The development of Milton Keynes offers physical planners and designers a remarkable opportunity for evaluation, research, and scholarship. The planning process for the new city itself generated a trail of evidence on attitudes, ideas, and arguments that went into the making of the plan. The two volumes of the plan itself and the ten supporting technical supplements are part of this evidence.1 The Milton Keynes Development Corporation (mkdc), in advocating the plan, committed itself to a program of monitoring and evaluation that would "allow the Corporation to measure the success of plans and policies and therefore provide a basis for future action and any new decision which this requires."2 As a part of this monitoring and evaluation program, from time to time the Corporation has undertaken and published surveys of resident attitudes and comments on the capacity of the plan to respond to social and economic change.3 And Milton Keynes as a new town is best to a range of vibrant and informed scholars at the Open University who have offered their own commentary and counterproposals. Not only does the development of the new city provide an opportunity for scholarship, but also the plan itself states the imperative for study and examination. In the foreword to the plan, written by Lord Campbell, Chairman of the m kdc in 1970, the intention is stated as "the Plan shall lay the foundations upon which an organic process of development will grow and become a living reality as the people who come after us plan and build for the future... and as the need of those who live in it change (there will be) a continuing process of research and consultation between the Corporation and the citizens of Milton Keynes."4

On the face of it, Jeff Bishop's article elsewhere in this issue would seem to be simply a desirable and welcome part of this process. His description and analysis of resident attitudes in Milton Keynes, however, is presented in such a way as to indicate that he has really missed some important and fundamental principles of the plan itself, not least of which is that research be an integral rather than a challenging part of a process of development expressly intended to avoid any fixed and inviolable end design. Some questions always lies behind research, and the appropriate framing of that question is an important key to successful research. When the question—whether before or after the event—is linked to policy in association with policy issues has to be clear. Bishop frames his question around what he describes as a perceived mismatch between "the form of the New Town and the proposed Master Plan" and ends up asking: "Do the public who live in these places (British New Towns) share the perceptions, values, and attitudes of those who plan them?" The question has some sociological interest and the answers may bear upon the way professional organizations develop their own value frameworks—compatible with or distinct from those of client groups, for example—but the policy point of the question is elusive. If the answer is "yes," in what way is that better than if the answer were to be "no," and does any practical action emerge from either answer? If we acknowledge that there are good political as well as professional reasons for knowing how far planner and planned for differ in outlook (putting aside for the moment its relevance to the issues Bishop goes on to deal with), we see that Bishop gives us only one-half of the picture. We may learn something of what planners think, but the values, perceptions, and attitudes of the planner are nowhere documented or computed; and such indirect references as are made imply that irrespective of what they are they are identical over time, place, and individual. Certainly the planners of Milton Keynes must include the development corporation and consultant team responsible for the plan for Milton Keynes as published in 1970, but the new city's planners must also include the many
members of the development corporation team that has had the task of preparing structure and action plans within the plan's framework over the last 14 years.

Bishop's article suggests that the planners held "traditional ideas about overall coherence, right line form, landmarks, and intercon- nectiveness" but does not identify which of the city's many planners may have held these ideas or when or in what form they were manifest. He suggests that professional visitors to Milton Keynes may have been concerned with these issues. If so, their concerns, while interesting, do not help us understand any better the relationship between the planners and the planned. Bishop's study seems to indicate that residents do indeed appear to grasp the structure of the city at least in terms of being able to take advantage of the grid roads to give access to different opportunities and to be able to describe their patterns of use of the centers and roads, but it implies that this came as a surprise to "the planners" without explaining who they were and what the basis for any contrary judgments may have been.

Given that we do not know which planners Bishop refers to, we do at least know broadly which "planners for" group he is interrogating: those living in Milton Keynes in the late 1970s—when the city is only in its tenth year and when despite its many achievements or short-comings it would be per- cipient to describe it as "built." We also know that he asked such residents the question: "Do you think you are living in a city?" Again, what are we to make of their answers, particularly if one does not have a common understanding of why the question was asked or what was meant by a city—at any stage of its building program.

Because Bishop roots his critique of the Milton Keynes' planners and his policy conclusions in the historical context of the city's development, it is important to correct some of the assertions that he makes about that context.

Bishop correctly characterizes the Mark I (1940s) new towns and Mark II (1950s) new towns in terms of their recognizable physical properties and their approach to planning—particularly at a neighborhood scale. However, in his description of the so-called "Mark III" new towns of the 1960s he oversimplifies their purpose as well as their structure. Milton Keynes, for example, was conceived explicitly as a part of a regional strategy for south- east England and sought to account for part of the absolute growth in the population and region. It was not—as were the earlier new towns—"aimed spe- cifically at those living..."
amongst urban decay." While, as Bishop states, it is true that Milton Keynes and many of its expanded towns contemporaries such as Northampton, Swindon, and others give much less emphasis to self-containment and more encouragement to private housing, it is hard to find the evidence that this was brought together in the spring of 1967. The Corporation's own guidelines for competing consulting firms in the summer of 1967 emphasized much contemporary thinking on the role of the new towns that was later to appear in the plan. For example, the Corporation emphasized the need for flexibility and for close attention to the complexities of phasing and implementation of the plan, in such a way as to ensure that at each stage the new town provided a good environment for living, working, and recreation. The firm of Llewelyn-Davies Weeks Forester-Walker & Bor (LFDWB), in their successful response to the brief, set out a particular philosophy in terms of planning for change, elements of which appear and reappear in the later formulation of the plan. There were other direct sources of planning experience as well—the professional staff gathered by the Corporation individually had experience in a variety of new towns and local government settings. In the case of Belize, the residents of the area had already been part of a major planned expansion scheme undertaken by the London County Council and later the Greater London Council.

2 The new city was designated in 1967 to occupy 3,300 acres and to be planned for a population of 250,000 by the turn of the century. At that time, 45,000 people lived in the designated area in the towns of Bledisloe, Wyckerton and Stone, Stratford, and in a dozen small villages including the village of Milton Keynes.
The general character of the land dates from the 17th and 18th centuries: larger fields, hedges, and lanes with nearly all building in villages and towns. The ground form rises about 60 meters from two north/south streams to a central ridge.

The plan for Milton Keynes was prepared over the period 1967–1970 by the ministry and a consultant team led by the firm of Unwin, Davis, Weeks, Forester-Walker & Bar.

The plan proposed that the building of the new city begin in the north and south and proceed in a way that would join the major existing towns in a crescent of new development by about 1980. This has now been realized and in 1984 there are 140,000 people living in Milton Keynes.
At the time of an initial series of seminars debating goals and directions for Milton Keynes in December 1967 and January 1968, a wide range of views became apparent. At the same time, however, some evident and powerful support of the concept of planning the city in a way that would allow for change and a future less constrained by the past emerged and was reinforced by the early work by Lewelyn Davies on the design of hospitals for growth and change.

In their studies of growth and change of hospitals John Weeks and Richard Llewelyn-Davies paid particular attention to unpredictability of health-service demand, policies and technologies beyond a very limited period of time, and, thus, the importance of arranging buildings in a geometry that would allow for unpredicted and new arrangements of activities. In the planning of Washington new town by Llewelyn-Davies during the period 1963–1964, the same ideas were expounded, especially in the interim plan. As the final report for Washington acknowledges, the ideas concerning the geometries for growth and change play a major influence in those proposals even through the uniform grid of the interim Washington plan proved impractical when confronted with the uneven regional traffic routes crossing the new town site.

The spirit of these ideas appears again in the plan for Milton Keynes:

... the central aim of the plan is to arrange these necessary fixed elements [transport, drainage, water supply] in a new city so as to allow the greatest possible scope for freedom and change, as it is built. They have also been planned as far as possible to allow wide variety in patterns of life and the greatest possible choice for the future. ... But at Milton Keynes it will be necessary for the thinking and planning process to be continued throughout the period of building. It is considered likely that policies and patterns of building which are appropriate in the early years of development will have to change long before the city is finished. The plan provides this freedom but it can only be exploited if systematic monitoring and evaluation are undertaken and plans and programs are correspondingly reviewed, developed, and changed to meet new circumstances and the wishes of the people of the new city."

Historically, then, the plan for Milton Keynes as a whole expressly sought the accommodation of change and new thinking in the light of fresh thinking and evidence. In so far as this principle is exemplified by Bishop’s discussion of neighborhoods it is necessary again to refer to the history of the plan’s development on this matter. In initial discussions about where people would live in the new city the term “neighborhood” was, in fact, avoided as long as possible to lessen the risk of conniving a particular social or community order, along the lines, perhaps, of what Bishop refers to as “the determining, and inhibiting effects of the neighborhood concept.” Together with the consultants and the corporation’s team members, a number of wise and interested academics were involved in these discussions. Mel Webber was one, but it would be unfair to him and to other contributors such as Kevin Lynch, Peter Cowan, and David Bottman, to suggest that the residential areas of Milton Keynes were planned as simply and directly on his ideas of “community without propriety,” for example. In fact, the conclusions drawn about residential areas—or neighborhoods, if we have to use the term—were the result of many contributions and lengthy and earnest debates. They reflected thorough and systematic interrogations of earlier new town experience, the review of goals and objectives by the planning team, and the array and evaluation of a wide range of possible options, all enhanced by the insights and experience of many urban experts and commentators, and influenced significantly by Bishop’s discussion of a geometry that would allow...
persuasive and accessible public transport. In this regard the plan stressed..., that the environmental area within the main road grid is not proposed as a 'community or 'neighbourhood'. There is little or no evidence available that would suggest that a particular site or unit or grouping of units is more or less appropriate socially or administratively. Therefore, the proposals are made in such a way as to permit the maximum freedom of social development, movement, and choice. In concept, the grid of main roads can be regarded as being superimposed on networks of pedestrian routes and local roads that continue across the grid. The areas within the grid of main roads are not self-sufficient and isolated areas or any number of areas can be regarded as a unit according to the function being considered."

Taken as a whole, Bishop's message seems to make something of a virtue out of a research finding necessity: that despite certain intentions and purposes (that be misconstrued) of the plan, residents are behaving in ways that suggest that those (nonexistent) constraints do not create obstacles to the use of Milton Keynes in ways they enjoy (and which were intended by the plan)!

The point could be left here, but in light of the material presented by Bishop on places, paths, and roads it seems important to clarify the principles behind the original plan on these matters also. Authorship of the proposals and purposes that follow refers to their acceptance by the consultant, by client teams, and by their political masters of the time.

There are four areas in the proposals that deserve mention in this context: the distribution of preferred or special places, the road and public transport pattern, the way in which uses are located and categorized, and the proposals for local places and associations.

In a deliberate attempt to distribute opportunities for city residents in space and through time the plan proposed half a dozen or more locations throughout the city where unique major activities would be located. The new city center was one obvious such activity, but the locations also included a major city health facility, the Open University campus, the College of Further Education, and possible major subcenters on the east and west flank of the city likely to be developed toward the end of the century. The intention behind these proposals was to create for the residents in every part of the city an association with at least one of the citywide functions. These locations also allowed space for expansion and provided
Every case these special places were proposed to have an "address" on the main road system, that is, to be visible and obviously accessible from that system. At the same time it was hoped that the buildings and activities located in these special places would be designed in such a way that the city's path and pedestrian system would penetrate the site and building form and that the activities would use that local movement system as a piece of their internal infrastructure. The same principle was proposed for activities of more local importance and of which there may be more than one in the new city, such as the major secondary school clusters, industrial estates, recreation buildings, health centers, and so on. These activities again were distributed throughout the city so that appropriate sites would be available when critical growth points were reached in the development of the city, giving, in turn, a particular set of opportunities and associations to the residential areas nearby.

The road system for Milton Keynes is, perhaps, the most conspicuous feature of the plan—especially in terms of the departure from earlier British new town practice. It was proposed as a deliberate response to the probability that at that time of far greater use of the motor vehicle in a future environment in Britain. It was also proposed to offer the most efficient and the highest potential standard of public transport service from the beginning of the new city's development. In the plan the main roads were seen as analogues of main roads in towns and villages, i.e., as a place from which one sees the principal activities of a town or a city and as roads that take on the character of the neighboring development. It was also felt to be very important that the experience of the city as a place when seen from shared or public transport be the same as that experienced by those using individual cars from both modes that 7. On this land the plan proposed a grid of main roads carrying public transport and faster moving traffic. The grid is bent to fit existing major routes, villages, topography, and woods.

8. A looser mesh of minor roads lies over the grid of main roads and a counterpart grid of main pedestrian/bike paths was proposed generally crossing main roads at midblock points (bus stops).

9. The places near these crossing points are possible locations for activities serving any part of the city.

10. Activities that serve city and region are located at different places in the city and two major park systems follow the stream valleys.
11 The plan proposed that the character of residential areas differ greatly as a product of local variations in policy and constraints and that a deliberate effort be made to achieve diversity in design at the finest possible grain.

12 The plan proposed that travel on the main roads will be an important way of experiencing the city and that each road would have a special character. Design variables include: carriageways separated with landscaped median; "hard" edge of buildings; "soft" edge of landscaping integrated with adjoining use; carriageways close together, passing through an activity center; view of adjoining area provided from road; carriageways separated and at different levels to suit topography.

Experience should be as revealing, as enjoyable, and as instructive as possible. By having the main roads as the principal channel for shared transport and by spacing the two-stops giving access to this transport reasonably widely, it was hoped that an efficient and reasonably high-speed public transport system could be implemented. These considerations were very important in selecting the fairly closely spaced mesh of the main road network (1 kilometer) in each direction. That close spacing, in turn, was intended to keep intersections simple and the walking distances to shared transport of no more than 750 meters or so.

In proposing a distribution of activities throughout the city, a system was used that did not require unrealistic, categorical precision. For example, it was recognized that employment opportunities would be available to greater or lesser extent in every category of land use and while there would obviously be concentrations at centers and at areas set aside specifically for industrial use it was also policy to allow employment at small local centers and even within residential areas.

Another departure from previous practice in new towns was the explicit avoidance of any policy concerning housing densities. The distribution of densities indicated in the plan reflected the predictions of the planning team and not any particular policies or concepts favored by the Corporation. These predictions, in turn, were based on the current patterns of demand and design elsewhere in Britain from which it was not expected Milton Keynes would depart significantly except insofar as it was thought likely to experience a higher percentage of privately sponsored dwellings at perhaps lower densities than had been previously seen in new towns. Thus the plan specifically treated density as the residual of behavioral research and local policies—local in time and local to the particular development in question.

Early in the planning process it was advocated that every site, every agent, every sponsor, and—ideally—every user in the city should be able to influence the quality and nature of place created. Thus, the task of those prescribing an overall structure and set of policies for locating activities was to provide for a system of possible associations that can be developed or not as the need arises. This approach led to the notion that at any center could be activities serving a small or a large hinterland and that residents would be able and likely to develop links to any number of centers and places throughout the city. The essence of this approach was to let local events together
with terrain, ecology, and site influence the making of places. The approach put forward certain principles and illustrations for exploiting the opportunities inherent in the larger pattern of a continuous mesh of pedestrian routes, local roads, and main roads, and is advocated as careful and systematic evaluation of what was achieved as each new center and place was developed.

Such a framework, deliberately creating freedoms for future designers and planners to exploit, is one that, as Bishop's article makes clear, has, indeed, been used as intended. At times, the flexibility seems to have stretched to a point at which some of the fundamental ideas are no longer recognizable, but this is the price as well as the purpose of the plan. What has not yet been accomplished, which would make a major contribution to the theory and practice of urban design and planning, is a rigorous examination of the outcome of each of the different ways in which the plan has been interpreted.

There are a number of very practical measures by which one might evaluate the quality of place and path in Milton Keynes. Has the system in fact resulted in a system of lower costs, higher quality, and accessibility at the pedestrian, shared transport, and private transport scale? Has the pattern provided for in the plan truly enabled a change through time, reflecting contemporary pressures, e.g., for energy conservation, for reduction in housing size, or for large-scale and—occasionally—very high rates of construction? Is the form and content of the city as it emerges apparent from the main road system or is it, indeed, now veiled in a system of landscaping and all but invisible to users of the main roads? How has Milton Keynes faced given the potential for adapting and changing local places to meet local requirements in the content for economic development and business growth? These are all questions that could be addressed in both absolute and comparative terms. The very existence of an implementing resource as versatile and substantial as the MKDC, and the scale and speed with which Milton Keynes has been developed, invites these questions to be addressed.

In the process of answering such other questions, it is, of course, vital that the residents be consulted. It is, after all, their experience of the city that marks its success. The appreciation of resident experience and response, however, cannot be encapsulated in answers to questions that do not satisfactorily interrogate what it is we need to know, from a practical or even theoretical point of view. It bears repeating often that the much needed collaboration of social researchers with urban planners and policy-makers in the evaluation and development of their work hinges on a mutual appreciation of purpose and intent. In the case of Milton Keynes a good starting point would always be the plan itself.

2 Ibid., p. 98.
3 Among others these include a report prepared in 1975 by B. Barron (skds), Lord Llewelyn-Davies (Llewellyn) and P. Chapman (Open University) entitled Flexibility and the report prepared in 1977 by the source entitled Seven Years On or, a summary of the 1976 Household and Employers Survey.
4 Milton Keynes Development Corporation, op. cit., p. vi.
10 Milton Keynes Development Corporation, op. cit., Volume One, p. 35.