

# TOWN PLANNING—A MODERN NEED FOR MODERN MAN

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TOWN planning in its modern form is a relatively new science. It is new because never before in the history of mankind have there been towns and cities of the population and extent that exist today.

Cities have always been the hub of creative thought, art forms, education, and political ideologies. The standards of living are higher, the death-rate is lower, and comfort and hygiene are more highly developed. The most urbanized societies in the world today are the best paid, fed, housed, and educated in the history of mankind.

The problems of modern civilization are basically the problems of the cities, and as large cities are new to man the problems are also new, making it often difficult to see the genesis of problems before the problems exist. The wealth and resources of most industrialized nations, in terms of investment and manpower, are tied up in their urban areas, thus creating a situation where modern town planning is directly related to the welfare and prosperity of the inhabitants.

## The history of cities

Until the industrial revolution man existed basically in a rural economy. The vast majority of people lived on farms or in small villages. Even the so-called cities of the ancient world seldom grew beyond a population of 20,000. The cities that did exist were rich in architecture and sculpture. The physical forms of function and beauty, often developed over many centuries, were able to be retained because there was little population change and no real growth pressures.

The size of cities was restricted by the regional soil fertility, the methods of farming and the transportation forms available. The world population was kept reasonably stable by epidemics, wars, stillbirth, natural calamities, and ignorance of hygiene. It

had taken from the beginning of history to A.D. 1800 for the world population to reach 900 million. By A.D. 2000 it is expected to top 6,000 million.

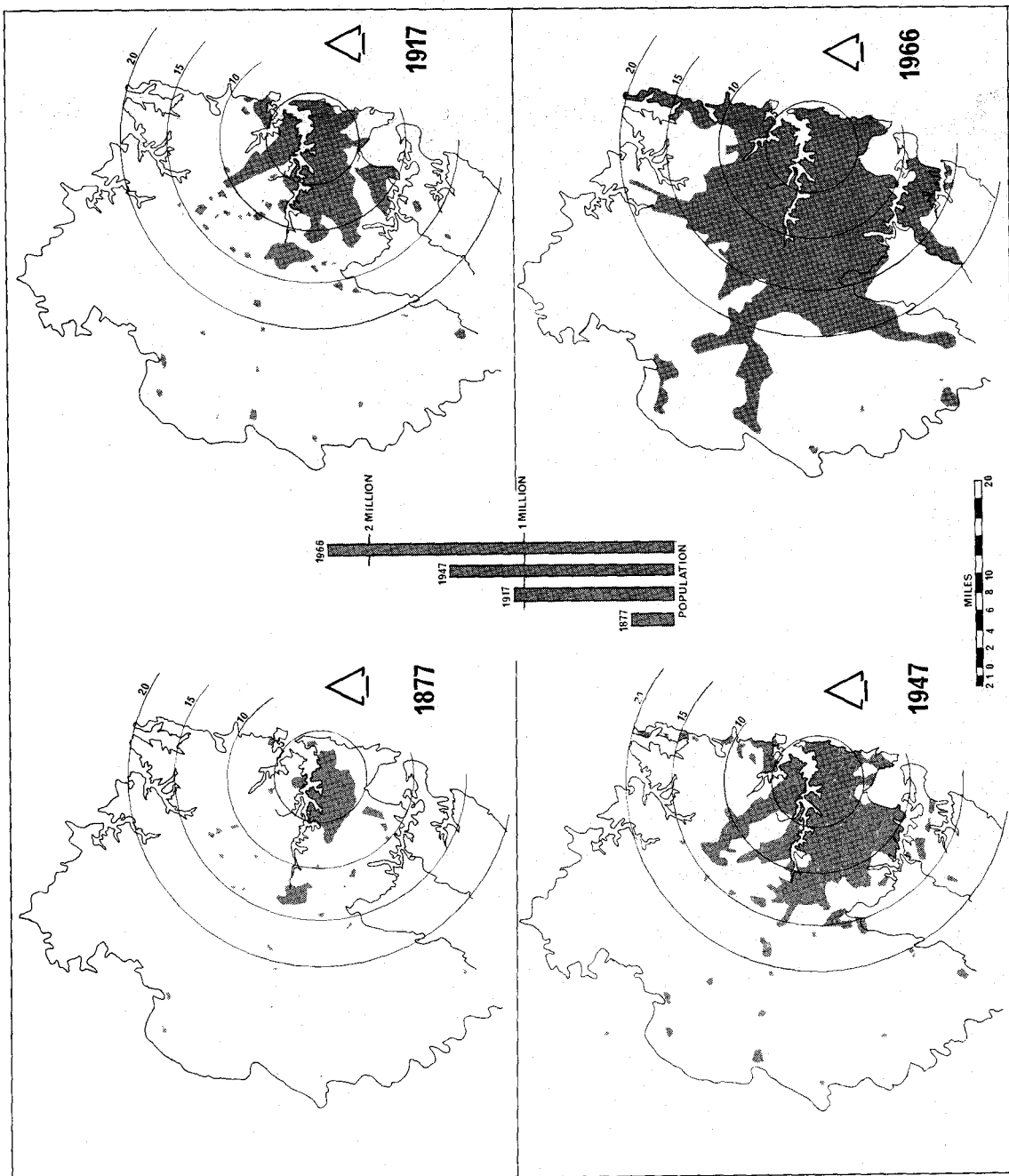
City growth has seen even more staggering results. London, with a population of 800,000 in A.D. 1800, now has over 12 million. In the same period Moscow has grown from 350,000 to over 8 million, and New York from 60,000 to over 15 million.

Australian cities have exploded in a similar fashion, and this, coupled with the geomorphology of the country and the historically recent colonization, has resulted in the most highly urbanized society in the world. Over 80 per cent of the population live in cities, with 44 per cent in Sydney and Melbourne.

The rush to the cities has been a phenomenon of the era since the industrial revolution. Mechanization of farming methods created a surplus of labour in rural areas and manufacturing of a multiplicity of goods and innovations created employment in the cities. The city migration that started in Europe two centuries ago is continuing today, creating serious social problems in the under-developed countries of the world. Shanty towns of more than 100,000 inhabitants have sprung up around many major cities, housing people in appalling hygienic conditions, with open-air sewers, polluted water, and uncollected garbage. In these areas physical and mental diseases are rampant and consequently the death-rate is high.

## Cities today and town planning

Since the majority of people in industrialized nations live in cities, and since most of the problems of society, in physical, social, and spiritual terms, are concentrated in cities, town planning has been oriented primarily towards the problems of urban growth and form. The results of city and regional planning are achieved through



Urban growth of Sydney. [Diagram by the author.]

short-term priorities with long-term objectives. Cities are continually-changing organisms. With ever-increasing population, ever-changing workforce structure, and ever-changing innovations, there is no final solution.

The planner of 50 years ago could never have envisaged the phenomenal growth of car ownership, nor the apparent demise of the railway. The planner of 20 years ago could not have predicted the growth of air traffic, nor the noise and space problems associated with airports. The planner of today is gazing into a crystal ball, trying to foresee the new forms and requirements of society in 20 years' time.

Some basic questions are completely unresolved. Are cars going to be superseded by an alternative form of transportation? Are the freeways being built today, at tremendous cost, going to be redundant by the end of the century? Will future generations have a substantially shorter working week, and, if so, will social patterns require two houses per family, one of them for escaping from the city at weekends? How much additional recreation space will be required for additional leisure time? Is man going to make his cities unlivable by the air, water, and noise pollution he creates? Is man losing touch with reality by losing contact with nature? The questions are infinite.

London is a city where an attempt has been made to overcome some of the problems of urban growth. City sprawl has been controlled by a rural green belt. The overspill population has been located in "new towns", of from 40,000 to 100,000 people beyond the green belt. The policy has been to create employment within the "new towns", thus avoiding the dormitory-town situation and the long journey to work encountered in many other urban agglomerations. The results have only been partially successful. The towns were planned for a static population, and the problem now facing British planners is what to do with the additional millions expected in the London region before the end of the century. The present intention is to keep the green belt intact and to expand existing towns, up to 80 miles from London, to take populations of up to 250,000 people. No "new towns" will be started, even assuming a suitable

site for one could be found. Expansion will occur in some of the existing "new towns". Experience highlights the need for flexibility in urban growth forms and spatial requirements.

Another example of urban growth may be seen in the Randstad cities of Holland. These are a group of historical cities which have almost fused together in the shape of a ring, so that for planning purposes they form one city. Randstad Holland embraces the cities of Rotterdam, the Hague, Haarlem, Amsterdam, Hilversum, and Utrecht. The present total population is around 5 million. The object of planners is to prevent the various cities of this conurbation from becoming one amorphous mass. The cities will be kept separate by small open wedges, with the core of the ring remaining completely rural. Each city is to keep its identity and to be self-contained. Further expansion of the urban areas is to follow transportation routes outwards from the ring, avoiding natural forest areas and other regional assets.

In a period of just under two centuries, Sydney now has a population of 2½ million. This figure is conservatively estimated to reach 5 million by the end of the century. In terms of bricks and mortar, Sydney will have to repeat itself in less than 30 years. The pressures on land space will be enormous, and these pressures will be reflected in the price of land.

Sydney planners have determined to create a physical city form different to either London or the Randstad cities. The green belt concept, which was adopted in Sydney during the postwar period, vaporized in the face of growth pressures. The growth strategy is now based on a finger pattern extending outwards from the central core along transportation routes, divided by wedges of agricultural or non-urban land. A disadvantage of this form of growth is that it encourages further development, and thus employment, in and around the central core, creating public and private transportation and traffic movement problems.

### **Need for a planning team**

Town planning today is a science which is extremely comprehensive and diversified. It would be more aptly named "city and regional planning". The problems

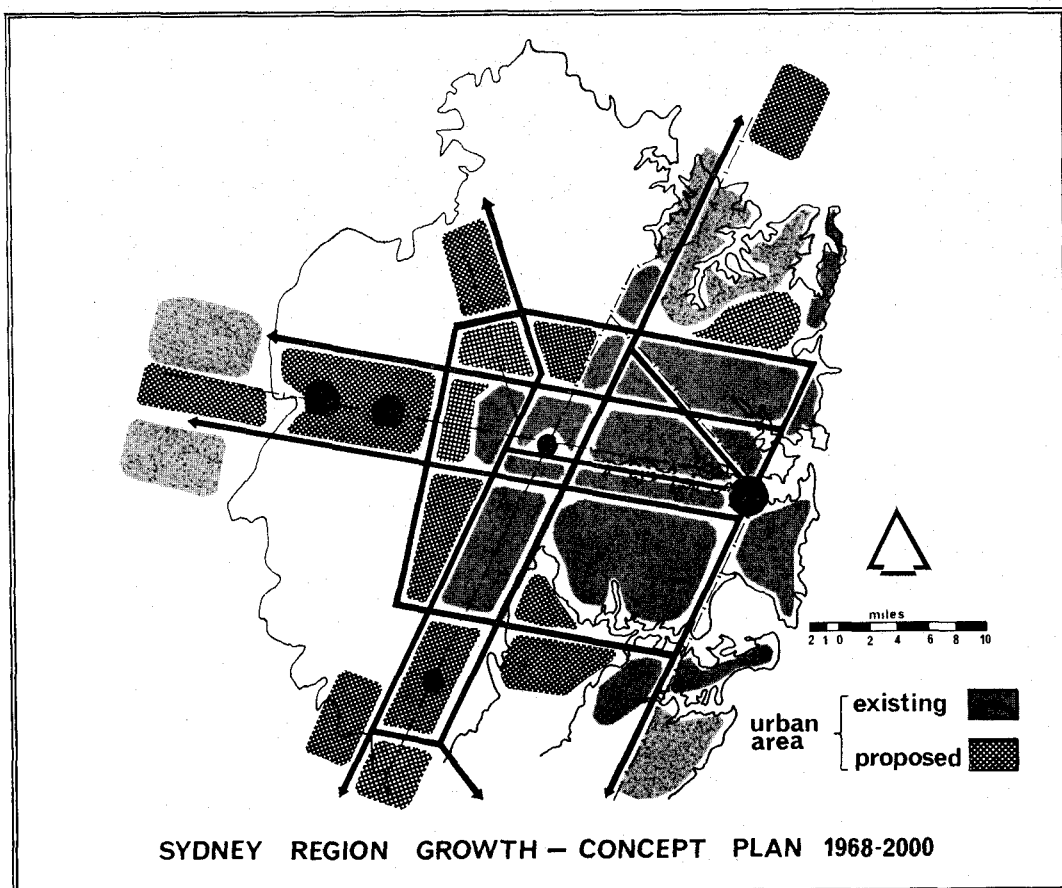


Diagram by the author. [Copied from *Sydney Region—Outline Plan, A.D. 1970-2000*, Report by the State Planning Authority of New South Wales, 1968.]

encountered range from national and regional economic problems to the physical detailed layout of small estates. The magnitude, variety, and complexity of planning problems are such that no one discipline is able to provide all the answers. As the population of cities increases so do the number, size, and diversity of a city's functions and the interaction between those functions.

The need, then, is not so much for lone town planners, but for planning teams. These multi-disciplined teams would comprise members from fields such as town planning, engineering, architecture, economics, sociology, traffic engineering, surveying, urban geography, and others.

If our environment is to be improved, then every city and every region needs a team

of experts to identify the problems of the area, to determine priorities for action, and to implement recommendations. The planning process must include a programme of public participation and education if the results are to achieve public acceptance—for planning is, after all, for people.

At the present time, the main problems in achieving worthwhile results in all aspects of planning lie in two areas:

- There is a lethargy on the part of governments in providing sufficient funds for planning and for the realistic implementation of planning proposals. This withholding of funds is a short-term expediency and a longer-term tragedy, for the results of non-planning are inconvenience and financial waste.

● There is a shortage of supply of experienced planners. The number of university graduates in planning is small enough. The number who practise in this field is much smaller.

### The future

The planning of a city or region is not a problem which can be solved and then forgotten. Cities and regions are dynamic ever-changing organisms which require continual planning and research, as conditions and pressures change. Urban forms must be capable of accepting change.

It is obvious that the process of urbanization is inevitable as nations become industrialized, and that city regions will continue to grow, at least in terms of population if not in areal requirements. Cities of the future may be multi-level and less confined to the existing topography. Housing may be modular and expendable. Cars may be a conveyance of the past and electronically controlled devices may carry us to work and school. Perhaps, in some parts of our city we may even discover once again that we are two-legged mammals with a capacity for walking and running, free to roam and shop without the motor car endangering life and limb.

In our complex society of today the one certain feature is that the requirements and demands of the individual, and the innovation

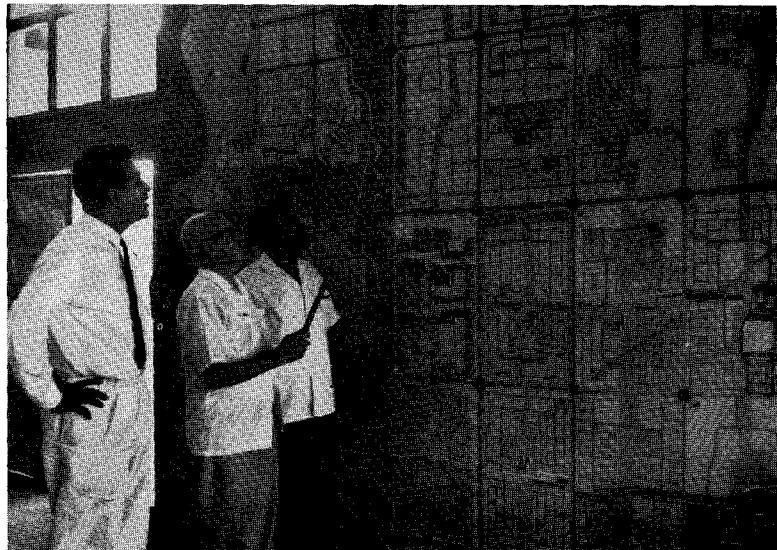
of computer technology, will rapidly require variations and modifications of our urban structure. New cities today, therefore, are generally structured on a modular cell form of growth, where the individual cells are capable of change, without affecting the environment within the adjoining cells. Canberra's and Chandigarh's (India) proposed structures are typical of this pattern.

Perhaps the most serious threat to mankind is the possible isolation from nature and the pollution of both city and country. Certainly there will be hordes of city dwellers commuting to the country and seaside every weekend to escape city pressure, sterility, pollution, and noise. The result, however, could be the destruction and pollution of the country, ultimately providing no escape from the ravages of man.

The early preservation of large primitive areas is essential in all countries throughout the world, with access only by means of trails. The encroachment of the motor car into primitive areas is intolerable.

With sufficient far-reaching thinking today, and given sufficient public support, planners may be able to create cities which will exist in harmony with nature, and yet still provide all the benefits of the city. If not, the result could be cities under air-conditioned geodesic domes, isolating the bulk of the population from the polluted environment outside.

Town planners in Chandigarh, India, with that city's master plan. [World Health Organization photo by T. S. Satyan.]





Air pollution in Czechoslovakia. [World Health Organization photo by Jean Mohr.]

The importance of rational research and planning, assisted by computer technology, is unquestioned. What is in doubt is man's ability to understand the magnitude of the problem and to provide the means of satisfying the need.

#### FURTHER READING

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