

# 1 Planning, planners and plans

Planning, the subject matter of this book, is an extremely ambiguous and difficult word to define. Planners of all kinds think that they know what it means; it refers to the work they do. The difficulty is that they do all sorts of different things, and so they mean different things by the word; planning seems to be all things to all people. We need to start by defining what exactly we are discussing.

The reference in the dictionary gives one clue to the confusion. Whether you go to the *Oxford English Dictionary* or the American *Webster's*, there you find that the noun 'plan' and the verb 'to plan' have several distinct meanings. In particular, the noun can either mean 'a physical representation of something' – as for instance a drawing or a map; or it can mean 'a method for doing something'; or 'an orderly arrangement of parts of an objective'. The first meaning, in particular, is quite different from the others: when we talk about a street 'plan' of London or New York, we mean something quite different from when we talk about our 'plan' to visit London or New York next year. But there is one definition that combines the others and blurs the distinction, as when we talk about a 'plan' for a new building. This is simultaneously a physical design of that building as it is intended to be, and a guide to realizing our intention to build it. And it is here that the real ambiguity arises.

The verb 'to plan', and the nouns 'planning' and 'planner' that are derived from it, have in fact only the second, general group of meanings: they do not refer to the art of drawing up a physical plan or design on paper. They can mean either 'to arrange the parts of', or 'to realize the achievement of', or, more vaguely, 'to intend'. The most common meaning of 'planning' involves both the first two of these elements: planning is concerned with deliberately achieving some objective, and it proceeds by assembling actions into some orderly sequence. One dictionary definition, in fact, refers to what planning does; the other, to how planning does it.

The trouble arises because, although people realize that planning has this more general meaning, they tend to remember the idea of the plan as a physical representation or design. Thus they imagine that planning must include the preparation of such a design. Now it is true that many types of planning might require a physical design, or might benefit from having one: planning is often used in the production of physical objects, such as cars or aeroplanes or buildings or whole towns, and in these cases a blueprint of the desired product will certainly be needed. But many other types of planning, though they will almost certainly require the production of many symbols on pieces of paper, in the form of words or diagrams, may never involve the production of a single exact physical representation of the entity which is being produced.

For instance, the word 'planning' is today applied to many different human activities – in fact, virtually all human activities. One almost certainly needs a plan to make war; diplomats make contingency plans to keep the peace. We talk about educational planning: that does not mean that every detail of every class has to be planned by some bureaucracy

(as happens, by repute, in France), but merely that advance planning is necessary if students are to find classrooms and libraries and teachers when they arrive at a certain age and seek a certain sort of education. We talk about planning the economy to minimize the swings of boom and slump, and to reduce the misery of unemployment; we hear about a housing plan and a social-services plan. Industry now plans on a colossal scale: the production of a new model of a car, or a personal computer, has to be worked out long in advance of its appearance in the shops. And all this is true, whatever the nature of the economic system. Whether labelled free enterprise or social-democratic or socialist, no society on earth today provides goods and services for its people, or schools and colleges for its children, without planning. One might regret it and wish for a simpler age when perhaps things happened without forethought; if that age ever existed, it has gone for ever.

The reason is the fact of life everybody knows: that modern society is immeasurably more complex, technically and socially, than previous societies. Centuries ago, when education involved the simple repetition of a few well-understood rules which were taught to all, and when books were non-existent, the setting up of a school did not involve much elaborate plant or the training of specialized teachers. The stages of production were simpler; wood was cut in the forest, people wrought it locally into tools, the tools were used by their neighbours, all without much forethought. But today, without elaborate planning, the complex fabric of our material civilization would begin to crack up: supplies of foodstuffs would disappear, essential water and power supplies would fail, epidemics would rapidly break out. We see these things happening all too readily, after natural or human disasters like earthquakes or wars or major strikes of railway- or power-workers. Though some of us may decide to opt out of technological civilization for a few years or for good, the prospect does not seem likely to appeal to the great mass of humankind even in the affluent world. Those in the less affluent world are in much less doubt that they want the security and dignity that planning can bring.

The point is that the sorts of planning which we have been discussing in these last two paragraphs either may not require physical plans at all, in the sense of scale blueprints of physical objects, or may require them only occasionally or incidentally. Planning is more likely to consist, for the most part, of written statements accompanied by tables of figures, or mathematical formulae, or diagrams, or all these things. The emphasis throughout is on tracing an orderly sequence of events which will achieve a predetermined goal.

Consider educational planning as an example. First, the goal has to be fixed. It may be given externally, as a situation which has to be met: to provide education which will meet the expected demands ten years hence. Or there may be a more positive, active goal: to double the numbers of scientists graduating from the universities, for instance. Whatever the aim, the first step will be a careful projection which leads from the present to the future target date, year by year. It will show the number of students in schools and colleges and the courses that will be needed to meet whatever objective is stated. From this, the implications will be traced in terms of buildings, teachers and materials. There may need to be a crash school-building programme using quickly assembled prefabricated components, a new or a supplementary teacher-training programme or an attempt to win back married women into teaching, or a new series of textbooks or experiments in web-based learning, all of which in turn will take time to set in motion and produce results. At critical points in the process, alternatives will be faced. Would it be more economical, or more effective, to increase teacher supply or concentrate on a greater supply of teaching material through the Internet? Could better use be made of existing buildings by better overall coordination, rather than by putting up new buildings? Ways will need to be found of evaluating these choices. Then, throughout the lifetime of the programme, ways will need to be found of monitoring progress very closely to

take account of unexpected failures or divergences from the plan or changes in the situation. In the whole of this complex sequence the only scale models may be the designs of the new schools or of the IT system and a few other details – a small part of the whole, and one which comes at a late stage in the process, when the broad outlines of the programme are determined.

To summarize, then: planning as a general activity is the making of an orderly sequence of action that will lead to the achievement of a stated goal or goals. Its main techniques will be written statements, supplemented as appropriate by statistical projections, mathematical representations, quantified evaluations and diagrams illustrating relationships between different parts of the plan. It may, but need not necessarily, include exact physical blueprints of objects.

## The application to urban and regional planning

The difficulty now comes when we try to apply this description to the particular sort of planning that is the subject matter of this book: urban and regional planning (or, as it is often still called, town and country planning). In many advanced industrial countries, such as Britain, the United States, Germany or Japan, the phrase ‘urban planning’, or ‘town planning’, is strictly a tautology: since a great majority of the population are classed in the statistics as urban and live in places defined as urban, ‘town planning’ seems simply to mean any sort of planning whatsoever. In fact, as is well known, ‘urban planning’ conventionally means something more limited and precise: it refers to planning with a spatial, or geographical, component, in which the general objective is to provide for a spatial structure of activities (or of land uses) which in some way is better than the pattern existing without planning. Such planning is also known as ‘physical planning’; ‘spatial planning’ is perhaps a more neutral and more precise term.

If such planning centrally has a spatial component, then clearly it only makes sense if it culminates in a spatial representation. Whether this is a very precise and detailed map, or the most general diagram, it is to some degree a ‘plan’ in the first, more precise meaning of the term. In other words, it seems that urban planning (or regional planning) is a special case of general planning, which does include the plan-making, or representational, component.

Broadly, in practice this does prove to be the case. It is simply impossible to think of this type of planning without some spatial representation – without a map, in other words. And whatever the precise organizational sequence of such planning, in practice it does tend to proceed from very general (and rather diagrammatic) maps to very precise ones, or blueprints. For the final output of such a process is the act of physical development (or, in some cases, the decision not to develop, but to leave the land as it is), and physical development, in the form of buildings, will require an exact design.

A great deal of discussion and controversy in recent years tends to have obscured this fact. In most countries spatial or urban planning as practised for many years – both before the Second World War and after it – was very minute and detailed: the output tended to consist of very precise large-scale maps showing the exact disposition of all land uses and activities and proposed developments. During the 1960s such detailed plans were much attacked: planning, it was argued, needed to concentrate much more on the broad principles rather than on details; it should stress the process, or time sequence, by which the goal was to be reached, rather than present the desired end-state in detail; it should start from a highly generalized and diagrammatic picture of the spatial distributions at any point of time, only filling in the details as they needed to be filled in, bit by bit. This, as we shall see later, is the essential difference in Britain

between the system of local town and country planning introduced by the historic Town and Country Planning Act of 1947, and the system which replaced it under the Town and Country Planning Act of 1968.

The central point, though, is that this type of planning is still essentially spatial – whatever the scale and whatever the sequence. It is concerned with the spatial impact of many different kinds of problem, and with the spatial coordination of many different policies. Economic planners, for instance, are concerned with the broad progress of the economy, usually at national and sometimes at international level: they look at the evolving structure of the economy, in terms of industries and occupations, at the combination of the factors of production which brings forth the flow of goods and services, at the income thus generated and its reconversion into factors of production, and at problems of exchange. Regional economic planners will look at the same things, but always from the point of view of their particular spatial impact: they consider the effect of the variable, geographical space and distance, on these phenomena. Similarly, social planners will be concerned with the needs of the individual and the group; they will be concerned with the changing social structure of the population, with occupational mobility and its effect on lifestyles and housing patterns, with household and family structure in relation to factors like age and occupation and educational background with household income and its variation, with social and psychological factors which lead to individual or family breakdown. The social planner in the urban planning office shares the same interests and concerns, but sees them always with the spatial component: s/he is concerned, for instance, with the effect of occupational mobility on the inner city – as against the new suburb – on changing household structure as it affects the housing market near the centre of the city, and on household income in relation to items like travel cost for the low-income family whose available employment may be migrating to the suburbs.

The relationship between urban and regional planning and the various types of specialized planning, in these examples, is interestingly like the relationship of geography, as an academic subject, to other related social sciences. For geography also has a number of different faces, each of which stresses the spatial relationship in one of these related sciences: economic geography analyses the effect of geographic space and distance on the mechanisms of production, consumption and exchange; social geography similarly examines the spatial impact upon patterns of social relationship; political geography looks at the effect of location upon political actions. One can argue from this that spatial planning, or urban and regional planning, is essentially human geography in these various aspects, harnessed or applied to the positive task of action to achieve a specific objective.

Many teachers in planning schools would hotly deny this. They would argue that planning, as they teach it, necessarily includes many aspects which are not commonly taught in geography curricula – even those that stress the applications of the subject. The law relating to the land is one of these; civil engineering is another; civic design is another. This is true, though many would argue – both inside the planning schools, and out – that not all these elements are necessary to the planning curriculum. What does seem true is that the central body of social sciences which relate to geography, and whose spatial aspects are taught as parts of human geography – economics, sociology, politics and psychology – does form the core of the subject matter of urban and regional planning. By ‘subject matter’ we mean that which is actually planned. It is, however, arguable that there is another important element in planning education, not covered in this body of social science: that is, the study of the process of planning itself – the way we assume control over physical and human matter, and process it to serve their defined ends. According to this distinction, ‘planning method’ would be what is common to the education of all kinds of planners – whether educational, industrial, military or any

other; geography and its related social sciences would constitute the peculiar subject matter of that particular division of planning called urban and regional.

## **‘Planning’ as an activity**

What then would this core of planning education – the study of planning process – comprise? This is a basic question which ought to have been the subject of intense debate in schools of planning. But curiously, for a long time it was avoided – the reason being, apparently, that planning education was seen as education in making physical plans, not education in planning method. The first people to raise the question seriously were not teachers of physical planning, but teachers of industrial or corporate planning, in the American business schools. There, up to about 1945, education in management was usually based on a rather narrow spectrum of skills in applied engineering and accounting; the aim was to obtain maximum efficiency in plant operation, both in an engineering sense and in an accounting sense, and little attention was given to the problems of decision-taking in complex situations. But during the 1950s, partly as the result of the work of such fundamental thinkers as Chester Barnard, Peter Drucker and Herbert Simon, management education was transformed. First, it developed into a science of decision-making, which borrowed freely from concepts in philosophy and politics, and second, it harnessed the thinking of a number of social sciences, such as economics, sociology and psychology. It was this new tradition in corporate planning which began, after about 1960, to affect the direction and content of education for physical planning.

By this time, however, management education had further evolved. With the development of computerization in management and planning of all kinds, there was increasing interest in the development of sophisticated control systems which would automatically control machinery. Such systems, of course, were only a development of earlier experiments in automation, which can be dated right back to the origins of the Industrial Revolution; but progress in this field took a big leap forward with the rapid development of more complex computers during the 1950s. Yet even before this, a remarkable original thinker, Norbert Wiener of Harvard, had anticipated the development and much more. In a book published in 1950, *The Human Use of Human Beings*, he had suggested that automation would liberate the human race from the necessity to do mundane tasks. But further, he proposed that the study of automatic control systems was only part of a much larger science of cybernetics,<sup>1</sup> which he defined in the title of a book published in 1948 as the science of ‘Control and Communication in the Animal and the Machine’. According to Wiener, animals and especially human beings have long possessed extremely complex communication and control mechanisms – the sort of thing the computer was then replicating. Human societies, Wiener suggested, could be regarded as another manifestation of this need for communication and control.

Thus a new science was born. Rapidly developing in the late 1950s and 1960s, it had a profound influence on research and education in management, and particularly in planning. For if human arrangements could be regarded as complex interrelating systems, they could be paralleled by similar systems of control in the computer, which could then be used to monitor developments and apply appropriate adjustments.

The best analogy, much quoted at that time, was manned space flight. In an expedition to the moon most of the adjustments to the spacecraft were made not by the astronauts but by an extraordinarily complex computer-control system on earth at Houston, Texas. Similarly, it is argued, the development of cities and regions could be controlled by a computer which received information about the course of development in a particular area, related this to the objectives which had been laid down by the planners for the

development during the next few years and thus produced an appropriate series of adjustments to put the city or the region 'on course' again.

In practice this insight has been very useful for the way we think about the physical or spatial planning. Information systems are now used very widely in the planning process. And, as we shall see in later chapters of this book, it has profoundly affected the way planners think about their job and the way they produce plans. In essence it has led to a swing away from the old idea of planning as production of blueprints for the future desired state of the area, and towards the new idea of planning as a continuous series of controls over the development of the area, aided by devices which seek to model or simulate the process of development so that this control can be applied. This in turn has led to a complete change in the sequence of the planners' work. Formerly, at any time from about 1920 until 1960, the classic sequence taught to all planning students was survey–analysis–plan. (The notion of survey before plan had first been worked out, and taught, by a remarkable British pioneer in planning, Patrick Geddes; his work is discussed in more detail in Chapter 3.) The terms were self-explanatory. First, the planner made a survey, in which s/he collected all the relevant information about the development of his or her city or region. Then s/he analysed these data, seeking to project them as far as possible into the future to discover how the area was changing and developing. And third, s/he planned: that is, s/he made plans which took into account the facts and interpretations revealed in the survey and analysis, and which sought to harness and control the trends according to principles of sound planning. After a few years – the British Planning Act of 1947 laid down that the period should be every five years – the process should be repeated: the survey should be carried out again to check for new facts and developments, the analysis should be reworked to see how far the projections needed modifying and the plan should be updated accordingly.

The new planning sequence, which has replaced this older one as orthodoxy, reflects the approach of cybernated planning. It is more difficult to represent in words because it is a continuous cycle; more commonly, it is represented as a flow diagram. But, to break into the flow for purposes of exposition, it can be said to start with the formulation of goals and objectives for the development of the area concerned. (These should be continuously refined and redefined during the cycles of the planning process.) Against this background the planner develops an information system which is continuously updated as the region develops and changes. It will be used to produce various alternative projections, or simulations, of the state of the region at various future dates, assuming the application of various policies. (The aim is always to make this process as flexible and as varied as possible, so that it is possible to look at all sorts of ways of allowing the region to grow and change.) Then the alternatives are compared or evaluated against yardsticks derived from the goals and objectives, to produce a recommended system of policy controls which in turn will be modified as the objectives are re-examined and as the information system produces evidence of new developments. Though it is difficult to put this new sequence into a string of words like the older one, it might be succinctly described as goals–continuous information–projection and simulation of alternative futures–evaluation–choice–continuous monitoring. Something like this sequence, with some differences in words and in ordering, can be found in several important and well-known accounts of the planning process written in the 1960s and early 1970s.

## Objectives in planning – simple and complex

In practice, as has been said above, this is a great improvement. It means that the whole planning process is more clearly articulated, more logical and more explicit. It is obviously

better that planners should start with a fairly exhaustive discussion about what they are seeking to achieve and that they should go on having this discussion during the whole planning process. It is better, too, that different alternatives for the future should be developed, so that they can be openly discussed and evaluated. And the emphasis on specific evaluation, using certain fixed criteria, is an advance. Planning is now much more flexible, working with much greater information. And it is more rational – at least potentially so.

Nevertheless, the alternative system has proved to create many new problems and pitfalls of its own. The development of computerization does not make planning easier, in the sense that it somehow becomes more automatic. There may be many automatic aids to smooth out tedious processes, such as detailed calculations; but they do not diminish the area of human responsibility – the responsibility to take decisions. And the basic difficulty is that it is more difficult, and finally less feasible, to apply cybernation to most urban planning problems than it is to apply it to the job of getting human beings on the moon.

At first sight this may seem absurd: nothing could be more complex than space travel. But this is to mix up levels of complexity. Space travel (or, indeed, commercial aviation) presents many technical problems, but there are two features that make it basically simple. First, the objective is clearly understood. Second, the processes involved are nearly all physical: they are subject to laws of physics, which are much better understood, and which appear to be more regular in their application, than laws of human behaviour. (There are human beings involved, of course, but in practice they are reduced to little more than biological units for most of the voyage.) The kind of planning that most resembles space travel is transportation planning, and it is significant that this was where computerized systems planning had its earliest and most successful applications.

Elsewhere, it has proved harder. That is because it is inherently more complex. First, the basic objective is not well understood; there is clearly more than one objective, and perhaps dozens (economic growth, fair distribution of income, social cohesion and stability, reduction of psychological stress, a beautiful environment – the list seems endless). These objectives may not be readily compatible, and may indeed be contradictory. Second, most of the processes which need controlling are human processes, which are less well understood and work with much less certainty than laws in the physical sciences. Anyone who has studied any of the social sciences such as economics, sociology, psychology or human geography is familiar with this fact. Just as in these sciences we have to work with laws of statistical tendency rather than with laws which are constantly reliable in producing experimental results, so it will be in much of spatial or physical planning.

One point made in the last paragraph is relevant for our understanding of the particular nature of spatial planning. Earlier, we said that its method was shared with other sorts of planning activity; its subject matter was distinctively spatial, so that at some time, in some sense, it would produce spatial representations of how activities should be ordered on the ground. We now see that spatial planning, as we are using the term in this book – urban and regional planning, as it is conventionally termed – has another feature: it is multidimensional and multi-objective planning. It is necessary to specify these two linked attributes, because there are many types of planning which are ‘spatial’ in the sense that they are concerned with spatial arrangements on the earth’s surface, but have only a single dimension and a single objective. When sanitary engineers consider a sewer plan, their work certainly has a spatial component, but it is neither multidimensional nor multi-objective. (Or, to be more precise, even if the engineer thinks s/he has more than one objective, these are all engineering objectives within the same basic dimension.)

This engineer, or colleagues like the highway engineer or telephone engineer, are doubtless all working with plans which are spatial representations of their territory. But none of them will be trying (for instance) to balance the advantages of preserving a long-established inner-city society against the advantages of building better housing on an estate some distance away, or the problem of reconciling higher car ownership with the preservation of public transport for those who have no access to cars and the preservation of a decent urban environment, or the merits of segregating factory zones versus the merit of having local factories nearer to people's homes – all of these, and many more, being considered as part of the same planning process, and having finally each to be considered *vis-à-vis* all the others. This task of reconciliation is the essence of the job of the urban and regional planner; this is why, compared with most other sorts of job regarded as planning, it is so difficult.

It is difficult in two ways. First, the amount of necessary information and specialized expertise is so much greater than in most other planning activities: it covers almost the whole of human experience. The ideal urban and regional planner would have to be a good economist, sociologist, geographer and social psychologist in his or her own right, as well as having several other necessary physical-scientific skills, such as a good understanding of civil engineering and of cybernetics. To judge the quality of the information s/he was receiving, s/he would need to be a sophisticated (and even slightly sceptical) statistician. And s/he would need to be a highly competent systems analyst in order to develop the relationships with the computer control system with which s/he related. All of which, of course, constitutes an impossible specification – and a daunting task for the educationalist.

But second, and even more problematically, there is the need to frame and then weigh up different objectives. Consider a very typical (and very topical) type of planning controversy: the line of a new urban motorway. Some critics say that it would be quite unnecessary if public transport were adequate: some that the line should be shifted. The fact is that car ownership is rising, and this seems outside the planner's control; it is set by the political or social framework within which s/he acts. The projections (which may not be entirely reliable) suggest that the traffic will overwhelm the present road network, giving an environment to many thousands of people which, by current standards, is judged intolerable. The quality of public transport is declining, but the available evidence shows that better quality would not have much result in tempting people back from their cars and reducing the case for the motorway. One possible line for the motorway goes through a slum district due for early demolition and rebuilding; some sociologists say that the community should be rehoused *in situ*, others argue that many of the people would lead happier lives in a new town. Another line goes through open space which contains playing fields as well as the nesting grounds of several species of birds; local sports clubs and nature conservationists are united in opposing this line. The costs to the public purse are known in the two cases, but the benefits are dependent on the valuation of travel time for the likely motorway users, on which two groups of economists are hotly disputing. And the costs, or disbenefits, for different groups of the public affected by the building of the motorway are almost incalculable.

There are many varying interests and special academic skills, some of the practitioners of which cannot agree among themselves; the only person who seems competent to take any decision at all is someone whose training and thinking are supposed to encompass them all. This, of course is the general urban and regional planner. This is not the point at which to discuss the resolution of the problem just mentioned; in fact, there simply is no clear resolution, and the most the planner can do is to try to reach a decision within a clear and explicit framework – which, hopefully, the present style of planning helps him or her to do.



The example has been given simply to illustrate the unique quality, and the unique difficulty, of the sort of planning that is the subject matter of this book. To sum up: urban and regional planning is spatial or physical: it uses the general methods of planning to produce a physical design. Because of the increasing influence of these general methods, it is oriented towards process rather than towards the production of one-shot (or end-state) plans. Its subject matter is really that part of geography which is concerned with urban and regional systems; but the planning itself is a type of management for very complex systems. And further, it is necessarily multidimensional and multi-objective in its scope; this is what distinguishes it from the work of many other professionals whose work can fairly be described as planning with a spatial component.

## Structure of this book

The remainder of this book falls into five parts. Chapters 2 and 3 outline the early history of urban development in Britain, with special references to the changes brought about by the Industrial Revolution, and the contributions of notable early thinkers and writers on urban planning during the period 1880–1945. Chapter 4 takes the British story through the 1930s and 1940s, describing the new challenge of regional imbalance which appeared in the Great Depression of 1929–32, and the subsequent creation of the postwar planning machine following publication of the Barlow Report of 1940. Chapters 5 and 6 analyse the postwar history, and attempt to pass judgement on the performance of the planning system, first at broad regional level in respect of economic planning, then at the scale of the town and the city region in respect of urban planning. Chapters 7 and 8 attempt a comparative look at planning experience in other developed industrial countries, Chapter 7 for Western Europe and Chapter 8 for the United States. Lastly, Chapter 9 provides an outline of the sequence of urban and regional plan-making, with an introduction to some of the more important techniques involved at various stages of this process; it is deliberately written to provide a bridge to the more advanced textbooks of planning, which deal with these processes in more detail. But this book, as we have stressed in the Preface, must end there; it does not try to compete with those textbooks, but to provide the necessary historical framework of introduction to them.

## Further reading

Andreas Faludi, *Planning Theory* (Pergamon, 1973), is a good introduction to these questions. John Friedmann, *Planning in the Public Domain* (Princeton University Press, 1988), is the most comprehensive treatment. Good recent accounts are from Patsy Healey, *Land Use Planning and the Mediation of Urban Change: The British Planning System in Practice* (Cambridge University Press, 1988) and *Collaborative Planning: Shaping Places in Fragmented Societies* (Macmillan, 1997).

## Note

- 1 The word is derived from an ancient Greek word, meaning ‘helmsman’ or ‘oarsman’.