less tea and coffee drinking, since pots would be expensive and there would be fewer idle rich, and more games and sports; more leisure time for all; more innovation and entrepreneurship because of the decentralization of resources; more effective use of resources (Wedgwood died very very rich, presumably having loaned his money to rich industrialists while alive, making him and them even richer); shorter working hours; no child labor; fewer accidents (there would be incentives to make work safe, because the workers could choose to avoid unsafe establishments); a religious emphasis on love and community instead of hellfire and damnation; and so on.

(1) All this would be very functional for society. Its impact on the social sciences would have been profound, for many social scientists believe that what exists was somehow inevitable, rather than assuming that history is full of branching points, only one of which we actually took, while others were quite possible and often favored by some groups. Max Weber, writing a century after our imaginary history of industrialization took place, would have proclaimed that the communitarianization of the world was inevitable, rather than proclaiming the inevitability of bureaucratization; Michels would have formulated the iron law of equality, not the iron law of oligarchy; the evolutionists would still see the survival of the fittest, but the idle rich would now be the unfit and the small entrepreneur and the worker the fit, a view that Adam Smith actually held. And Langton would not have written about how bureaucracy evolved through a natural process of selection "by virtue of its more effective competition for resources" (336) or how bureaucratic elements "help an organization achieve a better fit with its environment, allowing it to compete more

effectively with other organizational forms for vital resources." (337) Instead, he might have written of the "ecological theory of small, nonbureaucratic, decentralized organizations." He might also have written not of the behaviorism of modern psychology, emphasizing rewards and punishments from superiors who set our premises, but of the "behaviorism" of the Man from Galilee and his radical social doctrine.

The moral? Beware of the functionalism that assumes that a pattern is, in Langton's words, "historically expected, given certain initial conditions" (351) if those conditions assume that efficient production for society is the driving force. Consider, at least, that the "certain initial conditions" might have been the distribution of power among interest groups and the state. Assuming a slightly different set of these interests, a quite different pattern would be "historically expected" under evolutionary theory. If so, the theory that the pattern is "historically expected" is less important than is determining the interests and powers that set the pattern. Langton writes as if the "highly adaptive set of traits" Wedgwood evolved were solving a problem for the system; more accurately, they were creating problems for most system members. Beware of unspecified "environments." The bland concept may mask powerful interests that consciously do the selecting. Even if there were any "natural process of evolution" for social systems, economic and state power can deflect it. Beware of "efficiency" arguments that do not ask, "Efficient for whom, and at what costs to others?" Ask instead about "externalities," the social costs of organized activities that are not included in the price and are borne by those who benefit very indirectly, if at all, from the activity.

Then join me in the difficult task of rewriting the history of bureaucracy with an expanded vision of the environment and externalities. I believe that a power theory of organizations—starting with the solid rock of bureaucracy, modified by bounded rationality and considerations of internal and external group interests, extended to networks and sectors that include the state, and closely attentive to externalities (the costs borne by the weaker members of society)—will show the way. It will be an organizational analysis all the way, because it is through organizations (at least since the time of Josiah Wedgwood) that classes are constituted and reproduced, stratification systems created and stabilized (and changed in some cases), political processes tamed and guided, and culture itself shaped and molded.