

The Work of the Contemporary Political Economists

A persistent theme in the intellectual mainstream of American public administration is reference to efficiency as an essential criterion of "good" administration. Efficiency is conceptualized in two fundamentally different ways. One way views efficiency as being expressed through principles of hierarchical organization. The greater the degree of specialization, professionalization, and linear organization in a unitary chain of command, the greater the efficiency.¹ The other way views efficiency in terms of a cost calculus. The accomplishment of a specifiable objective at least cost or a higher level of performance at a given cost is the measure of efficiency. Wilson clearly assumed that perfection in hierarchical organization is equivalent to efficiency measured in a cost calculus (Wilson, 1956: 197. See also proposition 6, in Chapter 2, under "Basic Propositions in the Wilsonian Paradigm"). Wilson thus equated perfection in hierarchical organization with least-cost performance.

Gulick, at the very culmination of the administrative survey movement, challenged Wilson's assumption by specifying a principle of homogeneity as a limit to efficiency in hierarchical organization. Simon sustained that challenge and explicitly broke with the traditional theory of administration. Using the least-cost solution as his criterion of efficiency, Simon demonstrated that solutions based on perfection in hierarchical organization need not be the most efficient. Simon recognized that various institutional arrangements might be used to bound human rationality and affect the potential for attaining efficiency.

Simon chose, however, to confine his works largely to something that might be specified as "an" organization or "the" organization. "Organizations" in this sense became the primary focus for subsequent work on organization theory. This focus led to substantial emphasis on the problems of bounded rationality *within* an organization and to substantial neglect of different decision-making arrangements and of multiorganizational arrangements in administrative systems.

The challenge posed by Simon's work has been pursued by a community of scholars who use the criterion of efficiency to assess performance in the provision of public goods and services. Most of these scholars were trained as economists with specialized interests in agricultural economics, resource economics, public finance, public utilities, public regulations, and welfare economics more generally. Since their analytical tools derive from economic theory and their concern is with public decision making, I shall identify this group of scholars as contemporary political economists.²

Many early efforts of these political economists were largely oriented toward benefit-cost analysis. One facet of this work has evolved into the planning, programming, and budgeting system (PPB) for planning public expenditure decisions (U.S. Congress, 1969). PPB analysis, however, rests on theoretical presumptions similar to the traditional theory of public administration. Such analysts would find Leonard White's early definition of public administration as the "*management of men and materials in the accomplishment of the purposes of the state*" (White, 1939: 6; White's emphasis) appropriate if the term "nation" were substituted for "state." The PPB analyst takes the methodological perspective of an "omniscient observer."³ Assuming that the PPB analyst knows the "will of the state," a program is selected for the efficient use of resources (i.e., men and material) in the accomplishment of those purposes. The assumption of omniscience may not hold; and as a consequence, PPB may involve radical errors and generate gross inefficiencies (Wildavsky, 1966).

In the last twenty to twenty-five years, other political economists have turned their attention to the relationship of institutional arrangements to economic performance in the public

sector. The presentation in this chapter will be confined to those political economists who (1) use the individual as the basic unit of analysis; (2) use the theory of externalities, common properties, and public goods to define the structure of events relevant to public administration; (3) analyze the consequences of different organizational or decision-making arrangements on the output of public goods or services; and (4) evaluate these consequences by whether the outcome is consistent with the efficiency criterion or other measures of performance.

Model of Man

Work among most political economists is usually based on an explicit model of man. They adopt a form of methodological individualism which makes self-conscious use of the perspective of a representative individual or set of representative individuals in the conduct of analysis (Buchanan, 1966: 26ff.). The representative individual may be a member of a hypothetical community, an entrepreneur, a public employee, or some other person whose interests are explicitly stated. Assumptions about individuals normally include reference to (1) self-interest, (2) rationality, (3) information, (4) law and order, and (5) the choice of a maximizing strategy.

The assumption of self-interest implies primarily that each individual has preferences that affect the decisions he or she makes; those preferences may differ from individual to individual. Rationality is usually defined as the ability to rank all known alternatives available to the individual in a consistent manner (Downs, 1957: 4–6). Assumptions about information usually have reference to three levels, which are defined as certainty, risk, and uncertainty (Knight, 1965). Under either certainty or risk an analyst can project a relatively determinate solution to a particular problem. Under conditions of uncertainty, the determinateness of solutions is replaced by conclusions about the range of possible solutions.

Once uncertainty is postulated, a further assumption may be made that an individual learns about states of affairs as he or

she develops and tests strategies (Simon, 1959). Estimates are made about the consequences of strategies. If the predictions follow, a more reliable image of the world is established. If predicted events fail to occur, an individual is forced to change his or her image of the world and modify his or her strategies (Shackle, 1961). When learning occurs, the assumption of rationality may also have to be modified to allow for a reordering of preferences as the individual learns more about the opportunity costs inherent in different alternatives.⁴

An assumption of uncertainty also implies that one of the essential considerations in the design of organizational arrangements is the development and use of information (Cyert and March, 1963). Planning and deliberation are activities that seek to clarify alternatives and the consequences that are likely to flow from those alternatives. An essential criterion of organizational arrangements is the extent to which relevant information is evoked or excluded and the effect that such organizational characteristics have on the error-proneness or error-correcting propensities of decision makers.

Classical economic theory postulates that economic man will act within the limits of "lawful" conduct. Most analysis by political economists is predicated upon some postulated condition of law and order in which basic definitions of rights, duties, liberties, and exposures exist in some form. An assumption may either be made that some basic constitutional settlement exists in the larger political environment or among segments of the domain being considered. In short, some political structure is assumed to provide a context for analysis. In the absence of any law-and-order assumption, it might be necessary to assume a Hobbesian state of war as the prevailing human condition.

The assumption that individuals will adopt a maximizing strategy implies the consistent choice of those alternatives which an individual thinks will provide the greatest net benefit as weighed by his or her own preferences. This can be expressed alternatively as the choice of the least-cost strategy and is equivalent to the efficiency criterion. Maximization under uncertainty is not possible in a formal mathematical sense. Yet it is possible to assume that individuals will attempt to maximize subject to

uncertainty. In that case, an individual who pursues a maximizing strategy in the absence of knowledge of all alternatives and of the costs of learning about added possibilities would act as if he or she were "satisficing" (March and Simon, 1958: 140–141). I prefer to refer to an optimizing strategy on the presumption that human choice is always subject to constraints of one type or another.

Structure of Events

Political economists assume that "rational," self-interested individuals who pursue optimizing strategies will face a variety of situations.⁵ The structure of events inherent in different situations can be characterized by their relative divisibility or indivisibility. The degree to which events can be subject to control by individual persons through possession, exchange, or use is the critical criterion in establishing their divisibility or indivisibility. Events that cannot be subject to possession, exchange, or use by individuals have the characteristics of involving interdependencies and commonalities in their possession and/or use.

Events involved in any decision-making situation can be arrayed on a continuum ranging from purely private to purely public (Davis and Whinston, 1967). Goods are events for which people have preferences; bads are events for which people have aversion. The potential demand for most goods will exceed supply, and goods will be scarce. The supply of most bads will exceed demand and thus require efforts to restrict or alter their supply. **Purely private goods** are defined as those that are highly divisible and can be packaged, contained, or measured in discrete units. Purely private goods are subject to provision under competitive market conditions where potential consumers can be excluded from enjoying the benefit unless they are willing to pay the price. **Purely public goods**, by contrast, are highly indivisible. Potential consumers cannot be easily excluded from enjoying the benefit once a public good is produced. Once public goods are provided for some, they are available for others to use or enjoy jointly without reference to who pays the cost (Samu-

elson, 1954: 387; Margolis, 1955). National defense is a classic example of such a good. Once it is provided for some individuals living within a nation, it is automatically provided for all individuals within the nation whether they pay for it or not.

Exclusion, jointness of use, measurability, noticeability, or other attributes can be used in conceptualizing different types of goods. Mancur Olson in *The Logic of Collective Action* (1965) places primary emphasis upon exclusion and gives some consideration both to jointness of use and noticeability. Vincent Ostrom and Elinor Ostrom in "Public Goods and Public Choices" (1977) use both exclusion and the failure of exclusion, and separable and joint use to construct a two-by-two matrix that has reference to private goods, toll goods, common-pool resources, and public goods. Measurability, degree of choice, and noticeability are factors of considerable importance, but multidimensional matrices are difficult to elaborate. These difficulties, however, should not detract from considering the nature of the good, or the set of events, and related technologies as being one of the most fundamental elements that needs to be considered in all forms of institutional and policy analysis. Most political economists refer variously to externalities, common-property resources, collective goods, or public goods, in contrast to private goods, as being associated with market weaknesses and market failures.

Within this range, the production or consumption of goods or services may involve spillover effects or externalities which are not isolated and contained within market transactions (Ayres and Kneese, 1969). Goods with appreciable externalities are similar to private goods to the extent that some effects can be subject to the exclusion principle. Other effects, however, are like public goods and impinge upon persons not directly involved. Water pollution is an example of a negative externality; the benefits other members of a community derive from a person acquiring an education would be a positive externality. A reduction in the cost of a negative externality and an increase in the yield of positive externalities are both equivalent to the provision of a public good.

Common-property resources have attributes somewhat analo-

gous to public goods (Gordon, 1954; Christy and Scott, 1965: chap. 2). Common-property resources involve a jointness of supply and a separability of use so that individuals cannot be effectively excluded from access to the supply of a resource, but each individual makes a separable use of that resource. The use-unit is subject to separable use (Blomquist and E. Ostrom, 1985). A groundwater basin, for example, affords a common water supply, which is accessible to any overlying property owner. Once extracted, the water becomes available for the separable use of each overlying proprietor. Whenever the aggregate demand on such a resource exceeds the available supply, one person's increased demand will adversely affect the use of others. Beyond certain thresholds of supply, an exclusion effect will operate among users so that one person's use will impair use by others, but the supply of the resource continues to be subject to a high degree of interdependency and indivisibility. Spillover effects occur in relation to conditions of supply and may or may not occur in relation to conditions of use. The public-good contingency bears more upon consumptive or use aspects than upon conditions of supply.

Decision-Making Arrangements

The work of political economists is based on an assumption that self-interested individuals, who pursue optimizing strategies, will require reference to appropriate sets of decision rules or decision-making arrangements in dealing with different structures of events if the welfare potential of a community of individuals is to be enhanced. No single form of organization is presumed to be "good" for all circumstances.⁶ Rather, any organizational arrangement can generate a limited range of preferred effects. Every organizational arrangement will be subject to limitations. Institutional weaknesses and failures will become apparent if those limits are exceeded. Thus any particular organizational arrangement will have certain capabilities and will be subject to sources of weakness or failure. The essential elements in the analysis of organizational arrangements are to (1)

anticipate the consequences that follow when (2) self-interested individuals choose optimizing strategies within the structure of a situation that has reference to (3) particular organizational arrangements applied to (4) particular structures of events (goods) in the context of (5) some shared community of understanding. The optimal choice of organizational arrangements would be that which minimizes the costs associated with institutional weakness or failure (Buchanan, 1969).

The analysis made by political economists in assessing the consequences of decision rules on the choice of strategy in different situations will be applied to four different decision-making arrangements. The first application will examine the effect of decision rules allowing for individualistic choice related to a common-property or public-good situation. The second application will examine the effect of decision rules characteristic of large-scale bureaucratic organizations concerned with the full array of goods and services in the public sector. Given the problem of institutional weakness and institutional failure associated both with individualistic choice and with large-scale bureaucratic establishments, consideration will then be given to the choice of decision rules that would enable a community of people to reduce these costs by organizing a collective enterprise to develop a common-property resource or provide a public good. Finally, consideration will be given to the development of multiorganizational arrangements as a means of providing for a heterogeneous mix of diverse public goods and services.

Individualistic Choice and the Tragedy of the Commons

Individualistic choice occurs whenever each person is free to decide for oneself in the pursuit of one's own interest. Individualistic choice is characteristic of the market and occurs whenever the only requirement is the willing consent of those individuals who freely agree or contract with one another to exchange some good or undertake some action. If each is free to decide for oneself in the pursuit of one's own interest concerning a common-property resource or a public good, serious

problems will occur. Each individual will presume to maximize one's own net welfare if one takes advantage of the common property or public good at minimum cost to oneself. In the case of a public good, the cost minimizer would have no incentive to pay his or her share of the costs for provision. Most public goods would not be provided if funds were collected strictly on a voluntary basis.

In the case of a common-property resource with a renewable yield or supply, like a common water supply, individualistic choice has great advantages in reducing the costs of entrepreneurship so long as supply exceeds demand. When the aggregate demand of all individual users exceeds the available supply of a common-property resource, however, an increase in demand will diminish supplies and increase costs for the community of users. Each person will calculate only his or her own individual cost and will ignore the social costs imposed upon others. Many individuals will choose a "dog-in-the-manger" strategy, pursue their own advantage, and disregard the consequences for others. Furthermore, some individuals will be motivated to conceal information about their intentions. Should others propose joint action, those who conceal information may remain free to take advantage of opportunities created by the joint actions of others. If voluntary actions are taken to curtail demand, some individuals will pursue a "holdout" strategy (Hirshleifer, DeHaven, and Millman, 1960; Olson, 1965). The holdout will be free to capture a lion's share of the benefits derived from the voluntary joint actions of others. As long as each person is free to decide his or her own course of action, the probability of someone pursuing a hold-out strategy is high. The presence of holdouts will threaten the stability of any joint voluntary solution (V. Ostrom, 1968).

If the competitive dynamic is allowed to run its course, social costs will escalate to a point at which continued operations will yield an economic loss for the community of users. Individuals in weak economic positions will be forced out. The neighborhood effects that are generated may include poverty, deprivations, threats, and even violence. Individualistic decision making applied to common-property resources will lead inexorably to

tragedy unless the common property can be partitioned into separable private properties or decision-making arrangements can be modified to enable persons to act jointly in relation to a common property. This eventuality has been characterized by Garrett Hardin as the "tragedy of the commons" (Hardin, 1968). Unrestricted individualistic choice in relation to common-property resources or public goods can generate destructive competition so that the greater the individual effort, the worse off people become.⁷

Because of this competitive dynamic, individuals cannot be expected to form large voluntary associations to pursue matters of common or public interest unless special conditions can be met (Olson, 1965). These conditions will exist only (1) when members can derive a separable benefit of a sufficient magnitude to cover the cost of membership or (2) when they can be coerced through some form of levy or taxation into bearing their share of the costs. Thus we cannot expect people to secure the development of a common property or the provision of a public good by relying upon purely voluntary arrangements with each individual free to decide for him or herself. Some form of collective choice is required. When individuals act with the legal independence characteristic of decision making in market structures in a situation dominated by externalities, common-property resources, or public goods, we can conclude that institutional weakness or institutional failure will occur. The magnitude of the weakness or failure will depend on the importance of the externality, or the degree of indivisibility occurring in the common property or public good.

Bureaucratic Organization

Bureaucratic organization is an alternative decision-making arrangement to that of individualistic choice. Bureaucratic organization implies reliance upon hierarchy requiring subordinates to defer to the commands of superiors in the selection of appropriate actions and subject to sanctions or discipline for failure to do so. Bureaucratic organization can reduce some of the costs

associated with the use of individualistic choice. The exercise of governmental prerogative by public officials capable of central direction and control implies that effective sanctions can be mobilized to preclude the holdout strategy and to undertake management programs to develop a common-property resource or produce a public good.

In the organization of any management program, recourse to a hierarchical command structure will permit economic advantage to be realized whenever production processes require a pooling of efforts through a division of labor which takes advantage of common production facilities. This rationale applies to both private firms and public agencies. If a firm can conduct business under the management of an entrepreneur at a lesser cost than if each transaction were organized as a market transaction, both the entrepreneur and the employees of the firm can derive a benefit from agreeing to act in accordance with the decisions of the entrepreneur in allocating work assignments among several different employees (Coase, 1937). Bureaucratic organization is a method for enhancing efficiency in operations by minimizing decision or transaction costs within the limits or zones of authority provided by the employment contract and the competitive force of the product market.

When principles of bureaucratic organization are applied to the conditions prevailing in the provision of public goods and services, a number of sources for potential institutional weakness or institutional failure become apparent. In the absence of an exclusion principle, the competitive force of a product market will not exist for most public organizations (Downs, 1967: 29–30). As a consequence, entrepreneurs in such organizations will be less sensitive to diseconomies of scale that accrue from increasing management costs as the size of a public organization increases. We can anticipate that any organization might reach a point at which the management cost of supervising an additional employee would exceed the marginal value added by the employee's productivity. Beyond that point, a growth in organizational size would generate a net economic loss or yield a decreasing social return.

Gordon Tullock in *The Politics of Bureaucracy* (1965) analyzes

the consequences that follow when rational, self-interested individuals pursue maximizing strategies in very large public bureaucracies. Tullock's "economic man" is an ambitious public employee who seeks to advance his or her career opportunities for promotions within a bureaucracy. Since career advancement depends on favorable recommendations by one's superiors, a career-oriented public servant will act so as to please his or her superiors. Favorable information will be forwarded; unfavorable information will be repressed. Distortion of information will diminish control and create expectations that diverge from events generated by actions. Large-scale bureaucracies will thus become error-prone and cumbersome in adapting to rapidly changing conditions. Efforts to correct the malfunctioning of bureaucracy by tightening control will magnify errors. A decline in return to scale can be expected to result. The larger the organization becomes, the smaller the percentage of its activities will relate to output and the larger the proportion of its efforts will be expended on management.

Tullock suggests that the limits on control in very large public bureaucracies will engender "bureaucratic free enterprise" (Tullock, 1965: 167) when individuals and groups within an organization proceed to formulate their own missions with opportunities for side payoffs, including graft and corruption. Goal displacement and risk avoidance motivated by individual self-interest will generate organizational dysfunctions as elaborate justifications are fabricated to cover potential exposures to the scrutiny of superior authorities. The social consequences generated by an organization become increasingly contradictory and unreal to an independent observer when compared with public rhetoric about organizational purposes and goals. Michel Crozier concluded his study of French bureaucracy by asserting that "*a bureaucratic organization is an organization that cannot correct its behavior by learning from its errors*" (Crozier, 1964: 187; Crozier's emphasis). Both Tullock and Crozier sustain an analysis of conditions giving rise to institutional weakness and failure in large bureaucratic organizations. Their analysis is fully consistent with Max Weber's portrait of the fully developed bureaucracy.⁸

Once a public good is provided, the absence of an exclusion

principle implies that each individual using such a good or service will have little choice but to take advantage of whatever is provided unless he or she is either able to move to another jurisdiction or wealthy enough to make separate provision (Tiebout, 1956). Under these conditions, the producer of a public good may also be relatively free to induce savings in production costs by shifting some of the burdens or costs of production to users or consumers of the service (Weschler and Warren, 1970). Shifting costs of production to users may result in an aggregate loss of efficiency if savings on the production side are exceeded by added costs on the consumption side. Public agencies rarely if ever, for example, calculate the value of a user's time and inconvenience when studying how to make better use of an employee's time. More efficient use of clerical time may be more than offset in the time spent by persons who stand in line waiting on their "public servants." A net loss in efficiency may occur (Weschler and Warren, 1970). If a citizen has no place else to go and is one in a multitude of other citizens, the probability of his or her interest being taken into account is negligible. The most impoverished members of a community are the most exposed to deprivations under these circumstances. From this theoretical perspective, an analyst would not be surprised to find a positive relationship between the professionalization of the public service and the impoverishment of ghettos in big cities.

The inability of users of public goods and services to sustain an arm's-length relationship with producers of public goods and services generates further problems when users' preferences are subject to change in relation to the available supply of public goods and services (E. Ostrom, 1971). **No one** can know the preferences of other persons unless they are given opportunities to express their preferences. If public agencies are organized in a way that does not allow for the expression of a diversity of preferences among different communities of people, then producers of public goods and services will be taking action without information about the changing preferences of the persons they serve.⁹ Expenditures will be made with little reference to consumer utility. **Producer efficiency in the absence of consumer utility is without economic meaning.**

Similar difficulties are engendered when conditions of demand for a public good or service increase in relation to the available supply. When demand begins to exceed supply, the dynamics inherent in the tragedy of the commons may arise all over again. A congested street or highway, for example, will carry less and less traffic as the demand grows. What was once a public "good" may now become a public "bad" as congested and noisy traffic precludes a growing number of opportunities for alternative uses. In short, public goods may be subject to serious **erosion or degradation** as demands change. In the absence of a capability to respond with modified supply schedules and regulations for use, a public "good" may come to be a public "bad" and the tragedy of the commons can reach critical or explosive proportions (Buchanan, 1970).

The capacity to levy taxes, to make appropriate expenditure decisions, and to provide the necessary public facilities is insufficient for assuring optimal use of such facilities.¹⁰ One pattern of use may impair the value of a common facility or a public good for another pattern of use. The development of water resource facilities, for example, will be insufficient to enhance welfare for members of a community of users without attention to basic rules and regulations controlling the use of such facilities by different sets of users. Use of streams for the discharge of waste, for example, can become a dominant use, which will force out other users.

Optimal use of public facilities, when each use is not fully compatible with each other use, requires the development of a system of rules and regulations establishing capabilities and limitations in the discretion that persons can exercise in using common facilities made available to them. The development of such rules and regulations is relevant both to the scheduling of production processes and to the ordering of use patterns by potential users and consumers. These rules and regulations, like any set of decision rules, are not **self-generating, self-modifying, or self-enforcing**. Thus we are confronted with the basic problems of **who** shall promulgate and enforce rules of conduct to govern relations among individuals who use common properties or public facilities in relation to what sets of interests. Administrative

rules and regulations are, thus, **not** a matter of political indifference to the users of public goods and services.¹¹

Although bureaucratic organization will contribute significant institutional capabilities in the organization of any enterprise or agency concerned with the control of externalities, the management of a common property, or the provision of a public good, such an organizational form is also subject to serious conditions of institutional weakness and failure. An optimal structure for a public enterprise will need to take account of diversities in users' preferences and in production economies, relationship of demand to supply, and relationships in which one pattern of use may impair other patterns of use. The very large bureaucracy will (1) become increasingly indiscriminating in its response to diverse demands, (2) impose increasingly high costs on those who are presumed to be beneficiaries, (3) fail to proportion supply to demand, (4) allow public goods to erode by failing to take actions to prevent one use from impairing other uses, (5) become increasingly error-prone and uncontrollable to the point that public actions deviate radically from rhetoric about public purposes and objectives, and (6) eventually lead to the point that remedial actions exacerbate rather than ameliorate problems. The circumstances that generate institutional weakness and failure in large-scale bureaucracies pose problems that require a reconsideration of the decision rules applicable to public enterprises.

The Constitution of Self-Governing Public Enterprises

If individuals are to surmount the problems inherent in the tragedy of the commons and are to avoid the pathologies of the fully developed bureaucracy, they are confronted with the task of conceptualizing alternative institutional arrangements for the organization of collective or public enterprises. The structure of events inherent in a common-property resource or a public-good situation provides us with a basis for conceptualizing the community of interests that needs to be taken into account in designing alternative institutional arrangements. An inchoate

community is formed by the individuals who use or enjoy a common-property resource, or a public good. The domain of the common property or the public good defines and bounds the community of people who share in its joint use.

If the object of interest can be identified, courses of action can be examined to determine which alternatives will enhance the welfare of that community of individuals. If some form of joint action is available that would leave each individual better off, provided that all members of the community were required to contribute proportionately to that activity, each person will be motivated to devise and agree to a set of decision rules authorizing action on behalf of that community of individuals. Such rules would require some form of coercion to ensure that each individual will discharge a proportionate share of the burden.

"Bureaucratic free enterprise" need not be the vice that Tullock implied if (1) a bureaucracy is immediately accountable to the relevant community of interest for which it is acting, (2) the costs of providing a joint good are funded by the constituents in proportion to their benefit or in accordance with some comparable rule of equitable allocation, and (3) public facilities are subject to use under terms and conditions that are considered by the relevant community to be reasonably designed to advance their common welfare. If these conditions can be met, we can contemplate the possibility of organizing a self-governing collective enterprise with an organizational structure capable of internalizing decision-making arrangements appropriate to the community of interests associated with the management of a common property or the provision of a public good. Reliance upon external decision structures would be necessary only (1) if adequate remedies are not available for resolving local conflicts within the decision structures afforded by the constitution of such an enterprise or (2) if the operation of a public enterprise is conducted in a manner that causes injuries to others outside its boundaries. If such conditions are to be met, **the structure of public administration cannot be organized apart from processes of constitutional and political choice**, which provide means for (1) the expression of social preferences of individuals within the community being served; (2) the formulation, enforcement, and

revision of the decision rules governing both performance of producers and conditions of consumer use; and (3) the articulation and enforcement of demands made by individual users in relation to the producers of public services.

In the production and exchange of purely private goods and services, money is a medium of exchange and can be used as a measure of value and an expression of consumer utility. Public goods are not subject to exchange, and market price cannot be used as an appropriate measure of user's preference. The constitution of public enterprises must depend instead on the development of political mechanisms such as voting, representation, legislation, and adjudication for people to express their interests by signaling agreements or disagreements as the basis for ordering their relationships with one another. Such mechanisms provide essential means for informing public entrepreneurs about their strategic opportunities and limitations.

The development of organizational arrangements, which provides opportunities for persons to signal their agreements and disagreements, can be conceptualized as a problem of constitutional choice (Buchanan and Tullock, 1962). Constitutional choice is simply a choice of decision rules that specify the terms and conditions of government. These can apply to both small and large collectivities. The organization of a public agency, when viewed as a problem in constitutional choice, is the choice or selection of an appropriate set of decision rules to be used in allocating decision-making capabilities among the community of people concerned with the provision of public goods and services under reasonably optimal conditions.

The rudiments of a theory of constitutional choice applicable to the organization of a public enterprise have been developed by James Buchanan and Gordon Tullock in *The Calculus of Consent* (1962). According to Buchanan and Tullock, a representative individual wanting to form an organization to provide a public good would need to take two types of costs into account: (1) external costs, which are defined as those costs an individual would expect to bear when decisions deviate from his or her preferences and still impose obligations to pay and (2) decision-

making costs, which are defined as the expenditure of resources, time, effort, and opportunities foregone in decision making. Both types of costs are affected by the selection of decision rules specifying the proportion of individuals required to agree before future collective action is taken.

Expected external costs will be at their highest point when any one person can take action on behalf of the entire collectivity. Such costs would decline as the proportion of members participating in collective decision making increases. Expected external costs would reach zero when all were required to agree before taking collective action under unanimity. Expected decision-making costs, however, would have the opposite trend. Expenditures on decision making would be minimal if any one person could make future collective decisions for the entire group of affected individuals. Such costs would increase to their highest point with a rule of unanimity.

If a constitutional decision maker were a cost minimizer, and the two types of costs described above were an accurate representation of costs, we would expect the choice of a decision rule at the point where the two cost curves intersect. When the two cost curves are roughly symmetrical, some form of simple majority vote would be a rational choice of a voting rule. If expected external costs were far greater than expected decision-making costs, an extraordinary majority would be a rational choice of a voting rule. Such a rule of extraordinary majority would presumably apply to the problem of constitutional choice, where expected decision costs would be of minor magnitude providing that a reasonably optimal set of constitutional rules could be devised which would not impose high deprivations upon any particular element of the community. On the other hand, if the opportunity costs inherent in decision making were expected to be very large in comparison to external costs, reliance might be placed on a rule authorizing collective action by the decision of one person in the extreme case requiring rapid response (E. Ostrom, 1968).

If the basic decision rules of a public or collective enterprise allowed for effective articulation of community preferences within agreeable decision rules, advantage could be taken of any

economies that might be realized through hierarchical control for organizing a production process capable of responding to community preferences. In turn, when collective provision of a public good of specifiable quality is undertaken, each individual in that collectivity might rationally be assigned authority to require that the individual demands of each user of that good be met. Such a rule would specify the authority of **anyone** to act in relation to his or her individual interest in the collective enterprise. An optimal set of decision rules for the constitution of public enterprises would be expected to vary with different situations. We would not expect to find one good rule that would apply to the provision of all goods and services.

The similarity of these rules with elements in the structure of municipal corporations, public districts, and various local government agencies will be apparent to any student of American local government. If the rationale for such rules is theoretically sound, an appropriate structure of decision-making arrangements would exist when those in administrative responsibility were required to meet an appropriate set of conditions for sustaining public entrepreneurship under reasonably optimal conditions.

The Development of Multiorganizational Arrangements

The development of a self-governing public enterprise may not be a sufficient solution to problems of common-property resources or public goods. Several problems remain which may be sources of institutional weakness or failure associated with such an enterprise. First, a public enterprise may generate externalities that impinge upon others **beyond its borders**. If the externalities are negative, means may be required to limit and control them. Second, common properties or public goods may come in many different shapes and sizes with significant elements of jointness or interdependency among the various uses that can be made. Water resource systems, for example, reflect a baffling array of problems associated with persistent interdependencies among many joint uses (V. Ostrom, 1968). Inter-

dependencies among water-related uses may also be interconnected with land use, energy supply systems, transport systems, and the like. But each use may also involve interdependencies so that provision of a particular service will require separate consideration on its own merit. Third, when conflicts arise, institutional facilities need to be available for processing conflict and searching out resolutions that will preclude the tragedy of the commons from working itself out at some new level of interdependency. Multiorganizational arrangements can be conceptualized as a fourth institutional arrangement. As such it will involve a wide variety of interagency agreements and mechanisms for coping with interagency conflicts.

Some political economists have suggested that the problems arising from a great variety of public goods and services having many different sizes and shapes can best be resolved by taking advantage of the overlapping jurisdictions and fragmentation of authority inherent in the American political system (Bish, 1971; V. Ostrom, Tiebout, and Warren, 1961; Tiebout, 1956; Tullock, 1969). Mancur Olson, for example, suggests: "Only if there are several levels of government, and a large number of governments, can immense disparities between the boundaries of jurisdictions and the boundaries of collective goods be avoided. There is a case for every type of institution from the international organization to the smallest local government. It is the merit of the present approach that it can help explain the need for both centralized and decentralized units of government in the same context" (U.S. Congress, 1969: 1:327).

This solution is the antithesis of that proposed in the classical public administration tradition. Instead of chaos and disorder, these political economists perceive a pattern of ordered relationships being sustained among diverse public enterprises.¹² Each different public enterprise is accountable to its relevant community of interests and functions essentially as a public firm in a much larger industrial complex (V. Ostrom and E. Ostrom, 1965; V. Ostrom, 1969). Benny Hjern and David O. Porter (1981) have developed similar concepts related to "implementation structures."

Where externalities spill over into a larger domain and affect

other closely associated uses, second, third, and fourth levels of organization can be relied upon to take care of those externalities that spill over from small-scale public jurisdictions. The first-level agencies may, thus, operate as a small-scale producer and retailer in providing some public good or service to an immediate community of users. A second level of public agencies may function as intermediate producers and as wholesalers supplementing the operation of the first-level agencies. The third- and fourth-level agencies may become large-scale producers providing a complement of services relevant to a much larger public domain.

If the first-level agencies are constituted to articulate the preferences of the most immediate constituency of interests and are exposed to the demands of individual users, such agencies can be expected to reflect those interests in bargaining with second-, third-, and fourth-level agencies if substantial legal and political autonomy exists among the various public enterprises forming a public service industry.

Once we begin to look for new patterns of order among the multiorganizational arrangements existing in a public economy characterized by overlapping jurisdictions and fragmentation of authority, we can begin to see that the American system of public education, the American highway system, the American police system, the American water supply system, and many other public service systems are operated by thousands of enterprises functioning at different levels of government (V. Ostrom, 1969). Each of these public service industries maintains and operates facilities serving diverse communities of interest. Despite the diversity of agencies involved in the construction and maintenance of public roads, streets, and highways, for example, the American highway system is a highly integrated network that has surprisingly few discontinuous or duplicate facilities.

As long as ample overlap and fragmentation of authority exist, agencies at one level of government can take advantage of the capabilities of agencies operating at other levels (Landau, 1969). If economies of scale in the production of a public good can be realized by a larger agency, smaller-sized agencies can enter into contractual arrangements to buy services from the larger agency.

In such a circumstance small, local government agencies can operate as buyers' cooperatives on behalf of their constituents in arranging for the production of public services in accordance with the preferences of local inhabitants (V. Ostrom, Tiebout, and Warren, 1961). A wide variety of municipal services, including police services, are now being provided on a contract basis in different metropolitan regions. We might anticipate that bilateral and multilateral bargaining will generate a higher level of efficiency in the provision of police services, for example, than is available in the very large, highly centralized, big city police departments (E. Ostrom et al., 1973).

Conversely, if no economy of scale can be realized by increasing the size of the production unit, the interests of the larger community of users can be accommodated by having the larger unit of government contract with the optimal scale producer to modify its facilities and interests to accommodate the larger community of interests. The United States maintains an interstate highway system by contracting with state highway departments to plan, construct, and maintain highways in accordance with national standards and specifications. It is doubtful that the administration of this interstate system would be improved by nationalizing all aspects of highway planning, construction, and maintenance. Fiscal transfers can be made from one level of government to other levels when externalities accrue to a larger community of interest. Grants-in-aid are one method for accomplishing such transfers; smaller units such as school districts generate benefits that accrue to the nation as a whole (Wagner, 1971).

The industry characteristics of multiorganizational arrangements functioning in a public economy can be realized only when diverse public agencies are able to develop different economies of scale in response to varying communities of interest. Overlapping jurisdictions and fragmentation of authority thus are necessary conditions for public service industries, other than fully integrated monopolies, to exist. Centralization cannot be conceived as the converse of decentralization in the sense that we speak of centralization versus decentralization. In responding to problems of diverse economies of scale, elements of cen-

tralization and decentralization must exist simultaneously among several jurisdictions with concurrent authority.¹³

The work of contemporary political economists, based on a paradigm derived from economic theory, challenges many of the basic assumptions in the traditional theory of public administration. Yet their form of analysis and many of their conclusions have a familiar ring to most Americans. This familiarity derives from the circumstance that many of the classical American political theorists were political economists and used a similar mode of analysis (V. Ostrom, 1987). In the next lecture I shall use the intellectual perspective provided by contemporary political economists to examine the work of these traditional American political theorists. From this perspective, we shall discover that these traditional political theorists have provided us with the basis for a theory of democratic administration which stands in contrast to the theory of bureaucratic administration.

4

A Theory of Democratic Administration: The Rejected Alternative

One of the major conclusions derived from the political economists is that overlapping jurisdictions and fragmentation of authority can facilitate the production of a heterogeneous mix of public goods and services in a public economy. This conclusion is contrary to the basic presumption in classical public administration theory that overlapping jurisdictions and fragmentation of authority are the principal sources of institutional failure in American government.

The pioneer scholars in American public administration rested their political analysis upon a basic paradigmatic choice which explicitly rejected the political theory used in the design of the American constitutional system as being inappropriate for the study of political "realities." In this lecture, I shall attempt to clarify the paradigmatic choice Wilson made in pursuing his political analysis. I shall go behind that choice and examine the political theory he rejected. In doing so, I shall advance the thesis that Wilson rejected a theory of democratic administration while propounding a theory of bureaucratic administration as the one rule of "good" administration for all governments alike.

Some Anomalous Threads of Thought

Wilson based his analysis on a political science that derived its paradigm from Walter Bagehot's *The English Constitution* (1964). Wilson's reliance on Bagehot led him to look for a single