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The Logic of Planning Behavior

Lewis D. Hopkins

and

Peter Schaeffer

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Department of Urban and Regional Planning

University of Illinois at Urbana-Champaign

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The Logic of Planning Behavior

Explanations of planning behavior generally fail to distinguish among three kinds of activities: The production of information, regulation, and collective choice. The economics of information provides a useful approach to explaining planning as the production of information, and to understanding its relationships to regulation and collective choice. A framework incorporating information, rights in land, group formation, and development of built form is shown, using simple examples, to provide a coherent framework for describing and interpreting observed planning behavior.

The Logic of Planning Behavior

1. INTRODUCTION

Discussions of planning suffer from a lack of clear definitions and distinctions among the many activities in which planners are involved. For example, planners are often mistakenly thought of as regulators. Discussions of planning often involve one person talking about improved information and coordination and another talking about the design of an ideal social system. The logic of planning behavior developed here attempts to clarify planning roles and advance discussions of planning. The aims of this description of planning activities are similar to those stated by Faludi (1973): to explain planning phenomena in a coherent way, to provide a language for discussing planning, to generate empirically testable hypotheses, and to provide a basis for normative statements. Building on earlier work (Hopkins 1981), the approach seeks to explain under what circumstances we should expect planning to occur and by whom we should expect planning to be undertaken. A mathematical model of these phenomena is presented in Schaeffer and Hopkins (1985) and initial empirical work is reported in Hopkins and Schaeffer (1983). The approach provides interpretations of planning in both the private and the public sectors. Although in this paper we concentrate on land development examples, the concepts have much broader applicability.

In Section 2 planning is distinguished as a particular kind of activity, the production of information. A precise definition is essential in the development of useful explanatory models, but the framework also accounts for other activities in which planners are involved. The formalized framework described in Section 3 allows us to interpret decisions to plan in successive time periods contingent on existing rights and associations of decision makers. Section 4 tells a story about downtown commercial redevelopment in a small city so as to illustrate concretely both the kinds of activities that can be described and the kinds of behaviors that are observed. Additional applications of the framework are suggested in Section 5. We conclude that the approach is useful in developing reasonable expectations about planning behavior. We also suggest that the concepts are useful in thinking about how we should organize planning.

2. PLANNING, REGULATION AND COLLECTIVE CHOICE

Explanations of planning behavior generally fail to distinguish among three kinds of activities: 1) The production of information to reduce uncertainty, 2) regulation to restrict the range of choices, and 3) collective choice to agree on a joint decision. As illustrated by the examples in Table 1, all of these activities fall within the interests of planners, but we cannot explain all these activities as one type of phenomenon. Following Friend and Jessop (1969), we will refer to producing information to reduce uncertainty as planning. This is of course a narrow definition, but in the development of concepts that follows it is the term that fits most naturally. The concepts of planning, regulation, and collective choice are distinct, but highly interrelated. Most of the explanatory models and prescriptive concepts from economic theory that have been adopted pervasively and critiqued ubiquitously in the planning literature address collective action or regulation, not the production of information.

A framework for interpreting planning behavior must recognize both the distinctions and the relationships. By building from the fundamental concepts of the economics of information (e.g. Akerloff 1970; Hirshleifer 1971; Marschak 1974; Popkin 1981), we can find explanations of why we tend to organize planning the way we do. Skjei (1973) addressed the problem of information, but without careful distinction between planning and public action. Although not unrelated, these explanations are more fundamental to planning than the familiar concepts of externalities and public goods (e.g. Baumol and Oates 1975; Moore 1978). The three types of activity are illustrated by a simple example that is summarized in Figure 1. The diagrammatic representations are intended as devices to emphasize the characteristics of planning, regulation, and collective choice. The proposed approach is much richer than these simple diagrams, both theoretically and empirically.

The diagrams describe a situation with two owners of developable land. Three different land uses are feasible: residential, commercial, or industrial. Associated with each choice is a profit that can be made. The profit is not however independent of the development decision of the other owner. For simplicity assume that both face exactly the same decision problem with the same potential profits. The profits obtained by one owner, as a function of the decisions of the other owner, are given in matrix form.

Planning (production of information):

A consultant, working for a developer develops, analyzes, and recommends proposals for a residential development.

One developer talks with another developer about ideas for future projects.

A city planning agency develops a land use plan.

A consultant, hired by a group of private developers, develops a transportation network plan.

A public agency conducts a survey to determine preferences for park facilities.

Regulation:

A local agency administers a subdivision ordinance, including interpreting cases, recommending variances, conducting inspections, and monitoring enforcement.

A lawyer, hired by a local government, writes a zoning ordinance based on a plan developed by the government staff.

A state government administers a tax abatement program in enterprise zones.

The federal government administers special tax advantages for rehabilitation of historic buildings.

Collective choices:

A local government enacts a zoning ordinance.

A homeowners' association adopts a rule forbidding satellite dish antennas.

The federal government allocates funds to build public housing.

A park district decides to acquire land and develop a new park.

Table 1: Examples of Planning, Regulation, and Collective Choice

Suppose that initially the decision maker A has no knowledge at all about the possible actions of the other owner B, and that therefore, each of decisions are assigned the competitor's possible the same probability (1/3). If A makes a choice under these conditions, it will be residential development, which has the highest expected profit of the three alternatives.

If decision maker A decides to do planning to learn about the intentions of B, the assessment of the probability that B will take a particular action is likely to change. If these probabilities

change as indicated in Figure 1, then decision maker A's choice will be not residential but industrial development. The expected profit of this decision is $6(1/12) + 11(2/3) + 7(1/4) = 9.58$. Planning changes behavior by changing the information available.

	Residential	Commercial	Industrial	DECISION MAKER	EFFECT	“OUTPUT”	CONCEPT REFERENCE
INITIAL SITUATION	1/3	1/3	1/3	Individual			
Residential	10	10	5				
Commercial	12	4	8				
Industrial	6	11	7				
PLANNING	1/12	2/3	1/4	Choices remain with individual	Information changes	Plan	Hirshleifer 1971 Hopkins 1981
Residential	10	10	5				
Commercial	12	4	8				
Industrial	6	11	7				
REGULATION							
a) Change in Rights	1/2	0	1/2	Choices remain with individual	Available alternatives or incentives change	Regulation	Riker and Ordeshook 1973
Residential	10	10	5				
Commercial	12	4	8				
Industrial	6	11	7				
b) Incentive	1/3	1/3	1/3				
Residential	10	10	5				
Commercial	12+2	4+2	8+2				
Industrial	6	11	7				
COLLECTIVE CHOICE				Choices made as combination by group	Decision maker changes	Group	Olson 1965
Residential/Residential		20					
Commercial/Commercial		8					
Industrial/Industrial		12					
Residential/Commercial		22					
Residential/Industrial		11					
Commercial/Industrial		19					

Figure 1: Planning, Regulation, Collective Choice, and the Development Decision

Alternatively, if the community where B owns land exercises its regulatory power to change the development rights in land, then the decision situation also changes from that in the initial situation. Suppose that commercial development is ruled out through regulation. In this situation, A will choose commercial development to maximize expected profit.

The same outcome can be obtained if A is offered an incentive. If the community offers A tax abatement that increases the profit of commercial development by 2, regardless of the development decision made by B, then A will also choose commercial development.

Finally, if A and B realize that their profits depend on each other's decisions, they may act jointly. The profit matrix in the initial situation shows that the greatest joint profit is obtained if one of them does residential, and the other commercial development. The joint profit is $12 + 10 = 22$. The joint decision process is, of courses, complex as further discussed below.

2.1. Planning as the Production of Information

In this approach we define planning as the activity of producing information (Hopkins 1981). This information may be about states of the environment, values, or related actions (Friend and Jessop 1969). It may also be information about new alternatives. This information can be produced in many ways, such as devising forecasts of the environment, conducting surveys, talking with individuals involved in related actions, or hiring a consultant to assist in creating alternatives. These activities can be pursued in the interests of a public sector agency, a neighborhood association, or a private firm. They can be carried out by in house specialists or by hired consultants. The ideas developed here seek to explain how individuals, firms, and agencies are likely to organize themselves to carry out these activities.

The concept of planning as the production of information is consistent with decision theory (Raiffa 1968). The decision to plan is thus equivalent to the decision to conduct trials of an experiment. Trials are conducted in order to obtain additional information so as to adjust the prior estimates of the likelihood of outcomes of available alternative actions. We must clearly distinguish between decisions to plan (i.e. equivalent to decisions to conduct trials) and decisions to carry out other types of actions. The first might be a decision to conduct a survey. The latter might be a decision to construct a building.

A plan is a set of contingent decisions that are expected to be made in the future (Schaeffer and Hopkins 1985). For example, when a developer constructs the first phase of a project in a

particular way, he has expectations about possible ways to develop the second phase at some future time. When that time arrives he will know the actual outcomes of prior events, not merely expected distributions over possible outcomes. The developer may, therefore, choose not to follow the plan and take a different set of actions. A plan is a set of decisions that can be changed at little or no cost; they are not binding decisions about future actions. These decisions, however, are the expectations on which current decisions are made. A public agency may announce or formally adopt its plan as an indication of commitment to future actions. This commitment provides information that influences decisions of other decision makers. Public agencies may also publish plans as explanations and justifications for decisions, a role played by land use plans in support of zoning decisions.

Planning, as defined here, can occur without producing a plan. If there is only one decision unrelated to other decisions that can be made later, then there is no plan. One can, however, produce information to reduce uncertainty about the effects of that one decision.

2.2. Regulation

Many of the activities frequently referred to as planning are more appropriately described as the design, administration, and enforcement of regulations. Planning is distinct from regulation. Planning influences choices by changing the information on which a decision is based. Regulation influences choices by changing the set of alternatives that are permissible (Riker and Ordeshook 1973, p. 272-306). We interpret regulation to also include changes in incentives, for example through changes in tax policy or through subsidy programs, because these are changes in rights. Thus, regulation determines the set of rights, in a broad sense, that a decision maker holds. A subtle distinction can be made between a regulation and a policy. A regulation usually has the power of enforcement through some legal recourse. A policy is a rule-if these conditions exist then this response should be made-to standardize the actions of an agency (Kerr 1976).

Strotz (1956) has discussed cases in which individuals may choose to impose regulations on themselves. Individuals join voluntary groups that impose regulations on their members. Land use development regulations are imposed by homeowner's associations, developers, or municipal governments. As these examples illustrate, regulation is not necessarily a public sector activity. A well-developed explanatory theory of regulation has been shown to be consistent with many observed cases (Riker and Ordeshook 1973).

There are at least two sources of confusion in distinguishing between planning and regulation. First, some planning is planning for regulation. The planning activity leading to a comprehensive plan produces the information, including the creation of alternatives, on which decisions to impose regulations are based. Further confusion arises because land planning and land regulation are often done by the same agency. This organizational efficiency may be justified in order to assure quality control (Schaeffer and Hopkins 1985), but planning and regulation are two distinct activities.

A second source of confusion is that both planning and regulation reduce uncertainty. Planning reduces uncertainty by producing new information. Regulation reduces uncertainty by restricting the range of legally available actions, or by creating incentives to act in a particular way. Planning and the creation and administration of regulations can, therefore, be substitutes for one another in achieving the objective of reducing uncertainty. The organizational efficiency of choosing among substitutes within one agency might also help to explain why land planning and land regulation are frequently handled by the same agency.

2.3. Collective Choice

Many attempts to explain planning have confused planning with collective choice (e.g. Moore 1978). When a homeowners' association is faced with a decision whether or not to dredge its lake, it must make one decision that applies to all its members. When a consortium of downtown landowners forms a group to hire a planning consultant, they agree to agree on a single consultant. They may choose this consultant by majority vote, but that results in one consultant, not three parts of one and five parts of another. Collective choice describes a procedure by which a group arrives at a joint or common decision (see Figure 1). There is a highly developed literature on means of aggregating preferences to arrive at collective choices (e.g. Dahl and Lindblom 1953; Arrow 1963; Haefele 1973; Riker and Ordeshook 1973; Saunders 1980) The procedure may be tacit, imposed, created through a constitution as in some governments, or entered into by agreement as in a homeowners' association.

A group may decide collectively to plan or to regulate, but collective choice, the process of making such a decision, is a distinct activity. Although there is a wide range of activities that can be justified as requiring collective choice (see e.g. Due and Friedlaender 1973), the one most frequently cited in the planning literature is the Samuelsonian public good (e.g. Moore 1978). It is

widely accepted that there are no pure public goods, but rather goods that have public good characteristics across a particular group of decision makers.

We will therefore use the term collective good to emphasize that it applies only to a particular group. Although planning is often presented as a logical response to the difficulties of dealing with collective goods or externalities, it cannot cope with either. The fundamental notation of a collective good, and collective good externalities (Baumol and Oates 1975) is that, even with perfect information, individuals will not act to provide the appropriate amount of a collective good. Planning produces information and only information. It cannot, therefore, cope with collective goods. Regulation and collective choice to impose regulation are necessary to provide collective goods and deal with collective good externalities. Planning for such collective choice about regulation may be beneficial, but it is regulation that directly affects the incompatible behavior, not planning.

A major reason for the confusion between planning and collective choice is that each can help to coordinate the actions of individuals. Planning can reduce uncertainty about what others will do and thus lead to a decision by one individual that fits better (from the perspective of that individual) with the decisions of other individuals. Collective choice can achieve tin aggregate decision, based on an established procedure such as majority vote, in which the actions of individuals who are members of the group are chosen collectively to fit with one another (see Figure 1). In order to reduce uncertainty a resident could investigate what the owner of the adjacent vacant lot intends to do. Alternatively, residents of a municipality could make collective choices about regulations on land use. Although each approach reduces uncertainty, planning only produces information whereas collective choice results in a joint decision, often a decision about regulation. Hopkins and Schaeffer {1983) give an example of mountain resort development in which residents sought and achieved incorporation, the formation of a particular kind of group, in order to impose land use regulations.

2.4. Collective Choice to Plan

There is no inherent reason to expect that planning for a collective good will be or should be provided through collective choice. If highways are a collective good, then collective choice should be expected to make decisions to provide highways. Given that an agency is providing highways, there will probably be a demand for planning for highways. Some of this planning may

be done by the highway agency itself. This planning could easily, however, be handled by consultants because the product of planning is really a private good to the agency. A consultant could produce information, control access to it so as to collect an appropriate fee, and the information would not be jointly consumable by other agencies or individuals. A public agency is justified in doing its own planning for its actions without recourse to the logic of the theory of collective goods. Organizational efficiency in communication about needs and control over production quality and timing can justify vertical integration of planning as an input to the production process of the agency.

It is important to distinguish the final good, highways, from the good, information, that is produced by planning. If the information produced by planning is itself a collective good, then planning should be expected to be provided through collective choice (Hopkins 1981). Most planning by an agency in the public sector, as in the private sector, is probably with respect to the agency's own actions, not because the information is a collective good. Some types of land planning may provide a good counter example. If the area that is likely to be flooded by a river is known, individual developers or home buyers might gain by expending resources to gather such information. If the cost of obtaining the information were high, each individual might choose to wait and observe where others, known to have paid for such information, chose to locate and then imitate them. Under the right conditions of information cost, expected losses from flooding, and disadvantages of delaying construction or purchase, the information would have the properties of a collective good. It might then be expected that decisions to produce this information would have to be made collectively or the information would not be produced even though everyone would be better off if it were (Hirshleifer 1971).

3. A FRAMEWORK FOR DESCRIBING PLANNING BEHAVIOR

Stories are valuable in conveying ideas. But in order to organize data about cases, make comparisons and generalizations from cases, and develop conceptual explanations, a formal framework is useful. Elsewhere we have presented an initial mathematical model (Schaeffer and Hopkins 1985). The framework presented in Figure 2 is intended to help organize qualitative interpretations. It describes the status at the beginning of a time period and the changes between time periods. Variables are distinguished as state variables, decision variables, and parameters.

In each period the state variables describe the system at the beginning of the period, the decision variables describe the actions taken, the update functions describe changes that are functions only of time, and the parameters describe elements taken as given externally. The state variables are information (for example knowledge of alternatives or likelihoods of outcomes from actions), rights in land (for example development rights, tax liabilities, or voting rights), group membership (for example informal networks, chamber of commerce, or citizens of municipality), and built form (for example infrastructure or buildings). Information, rights, and group membership should be described for each individual and each group. Each decision variable changes a state variable. Planning changes the state of information by reducing the uncertainty about future events, actions, values, or alternatives. Regulation changes the rights, generally in systematic ways, such as restricting a right on a set of parcels through zoning. Rights can also be changed through a transfer of rights among individuals. Group membership changes occur when individuals join or leave groups, or more fundamentally when a new group forms and a group dissolves. Development actions change the built form.

The update functions describe changes in the system that are taken to be functions only of time and are not affected by other actions. These include depreciation of the value of information, behavioral changes due to the level of enforcement of rights, attrition in group memberships, and depreciation of the built form. Depreciation rates need not be constant and expenditure to maintain information, enforcement, membership, or built form can compensate for depreciation. Such expenditures are decision variables. The external parameters are taken as given in the sense that they are not explained in the model, even though they may not be constant.

This framework for describing planning behavior is sufficient for many types of cases: urban redevelopment, suburban development, rural resort development. It is also useful for international comparison because it incorporates differences in rights in land, affinities and group formation, and enforcement, which are critical in understanding international differences. The framework explicitly recognizes private sector actors as well as public sector actors in planning and addresses the organization of planning within and across sectors. It also makes clear distinctions but accounts *for* relationships among planning, regulation, and collective choice. The above framework can be used to aid in organizing a description of observed planning behavior and those aspects of a situation that are necessary to understand the planning behavior. Given this framework it is possible to construct an axiomatic-deductive (or “positive”) theory of planning behavior

analogous to the development of theory in microeconomics or political science (e.g., Riker and Ordeshook 1973). The intent of such theory is to explain and gain understanding, not to predict in an operational sense (see Webber 1984). The driving assumption is that persons, firms, and units of government, will plan and organize themselves to plan, when they perceive it to be to their benefit to do so.

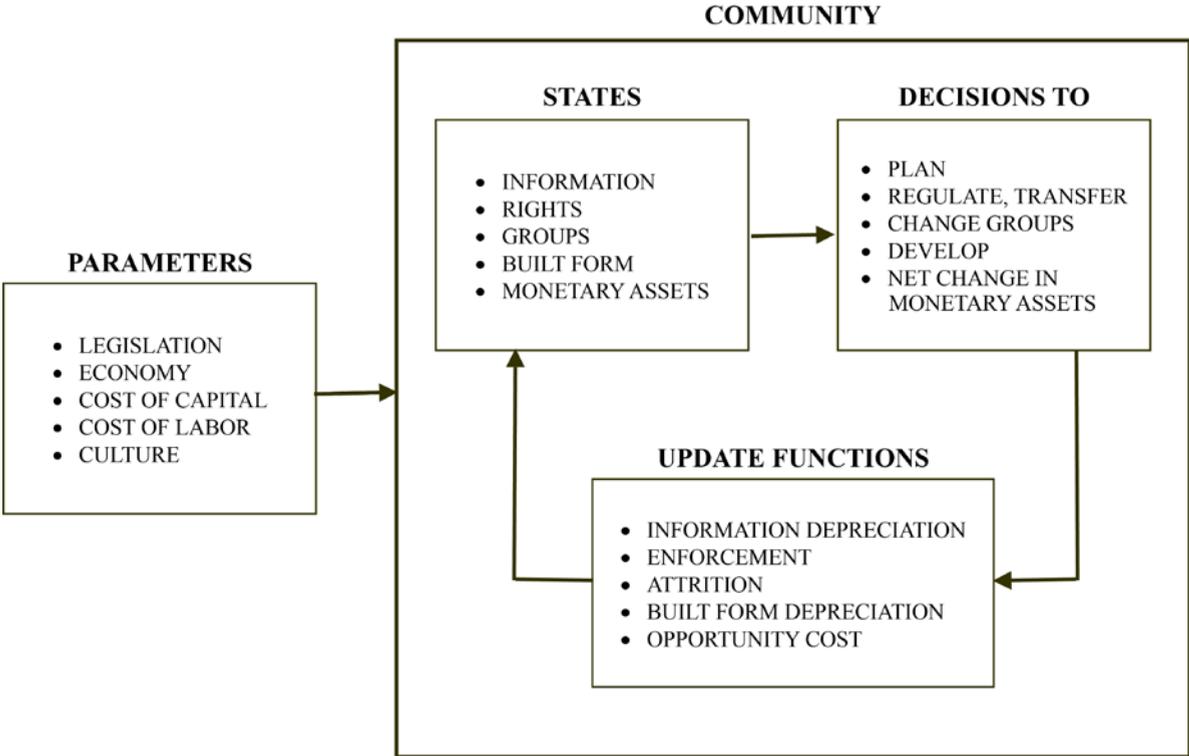


Figure 2: Framework for Explaining Planning Behavior

4. PLANNING BEHAVIOR: A DOWNTOWN REDEVELOPMENT STORY

In the late 1950s, the role of downtown Urbana, Illinois as a retail center was declining rapidly. Efforts to stem this trend eventually resulted in a cooperative project between the city and a private developer to build a covered downtown shopping mall. The story is based on Rimavicius (1982) and interviews by the authors.

Planning Activity 1: A voluntary private group obtained information about possible actions of others and attempted to create alternatives.

An important initial step was taken in the fall of 1959 when a Joint Committee was formed. Its members included representatives of the Urbana City Council, the Urbana Association of

Commerce, and the Urbana Economic Development Committee. The major planning effort was undertaken, however, by a sub-committee that included the three initiators: an attorney, a merchant, and the manager of a downtown motel. They were important members not only because of their initiative, but also because of their professional and social stature and connections. The private sector representatives dominated the early phases of planning. Two of the initiators approached a major department store with a proposal to expand its existing store in downtown Urbana. The management of the department store showed no interest. Indeed, it indicated that it had plans to relocate outside of Urbana. The realization of the impending loss of the downtown's major anchor store demonstrated the urgency of the committee's efforts. Having failed to persuade the department store management, the sub-committee subsequently met with the president of a chain of department stores based in Chicago in an attempt to explore a possible alternative.

The three key participants all had significant interests as individuals in downtown redevelopment because of business or landholdings. These existing rights in land are thus important in interpreting their action. Following Olson (1965) the group would form because some individuals saw sufficient potential individual gains to make it worth their effort to sustain the group, becoming the leaders and activists. Olson also argues that individuals will tend to work with others with whom they have social, cultural, or job affinities. Thus, both the initial state of group membership in terms of affinities and the decision to form a voluntary group are important in describing the planning behavior.

· The decision was to plan by attempting to create alternatives by contacting other businessmen to obtain or test ideas. By implication, the value of other planning activities, such as analysis of the current sales situation, was not seen as reducing uncertainty about decisions on new downtown development. The approach used was that often associated with architects, create alternatives first, then analyze and evaluate them.

Planning Activity 2: An individual firm produced information to reduce uncertainty about the environment and about values of others. The president of this chain was unwilling to commit to the construction of a store in downtown Urbana, unless it was part of a larger retail development with off-street parking. He did, however, indicate interest in locating in Urbana. His company paid for a consumer survey to determine the market potential of downtown Urbana. The information obtained through the survey convinced him that the city was a promising retail market.

The chain conducted a market survey to reduce its uncertainty about the likely outcomes of building a new store in downtown Urbana. Although the chain had no rights in land it did reasonably expect that they could be obtained. The chain clearly decided that it was worth paying for a survey to change its initial state of information before making a decision about built form. Following the survey, it did make a decision in favor of construction and acquired rights in land through purchase.

Planning Activity 3: In working out land acquisition the city and private groups communicated about their intentions both explicitly and implicitly.

The city became involved in the planning only when planning for its own action, eminent domain, became an element of the project. The involvement of the Chicago chain changed the scope of the project. It now focused on a large scale retail development entailing several blocks and requiring the closing of streets to through traffic. The private sector could not succeed without the participation of the public sector. Although the public sector was represented in the joint committee, up to this point it had played no part and it was not even informed about the results of actions. Only a few people were aware of the negotiations between members of the sub-committee and the Chicago chain. The mayor of Urbana was unaware of the project until 1961. These planning activities were undertaken secretly by the private sector. The public sector became an active participant in the project only after 80 percent of the land parcels had already been secured.

The city became involved because it held the power of eminent domain which was needed to conclude the acquisition phase. The city is a group formed through established mechanisms of incorporation with rules for making collective decisions and determining the rights and obligations of members. The city decided on the basis of information presented to participate and rights in land were then transferred through eminent domain and resale. The city's bargaining position was weak. Urbana was about to lose a major department store after a period of general decline of retail activities in the downtown. There were no attractive alternatives to accepting the plan presented by the private committee. The city's participation in securing the land could be inferred to be a de facto approval of the project.

One area of uncertainty for the private participants was whether various zoning and building permit approvals could be obtained. They were able to reduce this uncertainty before developing detailed proposals by communicating with city officials about the likelihood of approval at the same time they were communicating about acquisition of parcels. The expectation of approval,

which might be a confirmation (enforcement) of or a change in regulations, was clearly increased implicitly by the decision of the city to help acquire land.

The shopping mall was completed in 1964. As time went on, other retail developments, in particular the opening of a big suburban shopping mall, resulted in renewed difficulties for downtown Urbana. The downtown Urbana shopping mall was not as profitable as anticipated. The difficulties were due in part to the inferior performance of an old hotel that had been incorporated into the shopping mall. The hotel had been an elegant structure, but like other buildings in the downtown area, had begun to deteriorate. In 1975, the city cited the hotel for building and fire code violations. The owner of the shopping center, the Chicago department store chain, put the hotel up for sale.

Planning Activity 4: A bank undertook major planning for its own actions, including gathering information about the expected actions of others.

In 1976 a local bank initiated negotiations to purchase the hotel building. The bank was expanding and needed additional space to accommodate its growth. Eventually the bank signed an option to purchase the hotel subject to its obtaining certain concessions from the city. In particular, the bank wanted to buy some city-owned property adjacent to the hotel. It expended considerable money in evaluating this alternative. An option to purchase was used to maintain alternatives while attempting to reduce uncertainty about the actions of the city.

The bank initially held rights in land in several areas adjacent to the proposed downtown redevelopment area and may have held options on land elsewhere in the city. Working primarily from its own viewpoint, it evaluated the likely effects of several different options. As uncertainty was reduced, it began to focus on the hotel alternative. When the city announced intentions that were detrimental to that proposal, the bank pursued one of its other options. This change may also have been affected by external changes in state banking laws, which allowed it to build two facilities rather than just one. In the end it built on land it had already owned. Initial rights and external changes are pertinent in understanding its planning behavior.

Planning Activity 5: The city hired a consultant to plan for the possible expansion of a private shopping mall, in part because the city receives sales tax revenues and in part because the city held key land parcels.

At about the same time that the bank and the Chicago chain were negotiating, the city hired a consultant to investigate possible alternatives to revitalize the downtown district. Retail sales tax revenues were a major concern. In April of 1976 the consultant's recommendations were made public. It was proposed that the shopping mall should expand, and the city-owned real estate desired by the bank would be needed for this expansion. In addition, it was proposed to close off a street, leaving the proposed bank site with no traffic visibility. After the bank evaluated the consultant's proposal, tacitly adopted by the city, the bank removed its bid to purchase the hotel and pursued another alternative to expand its facilities.

The information resulting from this planning led the city to decide to keep its land parcels in order to preserve its options to act in the future. The search for an alternative buyer for the hotel continued as a collaborative effort between its owners and the city. This effort eventually led to the identification of a potential buyer, the owner of a hotel chain. Negotiations among the hotel chain, the Chicago store chain, and the city started in late 1976. The purchase of the hotel was concluded in January 1977. The new owner was also able to acquire options to purchase the adjacent city-owned properties. The willingness of the city to sell that property was a crucial factor in concluding the transaction.

On the surface the consultant to the city appeared to be planning for a shopping mall that was a private venture. The city, however, owned at that time key parcels that were a central element of the proposals that resulted. It also had a great deal to gain in tax revenues from the proposal to seek new rather than merely relocated businesses and to seek retail rather than services. These arguments make a strong case that the city was planning for its own interests, which are in some sense the collective interests of its members. The information produced by the consultant had few collective good characteristics. The information was a private good useful in the decision making of the city, not a collective good useful in the decision making of several individual decision makers. The city was just one, albeit collective, decision maker. This interpretation is reasonable given the initial state of rights in land and tax obligations, the decisions about doing planning, and the information that resulted from planning.

These events in downtown Urbana illustrate some roles of the public and private sectors in planning activities. The example contains ingredients that a useful explanation of planning behavior must consider. Public and private sector actors did invest resources to produce information in order to reduce uncertainty. Private individuals with downtown interests created alternatives; the Chicago

store chain paid for a market analysis; the bank hired consultants to investigate expansion possibilities; the city hired a consultant to create and evaluate alternatives. The framework is richer than this example, as indicated briefly in Section 5.

5. OTHER APPLICATIONS OF THE APPROACH

Another case provides an example of information that did have collective good characteristics within a particular group. A developer made a commitment to build a large shopping center in a previously undeveloped area of the fringe of the metropolitan Chicago area. This firm took the lead in forming a technical liaison group comprising its development partners, the commuter railroad company serving the area, some local businesses, and eventually other developers and representatives of public agencies. Among other things, this group hired a consultant to undertake a transportation study for the area (see O'Mara 1973). This organizational response can be interpreted as a voluntary group forming to invest in planning. Following Olson (1965), the group would form given their similar outlooks, the small number, and the obvious leader in the large developer. The group decided in common to hire, and levy charges to pay for a consultant. This was a collective decision to undertake planning that resulted in information that was a collective good among the members of this group. Each member then made its own decisions based on the information produced by the consultant. The decision to plan was collective, but the decisions to develop in particular ways remained with the individual firms. The existence of the group also increased planning in the form of communication about intentions among its members. Similar planning behaviors were observed in the development of Snowmass, Colorado (Hopkins and Schaeffer 1983).

The approach can be applied to situations involving neighborhood associations or public agencies focusing on social issues. These groups and agencies are also likely to plan for their own decisions. Their initial information, rights, and group affinities are likely to be quite different from those of the groups involved in land development of the types we have described. The framework is rich enough, however, to describe their involvement in such cases as the Model Cities program or the location of public housing. This approach can also be used to discuss planning programs such as the 701 Program or the special districts law in California (Topping 1982). For example, a private consulting firm is likely to do 701 planning for small communities because a firm, but not each municipality, can take advantage of the economies of scale and organizational experience from producing many standardized products.

More detailed investigations based on this approach have been conducted for Snowmass, Colorado and are reported elsewhere (Hopkins and Schaeffer 1983). A typology for describing rights has been constructed. An interview procedure that steps backward through time has been developed and implemented. In conjunction with appropriate documents and secondary sources these procedures permit detailed description of each of the state variables, decision variables, update functions, and parameters. It is then possible to test specific hypotheses about the circumstances under which investments will be made in planning and by whom these investments will be made. The approach also allows us to address the questions of the value of planning, distinct from the value of regulation or the value of collective choice (see Hirshleifer 1971; Hopkins 1981).

6. CONCLUSIONS

With apologies to Wildavsky (1973), if planning is something, maybe it isn't everything. Interpreting planning as the production of information allows us to develop better understanding not only of these narrowly defined activities, but also of the many closely related activities in which planners are also involved. Development of a formalized framework for explaining planning behavior helps not only in understanding observed planning behavior, but also in thinking about prescriptions for the organization of planning activities.

The framework focuses interpretation of planning on sufficiently specific questions that we can take better advantage of available interpretive concepts from economics. Planning is a response, not to market failure, but to the more fundamental problem of uncertainty that results when information, transactions, and adjustments are costly. The comparative static models, which have dominated economics, assume away the major reasons for the existence of planning. A model of planning must be constructed in a dynamic framework (Schaeffer and Hopkins 1985).

Defining planning as the activity of producing information permits construction of models that explain planning behavior in a coherent way. By incorporating planning in both the private and the public sectors and relationships of planning to regulation and to collective choice, the framework provides a language for discussing planning behavior. The dynamic framework of information, rights in land, group behavior, and parameters distinguishing economic conditions and cultural characteristics can be used to frame testable hypotheses. The better understanding of planning

behavior derived from these concepts will allow us to devise more efficient and equitable organizational structures to carry out planning.

REFERENCES

- Akerloff, George A. 1970. "The Market for Lemons: Qualitative Uncertainty and the Market Mechanism," *Quarterly Journal of Economics* 84: 488-500.
- Arrow, Kenneth J. 1963. *Social Choice and Individual Values*. (Second edition). New York: John Wiley.
- Baumol, William J. and Wallace E. Oates. 1975. *The Theory of Environmental Policy*. Englewood Cliffs, NJ: Prentice-Hall.
- Dahl, Robert A. and Charles E. Lindblom. 1953. *Politics, Economics and Welfare*. New York: Harper.
- Due, John F. and Ann F. Friedlaender. 1973. *Government Finance: Economics of the Public Sector*. (5th edition). Homewood, Illinois: Richard D. Irwin, Inc.
- Faludi, Andrea. 1973. *Planning Theory*. Oxford: Pergamon Press.
- Friend, J.K. and W.N. Jessop. 1969. *Local Government and Strategic Choice: An Operational Research Approach to the Processes of Public Planning*. London: Tavistock Publications, Ltd.
- Haefele, Edwin T. 1973. *Representative Government and Environmental Management*. Baltimore: Johns Hopkins University Press.
- Hirshleifer, Jack 1971. "The Private and Social Value of Information and the Reward to Inventive Activity." *American Economic Review* 61: 561-574.
- Hopkins, Lewis D. 1981. "The Decision to Plan: Planning Activities as Public Goods," In W.R. Lierop and P. Nijkamp, editors, *Urban Infrastructure, Location, and Housing*. Alphen aan den Rijn, Netherlands: Sijthoff and Noordhoff: 273-296.

- Hopkins Lewis D. and Peter V. Schaeffer. 1983. "Rights in Land and Planning Behavior: A Comparative Study of Mountain Resort Development." Paper presented at the National Conference of the Association of Collegiate Schools of Planning, October 21-23, 1983, San Francisco.
- http://www.petervschaeffler.com/uploads/7/4/3/3/74334295/rights_in_land_and_planning_behavior.pdf
- Kerr, Donna H. 1976. "The Logic of 'Policy' and Successful Policies." *Policy Sciences* 7: 351-363.
- Marschak, Jacob. 1974. *Economic Information, Decision and Prediction: Selected Essays*, Vol. II, Dordrecht, Netherlands; D, Reidel Publishing Co.
- Moore, Terry. 1978. "Why Allow Planners to Do What They Do? A Justification from Economic Theory." *Journal of the American Institute of Planners* 44(4): 387-398.
- Olson, Mancur. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, Mass: Harvard University Press.
- O'Mara, Paul. 1973. "The Aurora New Town Story: Who's to Plan the Region," *Planning* 39(12): 8-11.
- Popkin, Samuel L. 1981. "Public Choice and Rural Development – Free Riders, Lemons, and Institutional Design." In Clifford S. Russel and Norman K. Nicholson, editors, *Public Choice and Rural Development*. Washington, DC: Resources for the Future: 43-80.
- Raiffa, H. 1968. *Decision Analysis*. Reading, Mass: Addison-Wesley.
- Riker, William H. and Peter C. Ordeshook. 1973. *An Introduction to Positive Political Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Rimavicius, Lucia E. 1982. "Public/Private Partnerships as a Mechanism for Revitalizing Declining Downtowns: A Look at Urbana, Illinois." Unpublished manuscript, Department of Urban and Regional Planning, University of Illinois, Urbana, Illinois.
- Saunders, Peter. 1980. *Urban Politics: A Sociological Perspective*. Hammondsworth, England: Penguin Books.

Schaeffer, Peter V. and Lewis D. Hopkins. 1985. "Planning Behavior: The Economics of Information and Land Development." Planning Paper 85-1, Department of Urban and Regional Planning, University of Illinois at Urbana-Champaign.

Skjei, Stephen S. 1973. *Information for Collective Action*. Boston: Lexington.

Strotz, R.H. 1956. "Myopia and Inconsistency in Dynamic Utility Maximization." *Review of Economic Studies* 23(3): 165-180.

Topping, Kenneth C. 1982. "Thinking Big in California." *Planning* 48(9): 16-20.

Webber, Michael J. 1984. *Explanation, Prediction, and Planning*. London: Pion Ltd.

Wildavsky, Aaron. 1973. "If Planning is Everything, Maybe it's Nothing." *Policy Sciences* 4(2): 127-153.

Suggestions for further reading:

Since we wrote this paper, both of us have continued to work on this topic. The interested reader may find the following more recent references useful.

Lewis D. Hopkins, 2001. *Urban Development: The Logic of Making Plans*. Washington, DC: Island Press.

Lewis D. Hopkins and Marisa Zapata, editors, 2007. *Engaging the Future: Forecasts, Scenarios, Plans, and Projects*. Cambridge, MA: Lincoln Institute of Land Policy.

The following reference is relevant to understanding cooperative projects and planning, specifically between private and public entities:

Peter V. Schaeffer and Scott Loveridge, 2002. "Toward an Understanding of Types of Public-Private Cooperation." *Public Performance and Management Review* 26(2): 169-189