Chapter 18

BUILT ENVIRONMENTS

Conditions in Alternative World would provide an unprecedented opportunity for planners, architects and designers generally, to create genuinely 'user-friendly' environments. Within one, or at most two centuries the characteristics of physically developed areas the world over could be transformed from their present often inefficient and ugly nature to areas giving pleasure and satisfaction. *Freedom from the dead hand of private ownership of land and property would make possible the essential broad approach to what is undoubtedly mankind's most significant activity: creating physical environments which, through their inevitable permanence, will affect many generations yet unborn.* Because all planning and construction works would be the responsibility of local or regional councils of representatives, they would as closely as possible reflect the best interests of society by taking full account of every aspect of citizens' needs.

References have been made under 'concrete jungles' (Chapter 4) and 'bloated megacities' (Chapter 5) to the avalanche of appalling environments world-wide, which have resulted from the largely haphazard developments of the 20th century.

Uncontrolled mushrooming of city populations up to many millions has plagued the Third World worst; for example, Lima grew from 2m in 1960 to 7m in 1990, or 50% of Peru's total. A rare example of the benefits of planning control has been Havana, whose population of 2m remains as in 1960, ie 20% of Cuba's total. Without even the excuse of exploding populations, the First World also continues to desecrate itself; for example, if physical developments of all kinds continue as at present, it is estimated that 20% of the UK will be concreted over by 2050.

Not only have buildings themselves left much to be desired, very often vital services have been omitted altogether; in the world as a whole 40% of urban populations, and 90% of rural populations lack sanitation altogether.

Planned development world-wide

Alternative World's planners would be able to adopt a totally fresh approach to all physical development. They would appreciate that the disorder they would too often inherit is nothing more than the inevitable legacy of the anarchic capitalist system. That system would be seen to have been not only inherently antagonistic to positive community planning, but supportive mainly of individualistic plans for personal profit.

20th century towns and cities might appear to be terribly permanent, but nothing on earth is immutable. Several great cities in early history disappeared completely; hundreds of towns and cities throughout Europe were largely destroyed between 1939 and 1945. Great swathes of housing and industrial buildings in First World cities, left derelict by capitalism's regular attacks of depression, have, in some cases, been demolished and cleared away. The fact that most or all of those demolitions took place for wrong reasons does not exclude the concept of planned clearances being made for the right reasons. For example, because Mexico City grew irrationally from an old village in a location with insuperable seismic and climatic problems, serious consideration has been given to abandoning it completely.

To lead balanced and rewarding lives, town and city dwellers need to be able to visit and enjoy the many different facets of the countryside from time to time. *At present, many cities are so vast that their citizens are virtually trapped in them, as if in a quicksand, many for their whole lifetimes. However well-planned and attractive urban*

areas can be made, the aim should be to restrict their size firmly to around one million inhabitants, or far less where possible, and to ensure the rural integrity of their surrounding areas. With the advent of Alternative World, equality of rights and opportunities would be established for all, everywhere. As a result, massive emigrations of city dwellers would surely follow, as people abandoned overcrowded slums to return to the healthier areas they had originally been forced to leave.

The first world forum of representatives would need to establish a planning commission charged with the task, in close liaison with all the regions, of developing an optimal global plan for physical developments. This plan would need to take account of the disposition of resources, including food, energy and water, and a host of other relevant factors, before making recommendations regarding slimming down certain existing conurbations, and locations for new human settlements. In this context, it would become essential to take account of the bizarre imbalances in existing population densities world-wide, that is, numbers of people related to 'usable' areas of land available to them. Non-usable areas include mountainous, desert, swamp, waterless and other forms of inhospitable territory, together with forests which must be preserved. The resulting proportions of total land areas which can be used by mankind for agriculture or physical development amount to under one-third in all the current Third World continents. Thus expressed, population densities in South East Asia are around 100 times higher than those in North America. A further indicator of astonishing space disparities is provided by the fact that the US has, per capita, 20 times more agricultural land than China.

Population densities are commonly expressed as persons per hectare, which happens to be the area of a football field, and is thus easy to visualise. When standing at its centre, everyone on such an area can be readily identified, and a few moments walking brings one to the centre of the next similar area. By 2030, according to present trends, every hectare of usable land in 12 present Third World countries, by then having over 3bn inhabitants, will have to 'carry' from 6 to 30 persons. The comparable 'loading' in the UK, for instance, would appear likely to be about 2 persons, and in North America approximately 0.1 persons.

In the light of such data, it is likely the planners would be predisposed to recommending new settlements in particularly North, but also South, America, and in whatever other comparatively 'empty' parts of the world their research revealed. Citizens in densely populated areas would have every right to move to less crowded regions if they wished, but the scale of such movements would be very difficult to predict.

Past migrations have usually resulted from persecution or economic pressures; in the absence of these, millions might well prefer to remain in the environments they grew up in.

Therefore, although populations in the existing crowded areas would be sure to fall in due course, following birth control and some emigration, it is clear the planners would need to recommend particularly strenuous development efforts in those regions, accepting that much housing and other accommodation would have to be shared for the first few decades.

Alternative World's physical development policy would be the creation of both new towns and sub-divisions of existing cities, large enough to be self-sufficient in respect of education, culture, health, leisure and working occupations. New Towns would always be sited on land least suited to farming; the aim would be for 90% to 95% of usable land to be agricultural.

Existing cities would be 'humanised' by retaining such good features as existed, demolishing the ugly and worthless and sub-dividing them into a number of self-contained 'towns', separated by parks leading in turn to the surrounding countryside.

One of the planners' most important aims would be to arrange the locations of industry world-wide so as to achieve an overall balance of work opportunities. Apart from certain 'heavies' such as shipbuilding, whose locations are pre-determined, the majority of industries could be dispersed evenly around regions so as to maximise choices of occupations. At present, many millions of workers world-wide have come to accept the depressing scenario of daily 'commuting', often long distances from home to workplace and back. It is a practice not only wasteful of their time and often health, but above all highly wasteful of energy for transport. In Alternative World, since industrial processes would be obliged to minimise all forms of pollution, only very few operations would need to be sited 'down wind'. The majority could be dispersed evenly around communities, just as schools for instance, so as to be within easy reach from the homes of their workers. Further, since housing would be plentiful and occupancy flexible, citizens changing jobs could move easily into homes adjacent to their new occupations. Thus commuting could be relegated to history. Common ownership of all forms of physical development would enable local and regional plans to be truly comprehensive. The disposition of schools, community buildings of all types, leisure facilities, housing and industry would all be conceived in terms of facilitating citizens' movements within and between them, whether on foot, bicycle or by public transport.

Housing

Alternative World would single out the design of housing for very special attention, because it is the environment in which everyone, inevitably, spends such high proportions of their lifetimes, and in such close proximity to each other. The critical importance of maintaining consistently high standards of housing would be recognised as fundamental to the creation of contented, co-operative and productive societies. The steady increase world-wide in the numbers of older, less mobile members of society adds further to the importance of dwellings. In this context, housing layouts would contribute so far as possible to regenerating the concept of the 'extended family', promoting opportunities for mutual assistance without compromising privacy. Housing design and management would reject tendencies to group the elderly together, and aim instead at a mix of generations which would be beneficial to each other.

All housing would be built to high structural standards, which are in any case obligatory in many parts of the world for earthquake or cyclone resistance. Permanency makes for optimal use of resources, and spares future generations the burdens of unnecessary maintenance. Each dwelling would have as much basic sanitary equipment as resources allowed, but, as a minimum, a toilet and a sink. Sound insulation, both within and between dwellings, would have a high priority, particularly because of high occupancy rates. These would favour designs making it possible to sub-divide rooms during the early years, until housing output had met demand. The immense numbers of dwellings required would call for maximum standardisation to facilitate mass prefabrication. It would be recognised that, far from being a disadvantage, good designs bear repeating; witness the well-liked 18th and 19th century UK terrace housing, in which sufficient individuality is often expressed simply by different coloured front doors.

In Alternative World, the whole of the world's surface would be the joint property and responsibility of mankind, and recognised as being a highly precious and easily wasted asset. Because of the necessity to preserve all possible areas of land for agriculture, and because housing is inevitably a heavy land user, it follows that all new housing, worldwide, should be built at high densities. Shoddily built, overcrowded slums have created the false impression that high densities are synonymous with low standards; in fact, much luxury housing in the First World is high density. More importantly, the use-efficiency of resources for sewerage, water, electricity, street lighting, paved

access and other facilities all relate to the number of dwellings served and therefore benefit from high densities. In this context, the building of large dwellings on individual plots would be outlawed, whether in ‘leafy suburbs’ or in open country.

The importance of building housing at high densities is underlined by the following: other than agriculture, the two main users of land are a) housing and b) community facilities. The latter include: playing fields, parks, education, health and administration buildings, supermarkets, industry and transport. Whether in cities or towns, group b uses are all essential, and experience indicates that for healthy, productive communities they require a relatively stable average of around 10 hectares per 1,000 population. By contrast, depending on the density chosen, housing for 1,000 persons will consume widely fluctuating areas of land, varying from 1 hectare at a density of 1,000 persons per hectare, up to 20 hectares at a density of 50 persons per hectare. Besides wasting precious land, low density housing inevitably involves longer distances for people to traverse to reach the various group b facilities.

Alternative World would recommend that the great majority of new housing take the form of two- or three-storey, narrow-fronted terrace dwellings. One suitable application includes a private patio with planting space at the rear, with further, separate accommodation above a toilet and utility room beyond. Such a layout could result in fully acceptable densities of up to 180 dwellings per hectare, accommodating over 1,000 persons per hectare. With low water use sanitation (using kitchen and washing water for flushing) the highly economical arrangement could be provided of one private toilet, washroom and sink for under two metres run of sewer. If small numbers of flats were called for, these could be provided in three- or four-storey blocks, adding visual variety but inevitably consuming more resources to build, particularly in seismic areas.

Transport

In Alternative World, the common societal ownership of both all points of production, and consumer outlets would mean that all forms and sites of activities could be rationalised, and thus the needs for transportation of both goods and persons reduced to the essential minima. Joint ownership of every type of transport facility would promote both flexibility and energy savings. All forms of transport would be planned and coordinated by departments responsible to the local councils of representatives, and thus all systems would be responsive to community needs. Main emphasis would be placed on surface public transport worldwide, for both goods and passengers, over long and short distances, in rural and urban areas.

The aims would be to maximise carrying capacities, and minimise numbers of individual drivers while retaining all staff desirable for safety, yet providing such comprehensive services that cars and long-distance lorries would become largely redundant. Environments would be planned and laid out to encourage individual movements either on foot or bicycle, by provision of safe, sometimes covered path- and cycleways. Elimination of commuting would greatly reduce local passenger transport demand.

Priority would be given to railways of all kinds, from long distance to local light systems or tramways in urban areas, all carrying both goods and passengers. Widest use of electric traction using power from renewable energy-sourced generation would minimise pollution. Container systems would be developed for maximising efficiency in transferring loads from mainline to local delivery transport.

For inland regional goods movements, canal systems would be both revived and extended. Two-unit push barges can carry as much weight as two freight trains or 100 heavy lorries, with far less fuel consumption. Passenger coaches and medium-sized

trucks would be used for local transport to supplement rail services; monster articulated lorries would be outlawed. Since hydrogen can be produced renewably from electrolysis of sea water, and exhausts water vapour only, its use would be promoted for barges, trucks and coaches which could accommodate the somewhat bulky tanks required.

There are now around 500m cars in the world, and their numbers are increasing by nearly 20m annually. Each year, cars are responsible for 250,000 deaths and vastly more injuries; their exhaust fumes will soon be the biggest contributors to global warming. In Europe alone, 12m discarded cars weighing 9m tons are scrapped annually. 30% of car journeys are under one mile, 50% under two miles and 75% under five miles. Alternative World could not continue to tolerate such appalling pollution and waste of human lives and resources. However, there will always be some legitimate uses for cars, and the right to use spare 'points' to lease them has been mentioned in Chapter 11.

Therefore, research would support the further development of electric cars, which, in the interests of both safety and economy, would be unable to exceed, say 30 miles per hour. Their batteries could be re-charged from renewable energy sources.

Since air transport can only be energised by rapidly disappearing oil fuel, which pollutes directly into the most sensitive levels of the atmosphere, Alternative World would phase out all aeroplanes as quickly as possible. Elimination of the money system would automatically eliminate the vast existing numbers of 'business' flights. In so far as 'face to face' meetings were absolutely essential, they could follow surface travelling. However, because medium- and long-distance communication between representatives and planners at all levels from local to the world forum would be absolutely essential, well-tried electronic sound/sight systems for 'air-wave' meetings would be promoted. To complement world-wide expanded rail networks, passenger ships would be reintroduced as required. Resources would be made available to assist the conversion of shipping generally to non-polluting energy such as hydrogen, supplemented by computer controlled sail systems.

Chapters 9 to 18: References

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