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Part One / Concepts

1 The Terrain of Planning Theory

When we say that someone has acted rationally, we usually imply approval. But what, precisely, do we mean by a “rational” action? For some, an action is rational when it adheres to a formal criterion, such as economic efficiency. If I can get more of something for the same cost, I am said to be acting rationally. For others, conforming to socially expected behavior is rational. Thus, if I quit my job for one that pays better, people will nod with understanding: I have acted rationally. Or if, as an industrialist, I shut down my factory in Cleveland, because I can increase my company’s profits by moving operations to Arizona or Brazil, that action, too, will be widely hailed as rational. Although the shutdown may have put thousands out of work, my first responsibility is to myself and to my stockholders.

Market Rationality and Social Rationality

In the market as well as in society, rationality identifies a relation between means and ends in which the ends are generally taken to be the self-regarding interests of an isolated individual or firm. The linked interests of all those workers in Cleveland were not expected to enter into my profitability calculus. And yet, strictly speaking, I cannot entirely ignore them either, because as a value that enjoys social approval, rationality needs to be justified in terms that are broader than mere self-interest. I need to demonstrate that my actions will tend to benefit the collectivity as well as me. As Charlie Wilson once tried to argue, “What’s good for General Motors is good for the nation.”

This, as everyone knows, was also Adam Smith’s basic position. Following Mandeville, he argued the doctrine of the natural harmony of interests. In his famous poem *The Fable of the Bees* (1714), Bernard Mandeville had said that human pride and the desire for luxuries would lead to general prosperity (Dumont 1977, ch. 5). Or as Smith expressed it, “private vices yield public benefits.” This “logic” still informs the work of contemporary economists. Social

welfare is enhanced, they say, so long as an action makes at least one person better off than before and no one's situation is made worse. The underlying assumption is that the gain of some is not necessarily inconsistent with the gain of all, which therefore implies that the interests of capital and labor can be unified. This principle of practical philosophy, called the "Pareto optimum" after the Italian sociologist who first stated it, is the most widely accepted criterion for analyzing the costs and benefits of actions in the public domain (Mishan 1981b).

The unrestrained pursuit of self-interest by individuals and corporations came to be known as *market rationality*. Because its social outcomes were not planned with any conscious effort, market rationality could be presented as a quasi-natural phenomenon, something beyond human intentions. Yet it was obvious from the beginning that social welfare was not being unambiguously promoted by transactions in the marketplace. Even the weak conditions of a Pareto optimum were rarely, if ever, achieved. As the "blind" forces of the market increased the prosperity of some, they also stepped up the exploitation of labor, drove peasants from their land, dehumanized work, caused mass unemployment, produced urban squalor, hurled small businesses into bankruptcy, exacerbated inequalities of wealth and power, and ravaged the earth. In the face of these realities, a different kind of rationality was needed to balance the calculus of private gain.

Market rationality was grounded in a metaphysics of "possessive individualism" (Macpherson 1962). According to this doctrine, the individual is assumed to be logically prior to society, and the satisfaction of material needs is said to be the principal reason people live in social groups. The contrasting doctrine of *social rationality*, which came into prominence during the nineteenth century, made the opposite assumption: social formations were said to be logically prior to the individual, whose separate identity as a person derived from membership in a specific group. Reason, therefore, ought to be exercised in the name of the group, so that its collective interests might be properly formulated and pursued through appropriate actions. Since collective interests, in this view, always took precedence over the interests of individuals, the Pareto optimum ceased to be valid as a criterion for social welfare. In political terms, this implied that market operations would have to be curtailed or replaced; in either case, some form of central planning would be needed (Lindblom 1977).¹

1. The problem with the doctrine of social rationality can be phrased as a question:

In the twentieth century, and particularly after the Depression, a third position was gradually adopted throughout the capitalist world. Though its rhetoric was deliberately vague, the practices it advocated were plain enough. Market rationality would be allowed free rein, but only within legal constraints designed to protect the collective interest. To mitigate the negative consequences of market rationality for people and their communities, then, the state would intervene in markets with the instruments of planning in progressive income redistribution, basic social service programs, unemployment and old age insurance, laws to protect natural resources and human habitats, and so on.

While corporate planning continued to hold firmly to the original model of market rationality, public planners championed a modified form of social rationality that was explicitly concerned with social outcomes (Mishan 1976). Public planning was thus brought into head-on conflict with private interests. The respective criteria for determining what was rational were diametrically opposed. But business was powerful, and planners rarely accomplished more than private interests were prepared to accept. When civic passions were inflamed by some particular practice—such as the dumping of toxic wastes, to take a recent example—planners might move against the interests of property and business. But such moments were relatively rare, and once passions had cooled, earlier gains might be reversed. It is probably correct to say that in most cases public sector programs are successfully launched only when they are broadly compatible with the interests of corporate capital.

The Uses of Planning

The practice of planning, in the modern sense, began in the early decades of this century. But to trace its ideological roots, we must go back to the early nineteenth century, to the work of Henri de Saint-Simon and Auguste Comte, in which the vision of a science working in the service of humanity first took shape. A full century of material and perceptual changes had to pass before planning emerged as a distinctive practice, with its emphasis on technical reason and social rationality. The first and most important among these changes was the gradual breakdown of the “organic” order of feudal society and

Who is to speak in the name of the collective interest, where that interest is understood as an undifferentiated whole? In practice, and where social rationality has prevailed over market rationality (as in the centrally planned economies of socialist countries), it is a Leninist vanguard party that presumes to speak in the name of the people, or the proletariat.

the emergence of the economy as a system of interrelated markets (Polanyi 1957). As economic pursuits came to be governed chiefly by the principle of private gain and were spurred on by competition, nearly all social relations outside the household came to depend upon money. Second, a science of society, together with its several distinctive disciplines, had to grow to maturity and gain a measure of social acceptance before the new planning could be based on it. Third, the industrial revolution had to mature before the bureaucratic state would take an active role in promoting the new economic forces, maintaining the necessary internal and external balances, and coping with the enormous social problems that industrialization had engendered.

Before the nineteenth century, a very different sort of planning had prevailed. Because it tended to impose a rational, Euclidean order upon the organic forms of nature, I shall call it *orthogonal* design (Houghton-Evans 1980). For architects and engineers, who were its chief practitioners, the straight lines and right angles of orthogonal design were classic instances of an artificial, rational ordering of space. The proto-cities of the ancient world—for example, the ceremonial centers of the Chou Dynasty; Teotihuacan in the central plateau of Mexico; and Angkor Wat, the magnificent temple city of the Khmer empire—are classical instances of orthogonal design (Wheatley 1971). Pierre Charles L'Enfant's imposing design for the federal capital at Washington, D.C. (1791), is a more recent example. In its purest form, orthogonal design can be found in the conceptions of utopian space expressed in Campanella's seventeenth-century City of the Sun, with its symmetrical-hierarchical patterns (Campanella 1981), and in the twentieth-century city of Brasília, designed by Lucio Costa and Oscar Niemeyer in the shape of an airplane with sweptback wings. It was master builders like these who had planned the great cities of antiquity; devised the complex irrigation systems of the early "hydraulic" civilizations of Egypt, Mesopotamia, the Indus Valley, and China; and laid out the roads that sent the Roman legions marching from the imperial hub to the furthest reaches of the empire (Childe 1956; Wittfogel 1959; Mumford 1961).²

2. According to Houghton-Evans (1980), the great virtue of "orthogonal" design is its *intelligibility*. Design, he avers, calls for "an orderly approach" in which separate functions are connected in space so that their logic becomes visible, creating a coherent system of spatial relations. In this view, orthogonal design appears to be the very opposite of Ian McHarg's *Design with Nature* (1969). It is not by obeying Nature that we shall master her, says Houghton-Evans; instead, we must impose upon Nature's

Orthogonal design had many historical and local variants, but its salient features can be readily described.³

1. It was primarily concerned with the physical arrangement of activities in two-dimensional or three-dimensional space.
2. It was intended for a static, hierarchical world that was construed as part of a cosmic order whose ultimate meaning could only be grasped through mystical revelation.
3. It had to conform to divine reason as interpreted by priests, shamans, theologians, geomancers, astrologers, and sometimes royalty. Because divine reason could only be “revealed,” it became authoritative knowledge. Orthogonal designers were not obliged to justify their work in rational discourse. It was sufficient that designs came from an acknowledged master, and that the relevant spiritual authorities declared them in accord with divine purpose. Two kinds of knowledge were thus required for validation: pragmatic knowledge based on experience and knowledge of the “will of Heaven.”⁴
4. Pragmatic knowledge of orthogonal design was typically passed from master to apprentice in actual work situations. Professional secrets were closely guarded, and design theory was a set of learned, pragmatic rules of procedure.

With the period we call the Enlightenment (ca. 1650–1850), Western European culture began to make a drastic break with the past, and by the mid-nineteenth century planning began to acquire features that had virtually nothing in common with the orthogonal design tradition. Although architects continued to work along traditional lines, most modern planning has been of an entirely different order.

subtle complexities (which presumably are not “intelligible” to men) an orthogonal order that is in accord with “human” reason. Presented in this way, orthogonal design becomes an example of patriarchal domination.

3. A lively description of the process of orthogonal planning is found in Arthur F. Wright’s account of the planning and construction of the new capital city of the Sui Dynasty in sixth-century China, which by the eighth century was to become “the glittering cosmopolis of eastern Asia and by far the world’s greatest city” (Wright 1978, 83ff.).

4. An outstanding example of authoritative design in this sense is the plan of the Benedictine monastery of St. Gall, Switzerland. Drawn up by monks in the ninth century, it was to serve as the paradigmatic design for Benedictine monasteries throughout Christendom. The plan of St. Gall was conceived as an ideal order, a proto-city, consistent with divine purpose (see the splendid book by Price 1983).

1. As a form of technical reason, modern planning is applied to the full range of problems that arise in the public domain.⁵
2. Planning takes place in and is adapted to a rapidly changing and increasingly turbulent world. Many aspects of this world will remain opaque to human understanding and can be only partially controlled.
3. In contemporary planning practice, knowledge derived from scientific and technical research has been added to the pragmatic knowledge of experience. Expressed in arch, conceptual language and in the form of quantitative models, scientific knowledge comes to us only in fragments, from different disciplines and focused experiments. Despite the lack of a unified “scientific” world view, these fragments, even when they are in conflict, tend to be stated as universally valid hypotheses.
4. Modern planning practice must conform to human (as opposed to divine) reason. Sharpened by science and logic, specific statements about the world must be validated in rational, open discourse, in which the burden of proof is generally on those making the initial statement. Unlike orthogonal design, modern planning has to justify itself politically, in open forum. As a result, the support for specific planning proposals generally takes the form of a fragile consensus that is constantly beset by rival theories and proposals. Far from being authoritative, modern plans are historically contingent and rest on democratic processes of decision-making.

One of the first demonstrations of the new planning practice was the allocation of raw materials to the German war machine during World War I. The technical genius responsible for applying the “scientific method” to central resource allocation was Walther Rathenau, who had apprenticed as president of Germany’s largest public utility, the Allgemeine Elektrizitätswerk. An early exponent of scientific management and the world’s first technocrat, Rathenau was

5. The discovery of a public domain may be seen as the crowning achievement of the Enlightenment. As a social movement, the Enlightenment had, for the first time, projected the masses of ordinary people into the stream of historical events, legitimated a democratic politics, and given birth to the “fourth estate” of the press—which helped to establish, for a rapidly urbanizing society, a shared sense of the “public.” Problems that rose to public consciousness were thus, by definition, of general concern. This development helps account for the multiplication of planning activities in the post-Enlightenment period.

assassinated by political and racist enemies in 1922 (Berglar 1970).⁶ But the idea of scientific planning had already taken root elsewhere. In the United States, Herbert Hoover, an engineer, had used methods almost identical to Rathenau's in mobilizing America's war economy. And over the next two decades, planning ideas proliferated, especially at the urban and regional levels (Scott 1969; Sussman 1976; Krueckeberg 1983). The first professional degree program in city planning was started at Harvard University in 1923 (Sarbib n.d.).

The full range of contemporary planning practice is illustrated in Chart 1. Although this is only a rough classification, some conclusions can nevertheless be drawn.

1. In market societies, the central coordination of all planning activities is patently impossible.
2. The same planning activity may cut across several levels of territorial organization—national, state, and local.
3. Physical planning or design is now only a small area of planning, and even in that sphere the orthogonal tradition has been largely replaced by scientifically based modes of analysis that involve modeling, projections, and spatial synthesis.
4. Modern planning practice is a social and political process in which many actors, representing many different interests, participate in a refined division of labor. Among these actors, the more important ones are lawyers, agronomists, economists, water engineers, city planners, social workers, statisticians, systems analysts, professional soldiers, civilian defense analysts, political scientists, social psychologists, public administrators, geographers, foresters, architects, environmentalists, community organizers, and demographers.

6. Rathenau stands in the direct line of succession to Auguste Comte. At the university, he had studied mathematics, physics, and chemistry, yet he was also at home in philosophy, the social sciences, and the new science of management. Starting his career as a chemical engineer, he soon switched to banking and eventually held a series of high-ranking posts in the wartime and postwar German governments. He was clearly the epitome of Comte's Ruler, the sort of man to whom the fate of the world should be entrusted. He wrote prolifically on economic and political subjects, and today we would call him a futurist. His book *The New Economy* (1919) urged (1) the unification and standardization of the whole of German industry and commerce into one great Trust, where it would work under a state charter and be armed with extensive powers; and (2) an intensification of the application of science and mechanization to production. For a summary in English, see Rathenau (1921).

Chart 1 Planning in Market Societies

National Security Planning**Economic Planning (national, state, local)**

- investment for economic growth
- full employment (anti-cyclical)
- monetary policy (anti-inflation, pro-growth)
- trade policy (tariffs, etc.)
- incomes (redistribution)
- employment (education, job training)
- strategic resources (energy)
- science policy (research and development)
- sectoral policies (agriculture, transportation, etc.)

Social Planning (national, state, local)

- “safety net” for the victims of market rationality (unemployment insurance, workmen’s compensation, retraining)
- social welfare services and transfer payments
- meeting individual and collective needs (health, education, housing, old age, day care)

Environmental Planning (national, state, local)

- residuals management and anti-pollution
- public lands management
- water resources
- resources conservation
- wilderness preservation
- protection of rare species
- protection of fragile and unique environments
- energy (alternative energy)

City Planning

- land use (zoning, public facility location)
- local transport (highways, rapid transit, airports, ports)
- urban redevelopment
- urban design
- conservation of the built environment
- community development (neighborhood planning)

Regional Development Planning

- natural resources development (irrigation, hydro-energy, integrated river basin development)
- regional economic development (inter-regional inequalities, special problem areas, urban-rural “imbalance”)

Chart 1 **Planning in Market Societies** (*cont.*)

migration and settlement policy
location of industry (growth centers)
regional transportation
comprehensive rural development

We can gain further insight into modern planning practice by viewing the many heterogeneous activities listed in Chart 1 as a much smaller number of *uses* to which planning is put in the “management of change” within territorially organized societies. These uses are shown in Chart 2. It will be readily apparent that all ten uses correspond to some notion of *social* rationality and not one to a theory of *market* rationality. The state, which is the principal though not the only collective actor in the public domain, is forced to couch its deliberations in terms of a collective purpose, or what is also called the general or public interest. Although this interest may be nothing more than a fleeting political consensus, the state must maintain at least the appearance of serving it. If it does not, its very legitimacy may be in doubt.

In practice, concern with a collective good may lead the state to support profit-making activities in the private sector, activities that correspond primarily to market rationality. Because in capitalist societies most people gain their livelihood principally through private business, the proper functioning of the private sector is essential. State planning is therefore generally supportive of business, and it usually includes general economic guidance, the provision of public services (which account for a large part of the costs of reproducing the labor force), major infrastructural investments, business subsidies, and the protection of property rights (items 1 through 5 in Chart 2). Activity in each of these policy areas engenders political struggle. For example, the kind of general economic guidance that is offered will depend a great deal on which theory is invoked—Keynesianism or supply-side economics in domestic affairs and neo-mercantilism or free trade policy in the international arena, for instance. The relative importance of various social needs may also be in dispute, and the recipients of public subsidies will usually try to hold on to them even after the objective need for them has disappeared. Specific property owners may take exception to the application of, say, a zoning law, or to the projected distribution of costs and benefits of government, intervention. But even after all allowances for conflict have been made, it is still possible to maintain that

Chart 2 The Uses of Planning

1. Guiding overall economic stability and growth in national societies (monetary policy, full employment planning, international trade policy, etc.).
2. Providing public services to meet the general needs of the population (national defense, public housing, education, health, etc.).
3. Investing in areas that are of little interest to private capital because of low rates of return, diffused benefits, and the large size of the investment required (basic physical infrastructure, such as highways, mass transit, major hydroelectric facilities, land acquisition in urban redevelopment, etc.).
4. Subsidizing corporate interests and farmers to encourage specific actions (sectoral growth, redevelopment, infant industries, acreage reductions, relocation of industry, employment of handicapped, etc.).
5. Protecting property owners and local business interests against the ravages of unrestrained market rationality (land use planning, zoning, anti-pollution planning, etc.).
6. Redistributing income to achieve a more equitable and just social order.
7. Applying comprehensive and coordinate planning approaches to area development (multipurpose river basin development, comprehensive rural development, etc.).
8. Restraining market rationality in the name of social interests (coastal planning, job protection, wilderness preservation, etc.).
9. Transferring income to the victims of market rationality (unemployment and workmen's compensation, etc.).
10. Ameliorating other dysfunctional consequences of market rationality (social and spatial inequalities, business cycle planning, resource conservation, etc.; see also 1, 4, and 6 above).

planning for these uses, although generally supportive of the interests of capital (and therefore rational in market terms), is nonetheless applied in name and in substance to the furtherance of a general territorial or social interest.

State planning, of course, also includes policies and programs that correspond primarily to social rationality, and these may bring the state into conflict with interests that adhere to the market principle of conduct. The major planning uses that are resolved primarily with reference to socially rational criteria are income redistri-

bution, coordinated planning for regional and rural development, restraints on market rationality, income transfers to victims of the market, and efforts to ameliorate the effects of market rationality (items 6 through 10 in Chart 2). The point of greatest potential conflict with market forces is the use described in item 8, which concerns policies that restrain the normal operation of markets. Historically, it is precisely here that the major public-private battles have been waged. And from these battles we have learned that *only large-scale political mobilization can hope to constrain the single-valued logic of the market*.

Five main conclusions can be drawn from this analysis of the role of planning in market societies. First, even in a country like the United States, with its fervent dedication to the principle of market rationality, many planning activities are undertaken at all the pertinent territorial levels. Second, these planning activities correspond to criteria of social rationality, which in turn derive from a conception of society that assigns primacy to territorially bounded collectivities. Third, although some varieties of socially rational planning aim at helping private business plan its own actions successfully, other varieties place severe restraints on market forces, and some of them even substitute political decision-making (aided by planning) for the operation of the market. Fourth, because planning in the public domain is politically inspired, it creates conflict. And fifth, in a head-on collision with private capital, state action based on planning is likely to be successful only when it is supported by large-scale political mobilization.

These conclusions, which are fundamental to an understanding of planning in capitalist societies, can be stated even more pointedly. Planning in the public domain occurs only in territorially organized societies in which both market rationality and social rationality contend for dominance. Production and livelihood depend largely on market rationality, but unrestrained profit making destroys the bonds of human reciprocity that lie at the foundation of all social life (Price 1978). For this reason, the state, which expresses the political community and is therefore accountable to it, is obliged to play a dual role: it must encourage and support the interests of capital, but it must also prevent those interests from eroding the foundation of a common life. When it opposes capital, the state typically can act with no more resolution than its political support allows. In the final analysis, its legitimacy depends on the political mobilization of the people acting in defense of their collective interests. As an instrument of societal guidance, actual planning practice inevitably reflects this complex, conflict-ridden role.

Planning and the Political Order

How does planning in the public domain fit into the system of political order? What tasks are assigned to planning in the whole ensemble of “guidance” activities to which technical reason is applied? And how is planning articulated with other elements of the social system? We can begin to find answers to these questions by referring to Figure 1, a model of planning in the public domain. Though necessarily static and abstract, this model introduces the major concepts that will be used throughout this book, shows relations between them, and locates planning activities within the spectrum of bureaucratic-political actions of the modern state.⁷

It will be useful to proceed by “reading” the model from top down. Each horizontal bar in the figure represents a definite conceptual space. Two overlapping lines, therefore, signify the coexistence in conceptual space of the activities or functions that they sym-

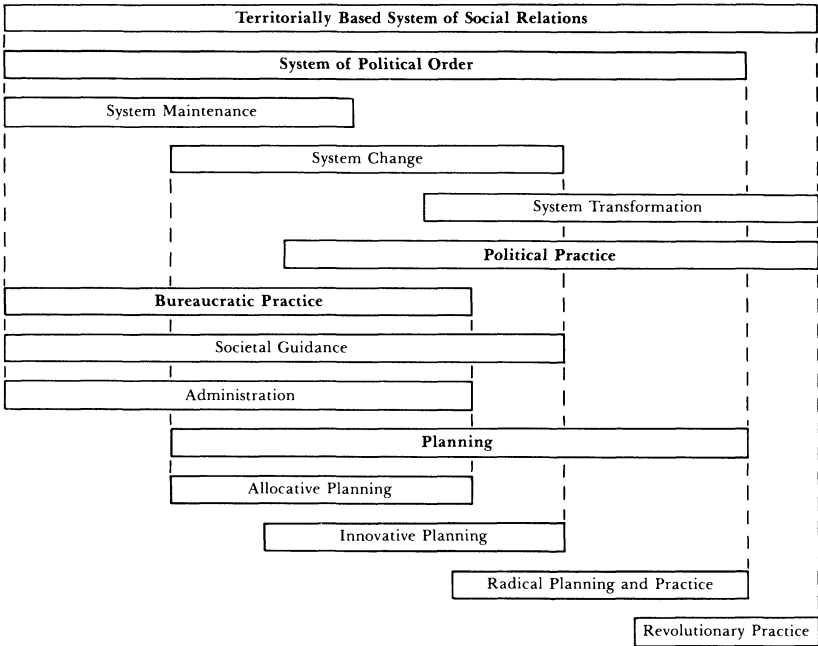


Figure 1. Planning in the public domain: basic concepts.

7. Many of the concepts discussed here were first introduced in my book *Retracking America* (1973). Since then I have made some changes in definition and have considered some new concepts that seem relevant to a discussion of planning theory. The present version is intended to supersede the earlier one in all respects.

bolize, but only to the extent of the overlap. For instance, the bar labeled planning hovers over allocative planning, innovative planning, and radical planning and practice, which are the three basic forms planning can take. The first two (allocative and innovative) overlap, as do the second two (innovative and radical), but allocative and radical planning barely come together: they are the extremes that are mediated through innovative planning. At the same time, radical planning and practice shades off into revolutionary practice, which in turn extends beyond the conceptual space of planning and therefore also beyond the system of political order.

This model tells us nothing about specific institutions, or about the relative importance of different forms of planning, or about the character of the political order, or about the nature of the political process. It is a purely conceptual model that is intended to clarify meanings and to show relations between major concepts in the theory of planning. After we have "read" through it, I shall point out certain of its properties.

The Territorially Based System of Social Relations

The most comprehensive concept of the model refers to social systems that are geographically bounded. Examples include the nation-state (the United States, Canada, France); states or provinces that are part of a federal system (California, Quebec, Rhône); and cities (San Francisco, Montreal, Lyon). Above the nation-state, territorial systems are encountered as multi-nation regions (the European Economic Community) and the global community (the United Nations); below the level of the city, we can identify the proto-territorial systems of neighborhood, borough, and village. We should bear in mind that territorial systems are arranged in the form of a nested hierarchy, so that people simultaneously belong to different orders of territorial relation.

Very large systems (the world, multinational regions, a large country) are heterogeneous with respect to culture, religion, political system, ethnic composition, and regional economic interest. But whatever the scale, territorial systems tend to look back on a common history and forward to a common destiny. Although individuals may escape this destiny by migration, most members of a territorial community have no choice but to remain where they are. This is obviously true for all of us with respect to the world as a whole; to some extent, it is also true at very local levels of territorial integration. Because of this social circumscription, territorial communities generally seek some measure of political control over their destiny; they are real or potential systems of political order (Carneiro 1970).

Members of territorially based communities tend to develop strong feelings of attachment, and these feelings are divided among the different communities to which people belong; some consider themselves citizens of the world, others are ardent nationalists, and still others identify primarily with local values. There are also competing loyalties to other agencies of social integration—family, social class, religion, and linguistic grouping—as well as more tenuous functional associations. Among these potential claimants on people's loyalties, family and state tend to have particular salience.

System of Political Order

Territorially organized social systems are typically organized as political systems. They have, or aspire to have, the basic institutions of self-governance: legislative, executive, and judiciary branches of government; political parties; an organized system of legitimate coercion (military or paramilitary forces, police, courts, jails); a constitution or charter that establishes the legal framework of the political order; and a political culture, which is a set of sanctioned practices for conducting the political affairs of the community. The bar labeled system of political order does not extend for the full length of the territorial system. The leftover space is taken up by revolutionary practice (at the bottom right of Figure 1), which is the practice of social forces that reject the legitimacy of the established political order and organize in violent opposition to it. Examples are terrorist actions in Northern Ireland, Israel, Lebanon, Peru, and the Basque Country in Spain and guerrilla movements in El Salvador and the Philippines.

Maintenance, Change, and Transformation of the System

The next three bars of Figure 1 suggest the basic dynamics of territorial systems: maintenance, change, and transformation. System-maintaining practices, articulated by the state, are chiefly bureaucratic in nature, whereas system-transforming practices involve a mobilized political community acting autonomously vis-à-vis the state. Mediating these extremes are system-changing practices through which radical proposals become integrated with the structure of the guidance system of society. The process through which this occurs is riddled with conflict and compromise. For this reason, special importance attaches to innovative planning which, from a certain perspective, may be regarded as the terrain for the resolution of these conflicts. Processes of system transformation are shown to overlap with both revolutionary practice and radical planning. To the extent that they overlap with radical planning, they must be

regarded as a legitimate part of an established political order that tolerates system-transforming activities. Such transformations generally take the form of structural or radical reforms that are engendered through a political process of radical planning and practice from below. It is entirely possible, of course, that the state will attempt to repress system-transforming actions. Whenever this happens, the political system in effect shuts itself off from further transformation from within and openly expresses the will to power and the material interests of its ruling class.

Societal Guidance

This concept covers activities comprising primarily system maintenance and change. Though mediated by the state, processes of societal guidance are also promoted by central institutions from other domains, especially from the corporate economy. Which specific subset of guidance institutions is activated in a particular case will depend on the nature of the issues that emerge as politically salient. The meaning of societal guidance will be discussed in more detail later. For now, it will be sufficient to note that it usually means a top-down management of public affairs, which includes administration and planning as well as political practices that remain within the constraints of the political culture. Specifically, it excludes both revolutionary practices and the more politicized forms of radical planning.

Administration and Planning

These two bars should be looked at simultaneously. Administration refers to the management of program routines and is therefore concerned chiefly with activities of system maintenance and with those elements of system change that are on the verge of being institutionalized. Planning, by contrast, is concerned mainly with informing processes of system change, which forms its boundary on the left. From there, it extends the entire length of the bar representing political order, because planning presupposes and established politics and the institutions that make it possible. It is also shown to coincide with radical, though not with revolutionary, practice. As a counterpart to societal guidance “from the top,” planning “from below” merges with the system-transforming practices of political radicalism.

Allocative, Innovative, and Radical Planning

Next, our model shows the three principal forms that planning can take. Allocative planning is concerned with the central disposition

of scarce resources (financial, land, labor) among competing claimants or uses. Innovative planning is concerned with institutional changes in the system of societal guidance. Radical planning is distinctive in drawing on organized citizen power to promote projects pointing toward social transformation. Examples of allocative planning include program budgeting, land use planning, economic development planning, and various forms of sectoral planning. Innovative planning practices have given rise to such new institutions (in the United States) as the Appalachian Regional Commission in the 1950s, the Office of Economic Opportunity in the 1960s, the Environmental Protection Agency in the 1970s, and various financial programs, such as federal revenue sharing. Examples of radical planning efforts are found in conjunction with action-oriented citizen movements, where they mediate between theory and practice in such matters as alternative economic development, producer cooperatives, feminist projects, and alternative energy programs. As with other categories, the three main forms of planning are shown to overlap with each other. Allocative planning may involve some innovative planning, as when a new program is getting funded, and innovative planning may be a response to radical planning and practice. On the other hand, allocative and radical planning barely come together. Almost the only point of overlap occurs when radical planners succeed in getting central authorities to fund radical projects, as occurred as a result of the special circumstances surrounding the Johnson administration's War on Poverty in the 1960s.

Revolutionary Practice

Overlapping with radical planning and practice, some parts of revolutionary practice may infiltrate and work within the still existing system of political order (Marris 1983). Ultimately, however, revolutionary practice seeks the dissolution and breakdown of that order. In its pure form, revolutionary practice remains outside the public domain.

In reviewing this model as a whole, we should note certain important features.

1. The practice of planning in the public domain has both political and technical aspects.
2. Technical aspects are especially pronounced in bureaucratic practice; political aspects predominate in political practice.

Both, however, are present to some extent in both forms of practice.

3. Bureaucratic practice is articulated through the institutional structures of the state; political practice has its origin in the politically active community. Although effective territorial governance requires both forms, bureaucratic and political practices are often in conflict. The need to resolve conflicts between them must be seen as a limiting condition; their normal state of relation is one of tension.⁸

4. For this reason, the state will attempt to bypass or suppress political practice whenever it can. But because political practice is the major source of structural innovation, suppressing or neutralizing the political community makes it more difficult for the state to find ways of coping successfully with changes external to the system itself. Repression feeds upon itself and becomes increasingly costly. Political critiques of planning policies are silenced. With the political community quiescent, the state becomes vulnerable to revolutionary practice.

Planning as a Theoretical Object

As planning theorists, we need to work with a general concept of planning. Without it, what shall we think and talk about? For everyday use, a pragmatic definition—such as planning is what planners do—may suffice; we can comfortably do planning without having a definition in the pocket. But theory cannot dispense with concepts, and for planning theory, the central concept is obviously planning itself. We need to know what *phenomena* should be investigated,

8. David Apter and Nagayo Sawa, in a brilliant dissection of the prolonged people's struggle against the Narita International Airport near Tokyo, offer trenchant commentary on the relation between citizen protest and state action in a democracy.

Each successful democratic system is a living example of how extra-institutional protest can be transformed into institutional reform. Protest, even in its extra-institutional form, is a commonplace of democratic politics . . . By making accountability a function of direct opposition, the two become inseparable, a relationship converting democracy from a form of government in which political participation is passive, a form of complicity in power, into something dynamic, an expression of mutual responsiveness. (Apter and Sawa 1984, 276)

But what if the state cannot respond, because the state itself is the problem? Then, say Apter and Sawa,

what will need reviewing in detail are all the old matters once regarded as settled: jurisdictions, political accountability, alternatives of opposition, institutional politics. (Ibid. 228)

They seem to be saying that we have already reached that point.

what *questions* should be asked, and what *philosophical perspectives* should inform our inquiry. The field of planning study needs bounding, and only a conceptual definition can provide that (Wildavsky 1973). Two main criteria should guide our search for a suitable concept: it should be general enough to cover all the specific areas of planning application identified earlier in this chapter and it should open up interesting questions for theoretical study.

In each of the substantive areas of planning, such as national defense, social planning, economic development, and urban design, planners draw on special theories that inform their work. Thus regional planners lean heavily on theories of location and population migration; urban designers work with theories of city form; and public health planners study epidemiology, or how diseases are transmitted in geographical space. At this level of analysis, planners are viewed in the context of specific tasks, and one necessarily dwells on the differences between them, which include not only differences in their objective planning concerns but also differences in their academic and professional training.

In the present inquiry, my focus is a different one. I shall assume that all specific planning applications face certain common methodological problems, such as making forecasts, obtaining appropriate forms of citizen participation, and constructing models useful in exploring alternative action-strategies. But I shall also assume that all planning must confront the *meta-theoretical problem of how to make technical knowledge in planning effective in informing public actions*. The major object of planning theory, I shall argue, is to solve this meta-theoretical problem. If it is not solved, planners will end up talking only to themselves and eventually will become irrelevant.

For many years, planning was defined as the art of making social decisions rationally (Robinson 1972; Faludi 1973). Rationality was defined as a kind of recipe for making decisions (identify objectives, consider all the relevant or most important alternatives, trace the major consequences of each course of action, and so on). It came to be labeled “synoptic” planning, and as a recipe it was difficult to apply. Charles Lindblom proposed, as an alternative decision model, a strategy of “muddling through” (Lindblom 1959, 1979). The theoretical content of both conceptions was quickly exhausted, however. Some authors, such as Etzioni (1968), proposed improvements in the recipe for rational planning. The “muddlers,” on the other hand, scored few theoretical points. Their proposals for incremental decision-making, “mutual partisan adjustment,” and “satisficing” were fancy arguments to extend the market model of the economy

to the public domain (Simon 1976; Lindblom 1965). The implementation of their model would leave things precisely as they were. This was planning theory in its most apologetic form.

The rational-choice model of planning has stagnated for nearly two decades. Since the early major contributions of Simon, Banfield (Meyerson and Banfield 1955), Lindblom, and Etzioni, little that is new had been added.⁹ Despite extensive and even virulent criticism (Caiden and Wildavsky 1974; Wildavsky 1979), the model continues to be in vogue, chiefly, one suspects, because nothing better has come along. The time would therefore seem to be ripe for a new conceptual approach.

An Operational Definition of Planning

When planners apply technical reason to the specific problem areas identified earlier, we find them engaged in some or all of the following activities.

1. Defining the problem to be addressed in ways that will make it amenable to action or policy intervention.
2. Modeling and analyzing the situation for the purpose of intervention with specific policy instruments, institutional innovations, or methods of social mobilization.
3. Designing one or more potential solutions in the form of policies, substantive plans of action, institutional innovations, and so on. These solutions are typically expressed in terms of:
 - a. Futurity—specification of goals and objectives, as well as forecasts, probability judgments, action sequences, and so on.
 - b. Space—location, spatial organization, physical design.
 - c. Resource requirements—cost estimates and other claims on scarce resources such as foreign exchange, skilled labor, and so on.
 - d. Implementation procedures.
 - e. Procedures for feedback and evaluation.
4. Carrying out a detailed evaluation of the proposed alternative solutions in terms of their technical feasibility, cost effec-

9. A possible exception might be the work in welfare economics by Edward T. Mishan (1976, 1981a, 1981b). Mishan's theories hover uneasily on the margins of contemporary planning practice. They have been taken most seriously by environmental planners; planning theorists have taken little note of them.

tiveness, probable effects on different population groups, political acceptability, and so on.

Where these activities are found, we can safely assert that planning exists. In this pragmatic definition, planning appears as a mode of decision-making-in-advance, as an activity that precedes both decisions and action. But useful as it is in identifying what lies at the core of technical planning expertise, the definition is inadequate for theoretical inquiry. A more formal concept must be articulated.¹⁰

Formal Concepts of Planning

The broadest definition of planning as a form of technical reason is this one:¹¹

I. Planning attempts to link scientific and technical knowledge to actions in the public domain.

In this definition, planning is not wholly concerned with either knowing or acting, but rather serves as a link: its specific task is to make scientific and technical knowledge useful to specific actors in the public domain. But we need a more precise definition if we are to connect our conceptual definition of planning to our model of a territorially based system of social relations (Figure 1). To meet this need, two further definitions suggest themselves:

II. Planning attempts to link scientific and technical knowledge to processes of societal guidance.

III. Planning attempts to link scientific and technical knowledge to processes of social transformation.

The operative terms in these definitions are *societal guidance* and *social transformation*. Whereas the former is articulated through the state, and is concerned chiefly with systematic change, the latter focuses on the political practices of system transformation. Planners engaged in these two practices are necessarily in conflict. It is a conflict between the interests of a bureaucratic state and the interests of

10. The pragmatic definition of planning is nevertheless useful in pinpointing problems in planning methodology, such as how to build policy models, how to make forecasts more reliable, what criteria to use in selecting the location of public facilities, how to design urban space, what method of shadow pricing to adopt in resource analysis, and how to make social evaluations more meaningful. The education and training of planners is concerned mainly with these and related questions applied to particular problem areas.

11. In the following, we shall not consider private sector (strategic) planning for corporate decision-making.

the political community. The bulk of public planning, of course, is related to societal guidance and includes both allocative and innovative forms. The pressure for system-wide transformation is intensified when, in the course of a system-wide crisis, the legitimate authority of the state declines, and the state itself is so weakened that it can no longer successfully repress the radical practices of the political community.¹²

Each of the three definitions of planning has roots in a different intellectual tradition.

DEFINITION I. The concept of action is central here, in the sense that action is viewed as being prior to any need for scientific and technical knowledge. Actors request the services of planners; they are in charge. The concept is taken from political philosophy (Arendt 1858), in which action signifies both a departure from routine behavior (a new path or an innovative practice) and the initiation of a chain of consequences that, except for the action, would not have occurred.¹³

DEFINITION II. Societal guidance is a concept drawn from macro-sociology (Etzioni 1968). It implies a central involvement of the state and incorporates both allocative and innovative forms of planning. Related theories include neo-classical and institutional economics, public administration, and organization development.

DEFINITION III. The language of social transformation is drawn primarily from both anarchist and Marxist literature, and from what is best described as a separate utopian tradition. Related concepts of political community and sociopolitical movements are taken, respectively, from political theory and political sociology.

A comprehensive exploration of the terrain of planning theory must cull from all the relevant disciplines those elements that are central to an understanding of planning in the public domain. The theory of planning is an eclectic field, bounded by political philosophy; epistemology; macro-sociology; neo-classical and institutional

12. In addition to outright repression, the state has several options for dealing with radical practice. It can co-opt radical politics by buying off its leadership, or give token recognition to radical movements, or make a strategic retreat. Any of these strategies may effectively neutralize the picture of a radical politics (see Apter and Sawa 1984 for examples).

13. Definition I represents a conscious turning away from decision-models of planning. Although in practice actions are inclusive of decisions, action is the more comprehensive term. Actors strive to make a difference in the world. They must mobilize power. They must concert the actions of others. All this is not part of planning but rather part of the situation to which planning is directed.

economics; public administration; organization development; political sociology; and anarchist, Marxist, and utopian literature. It is from the rich mine of these varied intellectual traditions that we must develop the answers to our questions about planning.¹⁴

Some Questions in Planning Theory

The conceptual definitions of planning raise questions that are central to any inquiry into planning theory. By way of illustration, and without attempting a systematic overview and ordering of questions, I should like to formulate some of them as they arise out of Definition I. This definition contains three key terms: knowledge, action, and the public domain.¹⁵ In the remainder of this chapter, we shall discuss questions pertaining to knowledge and action. The question of the public domain and other questions concerning the state and the radical practice of political communities will be discussed at appropriate points throughout the book.

Our intention here is to raise questions, not to answer them. It is to show how a conceptual definition of planning as the relating of knowledge to action can be useful for theory, which is to say, for a more precise understanding of the possibilities and limits of planning in the public domain.

The Question of Knowledge

This question concerns what we can and cannot know about. Are there different forms of knowledge, and are some forms inherently superior to others? How does knowledge come to be validated? How is it different from what is *not* knowledge? And to what extent and in what ways can scientific and technical knowledge about the world be made available and useful to actors in the public domain?

Planners claim that their advanced degrees in relevant disciplines and professional fields give them privileged access to scientific knowledge and technical know-how. They also claim that this knowledge is generally superior to knowledge gained in other ways (from practical experience, for example). In this respect, they speak as the true heirs of the Enlightenment, the age in which central au-

14. Disciplines and modes of inquiry *excluded* from this list are psychology (particularly individual psychology), cultural anthropology, geography, history, political science, micro-sociology, and the humanities, including design theory.

15. A fourth concept is *linkage*. The basic question here is *how* knowledge is to be linked to action. It is an instrumental question to which an answer can be forthcoming only when we have satisfactorily responded to the prior questions about both knowledge and action, the two phenomena that are to be linked.

thorities in the secular world began to base their decisions on science and its technical correlates rather than on divine inspiration. In the Enlightenment tradition, two crucial assumptions are made. The first is that the world is objectively knowable through the instruments of positive science. The truth of the world, as it emerges from a myriad of scientific inquiries, is validated by becoming the basis for the mastery of the world. Learning the secrets of nature, we learn to fly, to harness the sun's energy, and to transmit voice signals over vast distances through space. We can do these things because scientific statements are statements about the world "as it really is." The second assumption is that there is an unbroken line of evolution between the physical or natural world and the human or socio-cultural world. Seen in this perspective, the science of human behavior is a continuation of natural science "by other means," and its present lackluster performance in application is proof only of its relative immaturity. One or two generations (or centuries) hence, the argument goes, we will know a great deal more about the social world and how it works, so much more that we will be able to manipulate it at will, in much the same way that we now turn the natural world to our use.

The social validation of knowledge through mastery of the world puts the stress on *manipulative* knowledge. But knowledge can also serve another purpose, which is the construction of satisfying images of the world. Such knowledge, which is pursued primarily for the world view that it opens up, may be called *appreciative* knowledge. Although science (astronomy, for example) used to be primarily appreciative, it has become almost entirely a form of manipulative knowledge. Contemplation and the creation of symbolic forms continue to be pursued as ways of knowing about the world, but because they are not immediately useful, they are not validated socially and are treated as merely private concerns or entertainment.¹⁶

16. These brief allusions to the philosophy of science are based on eclectic readings. One of the best histories of science as a form of manipulative knowledge for mastering the natural world is Gillespie (1960). For the assumption of objective knowledge, I have relied chiefly on Popper (1975), and for the further assumption of continuity between the natural and social worlds, and of the respective domains of science, I have relied on the writings of evolutionists such as Steward (1955), Montagu (1956), von Bertalanffy (1960, 1962), Dunn (1971), Monod (1971), Wilson (1975, 1978), and Bateson (1979), in addition to the influential work of Popper. On appreciative knowledge, see especially Langer (1953) and, for a physicist's point of view, Schroedinger (1956a, 1956b). The contemporary tendency to return to an appreciative science is especially evident in such hybrid works as de Chardin (1959), Capra (1975, 1982), Hofstadter (1979), and Lindholm (1981).

The following questions about knowledge will be put from the perspective of planning and its linkage-to-action requirements. They are questions for which there are no easy answers; indeed, they may have no definitive answers at all. It is precisely this quality, however, that makes them intriguing.

1. All knowledge gained by applying the methods of science is knowledge about past events. But planners need some knowledge of future events, and so they engage in making forecasts, projections, and predictions. What assumptions must be made, particularly during periods of rapid structural change, in order to claim that knowledge of events in the past is relevant to “knowing” the future? Do these assumptions yield *reliable* knowledge about the future? And are the uncertainties inherent in statements about the future anything more than subjective feelings of risk, even when these feelings are “pooled,” as in the Delphi method?¹⁷ Are planners likely to assess risks in the same way actors do?

2. The hypotheses, theories, and models through which all scientific and technical knowledge is expressed are radical simplifications of the world: they are stated in universal terms, and their validity depends on the assumption that the world external to the model will remain unchanged. But in planning for the real world, “all other” conditions cannot be held constant. Rational actions must be based on holistic analyses of specific historical situations. Does knowledge, then, lose its “objective” character when the assumptions under which it is claimed to be true are “relaxed,” so that more and more variables can interact with the endogenous variables of the model in ways that cannot be calculated with precision? In other words, does the scientist-planner who is forced to engage in holistic analysis produce knowledge that is superior to the hopes and expectations of ordinary people who are concerned with solving their own problems?

3. All scientific and technical knowledge is either theoretical or methodological. Theoretical knowledge is knowledge that is still being talked about; theories argue and are argued against (even when they are the “best” available theories at the moment). By what criterion, then, do planners choose among con-

17. The Delphi method, developed at Rand, is used to pool “expert” opinions about the future in a process of iteration which tends to move from diversity in the spectrum of replies to a convergence on a relatively stable forecast.

tending theories? Is the “safe” bet always the best? And is choosing one theory instead of another a political act? Methodological knowledge can be acquired only by great expenditures of money and time (the process of validation itself requires years), and these are resources that are not usually available to planners. On the other hand, “quick and dirty” solutions do not yield scientifically validated knowledge. On what grounds, then, do planners claim superiority for the kinds of knowledge they make available within existing constraints? Is it true that scientific-technical knowledge, whether validated or not, is always better than knowledge based on other methods of inquiry?

4. What are the proper claims of that knowledge that is based on the experience of acting in the world and that in its articulate, particularistic, and embodied form is sometimes called personal or experiential knowledge (Polanyi 1962)? On what grounds can scientific and technical knowledge, with its presumptive universal validity, claim to be superior to personal knowledge, especially when the application of each kind of knowledge yields a different result?

5. All empirical knowledge—scientific and technical as well as personal—is validated, before an action is taken on it, by talking about the evidence. The construction of knowledge must therefore be regarded as an intensely social process, with its own interpersonal and group dynamics. Because human beings pursue ends, have desires, and want their views to be accepted by others, communication processes are structured both politically and theoretically. The knowledge that we have about the world is in part a reflection of our passions. When we say that we “know about the world,” we are talking of stories in which, by relating facts, experiences, beliefs, and visions in a narrative, we attempt to make sense of the world. We construct the world out of these stories in a process that is at once individual and social. This does not mean that knowledge is like fiction, a pure invention. Scientifically grounded statements about the world—to the extent that they are accepted as valid (and their validity is always historically contingent)—can have very real effects on the world. They have the function of affirming or negating, of making useful, and of changing the existing order of relations. It may be argued that all knowledge is inherently tied to some form of practice, and that it qualifies as knowledge only insofar as it produces consequences in the real world.

This interpretation challenges the claims to objectivity made for science and minimizes the differences between scientific-technical and personal knowledge. It portrays the creation of all knowledge as a social process that remains unfinished and open to the future. Given this construction, on what grounds shall planners argue that their view of the world ought to prevail? Can we assume that their knowledge is always more reliable than personal knowledge? Do the conditions of knowing require at least a dialogue between planner and actor? If they do, how shall such a dialogue be structured? And by whom?

6. Personal or shared beliefs about the world—the ideologies of actors—are an important obstacle to gaining objective knowledge. Powerful beliefs influence the kinds of knowledge we obtain when we investigate the world or act within it. If all knowledge is permeated by ideology, how can planners claim privileged access to objective knowledge? And when the personal knowledge of actors clashes with the scientific and technical knowledge of planners, is there any reason to think that one or the other is inherently better and should therefore be followed?

7. What is the utility of ignorance for actors?

The Question of Action

If we identify actions rather than decisions as the principal focus of planning practice, then being effective in the world becomes the decisive criterion. Planning that changes nothing of substance is scarcely worth talking about. As a concept, action has usually been used to mean goal-oriented action, a use that places the accent on its presumptive rationality (Parsons 1949). Here, we use it in a different sense. Following Arendt (1958), we shall say that action means to set something new into the world. Goal achievement is not an essential part of it. For example, actions may be undertaken to discover new objectives or to explore the meaning of a particular constellation of values. The only fixed requirement for an action is that it can be attributed to an actor who can be held accountable for at least its proximate consequences. Following are action-related questions.

1. Who are the actors in the public domain to whom knowledge is being provided? Are they individuals, organizations, collectives? What is the institutional setting in which actors in the public domain are working? What are the dynamics of their

relations with each other? What material interests divide them, and what values are at stake in the actions they contemplate? Can planners remain indifferent to these and other characteristics of the action field, or should they have to relate their own work in some manner to the internal dynamics of the field? If they should, what implications follow?

2. To be effective, actors must have sufficient power to concert the actions of others and to overcome the resistance of vested interests. Is planning, therefore, always addressed to those who are powerful enough to launch a successful action? And if it is, can we say that planning is primarily an instrument of domination in the hands of actors who have the capacity to prevail in promoting their own interests? Alternatively, if planning is addressed to the weak, how shall plans be carried out? Are social mobilization, confrontation, and protest the only ways by which the weak can create a political space for themselves? Should planners help the powerless acquire power? If so, by what means? And how would this effort by planners affect their claim to objective knowledge?

3. All action represents a departure from the routine; it initiates a course of change. This implies that actors must overcome resistance, the counteractions of those whose life situation they would rearrange. Action is thus a dynamic process that requires to adopt strategies for change. But is the devising of strategies part of the process of applying scientific and technical knowledge to action? Or is the knowledge that goes into the fashioning of strategies derived primarily from experience, and therefore *personal* knowledge? And if this is the case, is not personal knowledge also the most valuable form of knowledge-in-action?

4. In the long term, the outcomes of a chain of action and counteraction are unpredictable. What does this tell use about the supposed ability of planners to “know” the future through forecasting models? Assuming that these models are not totally useless, what legitimate uses can be made of them?

5. Action requires value commitments strong enough to enable the actor to persist with the action long enough to overcome resistance. The culture of actors, therefore, is very different from that of planners. Planners share a passion for dispassionate reason, which is the hallmark of scientific work, and they champion its requirements for a skeptical mind, for attentive

listening, for the rejection of rhetoric, and so forth. What problems arise from this apparent incompatibility of cultures? And if planners should become more like actors in their passionate commitment to the action itself, what would happen to their claims about objective knowledge, and to their special status as “experts”?

It could be argued that actors look to planners for contributions precisely because planners are “remote” from the action itself. Planners, for example, might be expected to correctly define the situation actors face, to suggest realistic expectations of the future, to indicate major options and risks, to weigh the costs and benefits of an action, to provide feedback on the effects of potential actions as well as changes in the external situation, to assess the strengths and weaknesses of opponents, to estimate the resources that are needed and can be mobilized, and to predict the likely occurrence of critical events. It is not clear, however, that actors really want such advice. Their passionate commitments may lead them to insist on an equally committed analysis. Are actors who are passionately engaged likely to listen with an open mind to counsel that is inconsistent with their own perceptions and beliefs? What systematic biases do these circumstances introduce into planning analysis and the communication of its results to actors?

6. Do planners have any responsibility for the knowledge and values they press upon actors? To what extent should planners lobby for acceptance for their theories, proposals, and projects? Are planners co-actors or merely hired consultants?

7. The apparent lack of concern among planners about the values of actors would seem to contribute to the overall irrationality of technocratic planning. On the other hand, to the extent that planners do show concern with long-run, structural consequences, is the reasoning they use still predominantly technical, or does it merge with what we might call political reason? And if the latter, what kind of knowledge becomes most relevant then? Is it knowledge based on science or knowledge based on action and accumulating experience? And whose experience would be more relevant, that of planners or of actors? Knowledge based on action is a form of learning. Is it not the responsibility of planners, then, to help structure settings that will allow both actors and planners to increase learning from

experience, and to use what has been learned as a basis for further planning and action

Conclusion

The idea of planning is elusive and frequently misunderstood. "Make me a plan," someone will say, expecting to be provided with a document that rationally lays out a course of action in relation to specified goals. But there are many forms of planning and many specific applications, and underlying these specifics there are some general characteristics of planning that define a generic problematic. This chapter has tried to lay out the arguments for such a view.

With reference, then, to planning in the public sphere, and in contrast to corporate planning in the private interest, we found the following characteristics.

1. Planning is concerned with making decisions and informing actions in ways that are socially rational.
2. Scientific and technical planning as practiced today contrasts sharply with earlier "orthogonal" planning. Concerned chiefly with physical design, orthogonal planning was intended for a static, hierarchical order, was practiced in conformity with a divine or cosmic reason, was based on authoritative (secret) knowledge, and was learned in accordance with traditional practices of apprenticeship.
3. Planning in a market society, such as the United States, is found in virtually all areas of state intervention.
4. Where planning is used, it is meant to serve a public or general purpose, such as ensuring the stability and growth of the economy; undertaking selected public investments and, in the absence of private sector interest, inducing desired actions on part of the private sector through various forms of subsidy; restraining private sector actions to safeguard the well-being of the population at large; redistributing income on grounds of equity; protecting individuals and businesses against the uncertainties of the market; and so forth.
5. Three major forms of planning may be identified—allocative, innovative, and radical—roughly corresponding to the three possible states of political systems: maintenance, evolutionary change, and structural transformation.

6. Planning can be defined in many ways, but in a theoretical perspective, only a few definitions are of possible interest.

Three linked definitions of planning in the public domain were advanced. At the most basic level, planning was said to be an attempt to relate scientific and technical knowledge to actions in the public domain. Two broad types of action were identified, concerned, respectively with societal guidance and social transformation. To illustrate the significance of these definitions, the chapter concluded with a series of questions in the theory of planning.

With this discussion as background, we can now proceed to look at the major traditions of planning thought as they have evolved in the course of the last two hundred years.