

CAPITALISM AND THE ENVIRONMENT: THE FAILURE OF SUCCESS*

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Australia's like a poor prostitute and the Australian just bullies her to get what he can out of her and then treats her like dirt.

D. H. Lawrence, *Kangaroo*

Business economists have ever been glib in equating economic growth with an expansion of the range of choices facing the individual; they have failed to observe that as the carpet of 'increased choice' is being unrolled before us by the foot, it is simultaneously being rolled up behind us by the yard.

E. Mishan, 1969

IT IS WELL over a century since Marx described the basic contradictions of capitalism; between the social character of the means of production and the private appropriation of the wealth produced. He could hardly have envisaged, however, that staggering expression of this contradiction which is now widely recognised as the crisis of the environment.

This essay is less concerned with the wilderness environment—kangaroos and mangrove swamps, fishes and weeds, birds and bees—than it is with the urban environment in which 85 per cent of Australians live.¹ The last decade in particular has seen the destruction of parts of this environment by freeways, high-rise re-development of inner suburbs (public and private), the overbuilding of our city centres with speculative office towers, and the general lack of planning of rapidly expanding metropolitan areas. To say nothing of plans for the destruction of rural and recreation areas close to the large cities by the captains of industry

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in collaboration with co-operative and growth-minded State governments; witness plans for industrialisation of Westernport Bay in Victoria, for mining by the Clutha Company south of Sydney and a nuclear power station and assorted industries for Jervis Bay in NSW, for oil exploration of the Barrier Reef, flooding of Lake Pedder, and so on.

What follows is a brief outline of the nature of the global ecological crisis and its relationship to the political economy of different social systems; a discussion (with examples) of the role of capitalism in the deterioration of the Australian environment; and finally some suggestions as to the changes in values, institutions, policies and power structure which will be necessary if Australia is to avert the impending ecological crisis.

Is there a crisis? And if so, how did it come about? Briefly, the ecologist sees mankind threatened by the effects of an exponentially growing population² pressing on an environment which is finite. Population growth and increased production and consumption of commodities, stimulated by capital investment, put exponentially increasing pressure on resources, some of which are already in sight of depletion, and threaten with pollution the natural environment not merely of ourselves but also of species on which we are dependent. About the form of the resultant catastrophe the ecologist is less precise. He sees population first growing beyond the capacity of its finite environment and then being halted by whatever proves to be the contemporary equivalent of Malthus's 'famine, pestilence or war'.

The latest report of this impending ecological disaster is the Club of Rome's report, by Meadows and others, *The Limits to Growth*. By now its recommendations are familiar. After investigating five major trends of global concern—accelerating industrialisation, population growth, widespread malnutrition, depletion of non-renewable resources and a deteriorating environment—it argued that to avoid a global crisis within the next 100 years both the world population and the world economy must be stabilised within the next few decades. A 'global equilibrium' must be achieved, otherwise an overpopulated world, corrupting its environment and exhausting its resources, faces an inevitable cataclysm.

The features of the present non-ecological situation which are emphasised by most bourgeois economists are that mankind is living on a heritage of non-replaceable resources, that producers are obtaining these resources at prices which do not ensure equilibrium between the long term demand for and supply of them, and that some forms of production involve costs of a kind which fall on persons other than those producing or consuming the goods concerned. (Coombs 1972). But what are the systemic features of this crisis? Where lies its chief cause?

Some writers attribute it to economic growth (Meadows 1972; Weaver 1971), others to technology (Commoner 1972), consumerism (Roberts 1973), industrial civilisation and human nature (Heilbroner 1974), the Judeo Christian tradition (White 1968), population growth,

affluence, and finally—capitalism (Weisberg 1971). Suggested remedies range from the social engineering solutions of Meadows *et al.*, to a more humane use of technology, to a no-growth economy, population control, and finally—socialism. But few writers have considered the institutional changes necessary to achieve their solutions or assessed the likelihood of a transition from a capitalist-consumerist economy to a socialist-ecologically stable one.

The problems which Meadows, Ehrlich (1970) and others have posed are the direct outcome of industrialisation and economic growth, which in turn have made possible an increasing population and the expansion of the hold of utilitarian and individualistic consumer greed over most nations. These processes developed under capitalism and find their most extreme expression in present capitalist society. The structure of responsibility for ecological destruction is bound deeply into the social stratification of our form of society. Wealth, and the social stratification it reflects, is the determining factor in access to resources and the production of surplus and waste.

The accumulation of capital and the drive for efficiency and control have a profound influence on the ecological stability of the planet. Capitalism is an economic order marked by the private ownership of the means of production vested in a minority class, and by a market system that determines the incomes and distributes the outputs arising from its productive activity. It is a social order characterised by a *bourgeois* culture among whose manifold aspects the drive for wealth is the most important. (Heilbroner 1974: p. 25). Capital is the critical factor in determining development, urbanisation, methods and amounts of production, in fact the structure of industrial society. The private form of appropriation makes *profit* the driving force of production, and causes the development of productive forces to be uneven. Production develops in sectors where high profits can be made rather than in sectors where the most urgent needs are to be found. The production of Valiant Chargers, Vincents Powders and a dozen different brands of detergents takes precedence over the struggle against air pollution, the preservation of natural resources and even the building of schools and hospitals.

The development of productive forces and the concentration of capital represent a new stage in the development of capitalism—that of monopoly capitalism (Baran and Sweezy 1966). The combination of corporate and state capital, fully integrated, affects life both biologically and socially. Industries are not required to account for the resources they despoil in the process of production. Today the ownership of property and capital is equivalent to ownership of the environment itself.

. . . the concentration of production and capital, of industrial capital with banking capital, the increasing rise of exports over imports, the

increasing production of surplus in relation to total product—all combine in the ultimate concentration of the multi-national corporation. In its consummate development, capitalism requires constantly accelerating levels of consumption, rising productivity, and the impulse to accumulate for its own sake. (Weisberg 1971:73)

Marx called it the circulation of capital. We call it the growth ideology. New goods are created and demands for the goods must also be created. Expectation must continually rise. If all of us suddenly decided that our homes were adequate, our cars satisfactory, our clothes sufficient, etc., our economy would collapse. The economy is based on wanting more and more of the latest, brightest, best, most fashionable stuff. People buy things, they go into debt, and then have to work to pay off the debt.

Economic growth requires that labour become a commodity to be bought and sold in the market, and also that labour become 'specialised'. That is, work is divided into minute parts (especially in manufacturing industries) with each worker doing only one small repetitive task. Economic growth also requires that land (meaning all of nature's resources) become a commodity to be bought and sold on the market. With growth, land—all of nature—becomes a commodity to be used for those purposes which will return the greatest profit. If these profitable activities involve depleting the soil, cutting down the forests, polluting the rivers, and fouling the air—so be it. The goal of capitalist society is to produce the most marketable goods and services possible. Muir has described this system as a 'gobble, gobble economy' (Weaver 1971: 673). A logical consequence of such an economy is environmental pollution—what economists call 'externalities' and then often forget. Capitalist society is devoted to producing the most goods and services at the lowest possible cost. This means constant efforts to find new, cost-saving methods of production. Each firm (and government department) is under pressure to limit cost increases and if possible to convert private costs to social costs. So those things which are 'free goods', such as air, water, quiet and natural beauty, will be used to the utmost. Environmental pollution is inevitable once growth is introduced as the primary goal.

Advertising plays some considerable part in this process. The United States spends \$15,000 million a year on advertising, 1½ per cent of the GNP, to convince people that they want all the goods the economy is producing (Weaver 1971: p. 672). Sir MacFarlane Burnet (1971) has suggested that we 'eliminate all advertising and replace it by a consumer information service'. It is indeed absurd that we should be devoting as much of our resources to advertising as we are to education, which is the situation at present (MacFarlane 1968: 209).

The case for the overriding responsibility of capitalist society in the global structure of social and ecological disorder has been well put by Weisberg (1971), who selects America as the chief offender, consuming

60 per cent of the world's resources but with only 6 per cent of the world's population.

While it is commonly countered that socialist countries exhibit their own social and ecological disorder, this skirts a basic issue at stake: is the capitalist organisation of society inherently anti-ecological? Can the social organisation of natural resources in terms of profit, private property and competition achieve any reasonable harmony with the life support systems of the earth? The evidence suggests not. Commoner (1972) for instance shows that changes in productive technology since the Second World War (namely, changes from natural fibres to synthetic ones, from soap to detergent, from steel to aluminium and cement, lumber to plastics, railroad to truck freight, harvested acreage to fertiliser, returnable to non-returnable bottles etc.) have not only been 'counter-ecological' but, more significantly, have been considerably more profitable than the activities they displaced.³

Commoner indicates that the practical problems of environmental pollution in industrialised socialist nations are not very different from those of an industrialised private enterprise economy like the US. But from this he concludes that in a socialist country the drive for 'plan fulfilment', like the profit-motivated drive for productivity in the US, leads to the same inevitable destruction of the ecosystem. The logic of this conclusion must be challenged. It seems more logical to argue that the present ecologically unsound processes of economic development being pursued in the socialist countries are the result of outdated aspects of Marxist theory and do not necessarily determine the future possibilities of a more genuine socialism than that practised in the USSR. (Marxist thinking has emphasised the domination of nature by man, and the need to conquer scarcity. It was not necessary in Marx's time to explore the way capitalism exhausted land. The emphasis was on the way it exploited the worker.) True, Russia can match Lake Baikal against Lake Erie, and so on down the line (May 1972: 11). But while socialist nations have to date emphasised the importance of economic output and modernisation, socialist planning which, unlike capitalism, does not have to deal with the profit motive, might just as well be utilised to curb ecologically improper forms of growth and development.⁴ It is pertinent here to recall that in economic terms environmental 'externalities' are a burden on society as a whole. In effect, modern technology which is privately owned cannot long survive if it destroys the social good on which it depends—the ecosphere. Hence an economic system which is based on private transactions rather than social ones is no longer appropriate and is increasingly ineffective in managing this vital social good. Our relation to capital must not determine our absolute dependence on life support systems. An economic system motivated by profit and competition pays too little heed to the common welfare, as Hardin's brilliant analogy of the tragedy of the commons illustrates.⁵ The logic of industrial development under capitalism serves

the needs dictated by capital. People within this context are merely a means to an end. The end is the accumulation of capital, not the development potential of human beings. People are considered one input into production, along with capital and land. The aggrandisement of capital and land is the equivalent of the ownership of the earth.

This next section looks at some of the consequences of private ownership, the profit motive and the related structure of political power in Australia on this country's environment, urban and rural.

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The backdrop to our polluted lives is the wounded bush, degraded and polluted by a variety of agencies from sheep to DDT, from 'developers' pegging out coastal heathland to 'developers' who denude the hillsides in southern NSW to feed the Japanese woodchip industry. But the setting for the lives of most of us is the city. And it is here that pollution has already reached dangerous levels. Let's concentrate on three of the most conspicuous aspects of our deteriorating cities; the increasing dominance of the private car, the overbuilding and dehumanising of city centres with speculative office towers, and the endless, planless suburban sprawl (or unlimited metropolitan growth)—and analyse what's in it for whom.

Cars, Freeways, Air Pollution

There is one car on Australian roads for every 3.3 people. Car makers consequently have as tight a grip on our economy as they do on our emotions. GMH employed 26,000 people, paid \$29 million in tax and customs duties in 1971 and had a sales turnover of \$500 million. The company sends over half of its net income of \$30 million back to America (Whitelock 1971: p. 128). Not only shareholders and our consumer economy demand increased car sales. So do our State Governments. In South Australia, for example the motor vehicle industry is the largest single industry, employing 39 per cent of the total work force and accounting for approximately 30 per cent of the total value of production. (SA Year Book and SA Statistical Register 1968.)

Car manufacturers sell at prices that represent a mere fraction of the total 'cost' involved. They are concerned to recover their own immediate monetary costs, plus profit. But what of the real costs that must be borne by the community? Overproduction and junking of cars entails depletion of non-renewable resources, (metal and glass) and the inefficient, 'high-powered' internal combustion engine devours non-renewable fossil fuels and creates a quarter of the total air pollution problem in Australia (Whitelock 1971: 128). For every 1000 gallons (4550 l) of petrol burned, exhausts discharge into the air 2500 lb (1136 kg) of carbon monoxide, 250 lb (114 kg) of hydrocarbons, 83 lb (38 kg) of nitrogen oxide and smaller quantities of other pollutants such as lead and sulphur compounds. In the case of carbon

monoxide alone it has been estimated that 2 million tons (2.4 million tonnes) enters the atmosphere each year. Melbourne's atmosphere collects 800 tons (960 t) each day from car emissions, plus 120 tons (144 t) of hydro-carbons and 52 tons (62 t) of nitrogen oxides.

Car manufacturing pollutes the air and the rivers, as do the oil refineries. A witness to the Senate Select Committee on Air Pollution estimated that more than 600 Australians could be dying each year from air pollution. Apart from the health costs of traffic noise and congestion, and the escalating social cost of the road toll, perhaps the worst effect of the increasing dominance of the car is the concomitant necessity for freeways and the destruction they render to the urban environment.

In the 1960s most Australian states prepared transportation plans (with the help of American engineering consultants) all of which were deferential to king car and ignored the alternative of improved public transport. The Metropolitan Adelaide Transportation Study (1968) recommended \$436 million for 97 miles of freeways and \$105 million for public transport. Its proposals would have constituted the single biggest change to Adelaide in the whole 130 years of its history. The Melbourne Transportation Study (1969) proposed \$2616 million for 307 miles of freeways and a mere \$225 million for public transport. Like the Adelaide Study it was prepared by engineers who failed to take into account the social and environmental disruption and destruction that their freeway networks would cause. The Cumberland County Plan (1948) prepared for Sydney incorporated the Department of Main Roads' plans for 200 miles of freeways spanning the metropolis in six directions, all radiating from and converging on the city centre. The DMR reviewed their plans in 1960 and added another 150 miles of freeways, and its new plans were incorporated into the State Planning Authority's *Sydney Region Outline Plan* (1968). It remains to be seen whether inner city residents' action group opposition to freeways, assisted by community, some union, professional and conservationist support, will be sufficient to resist the powerful 'freeway lobby' of car and oil companies, tyre and spare parts companies, and hire purchase/finance companies, and the bureaucratic expansionism and empire of the Department of Main Roads.

City Centres

A property or redevelopment 'boom' began to engulf Sydney in the late 1950s. Schemes to limit and disperse central office building have been proposed since 1953 'and regularly murdered by the lobbies of central investors' (Stretton 1970: p. 246). Archer's 1967 study of the main features of the development and use of the twenty largest private buildings completed in the inner city between 1956 and 1966 reveals the beneficiaries of this 'redevelopment' (which is now more appropriately termed 'overdevelopment'). Of these twenty largest buildings four and

business interests of the city its 'First Objective': 'Foster economic growth by managing, guiding and directing the conservation and re-development of the city as a whole'. It maintains the status of the biggest businesses and investors in the city.

Overall, the strategic plan seems likely to reinforce all those inequalities mentioned earlier that result from over-concentration in the centre of a large metropolis. Workers must live further out and travel longer distances; the public sector is called on to finance the additional strain on roads, public transport and other services; and the diversity of the city itself is reduced by increasing rents (contrary to the rhetoric of the plan's intentions). The 'strategies and actions' proposed cannot be expected to achieve the Plan's stated objectives of encouraging diversity and a better city environment. The way to retain the city's residential population, to encourage diverse land uses, to provide more public amenities and pedestrian and open space and to ease traffic congestion is to *reduce* the floor space ratio, to encourage lower densities and to disperse the workforce to metropolitan centres.

The story has been identical in Melbourne under a right-wing City Council. In 1971 it was announced that land values in the central business district (CBD) had increased 800 per cent in three years, that sites now sold at \$100 per square foot, and that in the past twelve months twenty-six permits had been issued for multi-storey office and shop complexes (*Age*, 27 May 1971). In June 1973, the Melbourne City Council (MCC) released a report revealing that land prices in the city had doubled since 1968. 'The great economic expansion in the city has forced out activities that are not capable of meeting rising land values and rents', the report commented. Earlier in the year Melbourne's Strategy Plan consultants had issued a draft report which forecast a \$33 million over-supply of office space by 1975 (*Age*, 20 June 1973).

Like the Pitt Street Property Owners Protection League, the Melbourne Building Owners and Managers Association has been able to resist the efforts of the planning authority to reduce allowable plot ratios in the city. While the property owners form a small and cohesive group which is able to act swiftly and decisively when its interests are threatened, the majority of city-users—non-executive office workers, shop assistants, cleaners, shoppers—have no say in the pattern of development. Their chances of influencing policy, in the direct way open to property owners, are minimal. Such situations make nonsense of the pluralist theory of democracy⁸ which argues that there is no dominant group or class or interest in society. The main flaw in the pluralist-democratic theory is its claim that the major organised 'interests' (business, unions etc.) compete on equal terms and that none achieves decisive advantage in the process of competition. Business enjoys permanent advantage 'inside the state system by virtue of the composition and ideological inclination of the state élite' and *outside the state system by virtue of the pressure it can bring to bear on govern-*

ments because of its private control of industrial, commercial and financial resources (Miliband 1969: p. 131).

It is clear therefore that radical changes in the nature of city development and future urban environment are not possible while political structures and informal channels of influence operate on behalf of the big property-owning section of the community. The following examination of the unlimited metropolitan growth of the post-war years explores in greater depth the nature of the power structure of our cities and the way it has shaped the urban environment to date.

Suburban Sprawl, Metropolitan Growth Unlimited

The social and physical environmental deprivation of the outer suburbs of Australian cities has only recently begun to be documented⁹, though Robin Boyd's *Australian Ugliness* (1960) did deal with his version of the aesthetic pollution of what has come to be called 'suburban sprawl'. But what are the structural imperatives behind this deprivation of the urban environment and the unlimited expansion of the metropolitan centres. Why has there been so little planning, and why has its impact been so limited?

Efforts to introduce planning in the past have suffered from the political naivety of the more idealistic of its advocates. Planners themselves, while not often espousing radical social values, have attempted to regulate through zoning and subdivision control, the worst abuses of a free market and its consequences for urban growth. Lack of political support has rendered their efforts largely unsuccessful.

The reasons for this failure of political support stem from the nature of politics in a property-owning 'democracy'. The structure of power has been and still is such as to protect property owners and to pamper rural interests. A business, rural and conservative bias has dominated the very political institutions through which efforts have been made to introduce city planning; Lower Houses dominated by coalitions of country and city rich, Upper Houses at the mercy of big property owners and rural conservatives, City Councils whose members have vested interests in protecting existing property and privileges or in real estate and land speculation, local councils whose main aim has been to attract as much development as possible (preferably private rather than public because of revenue from rates), a Liberal Party dependent on the business and financial community and governing in its interest, and a Labor Party espousing the growth ideology.

Through these political institutions the property-owning class has acted to protect encroachments on and threats to its property rights.¹⁰ Thus most efforts to introduce even the mildest forms of city planning legislation have been met, especially in the States Upper Houses, with what Davies (1960: p. 217) has called 'a compulsive shudder of the property instinct'. Such Bills were defeated in the NSW Legislative Council in 1915, 1919, 1922 and 1931, and the Town and Country

Planning Bill of 1945 was heavily amended to place planning control in the hands of local government. In Victoria, the Legislative Council rejected Bills in 1913, 1915, 1930, 1936 and 1937, and 1951, and the South Australian Upper House rejected Bills in 1917, 1954 and 1960, and heavily amended legislation in 1920, 1929 and 1966, after protests from property owners had been expressed through the Real Estate Institute, the City Council and the Chamber of Commerce.

Whenever they have thought it necessary, then, property owners have been able to use the institutions of the state to prevent encroachments on their 'property rights' by planning regulations and legislation. They resorted to such action especially before the second world war. Since then, property owners have been able to manipulate the planning process itself to make gains from property ownership, and to use the same political institutions to lend support to 'the national hobby of land speculation'. Such planning as has been attempted, and such plans as have been drawn up,¹¹ have been hampered at every level by private property interests exerting influence on public authorities and by the corruption of some public officers and politicians with foreknowledge of planning decisions.¹² The land-use plans and policies produced in each city (Adelaide 1962, Melbourne 1954 and 1971, Sydney 1948 and 1968) have been subject to constant pressure as a result of the capital gains on land which can accrue to individuals and companies from changes in the plans. In Sydney and Melbourne the plans themselves have become 'speculators' guides' indicating which areas are to be serviced at what time and re-zoned from rural to urban. The inability of planning authorities and the reluctance of governments to control land speculation in the past largely accounts for the failure of post-war planning to substantially improve the quality of the urban environment.

Vandermark and Harrison (1972) have noted the chief beneficiaries of this process. Since the early 1960s finance and insurance companies and (since 1969) superannuation funds have moved into the property market, and more recently foreign companies like Consolidated Goldfields and Kaiser Steel (US). The life insurance offices are withdrawing from mortgage lending for housing and transferring to property purchase. In 1959 AMP invested \$4 million in freehold property and \$3.7 million in office premises in NSW. By 1969 their investment was \$27.7 million in property and \$18.4 million in offices. 'Behind the names of the multitude of new development companies displayed on development projects, there usually stands a life office with a significant if not a 100 per cent interest in them.' There has been little analysis of the financial structure of the development industry and the increasing concentration of its profits in the hands of a few large companies but it has been argued that the concentration of the development business in relatively few and powerful companies has facilitated the organising of the major companies into new but influential pressure groups. (Vandermark and Harrison 1972: pp. 173, 185.)

In an editorial on 8 August 1972 the *Financial Review* expressed the situation lucidly.

Almost everyone has been tainted by a self-administered virus of greed fuelled by spiralling land prices which give those who already own property steady capital gains and those who struggle to buy property an even stronger vested interest in ensuring that the spiral will continue. In such a situation, the pressures on both individuals and professional real estate developers to become out-and-out land speculators become intolerably strong . . .

Such are the pressures of a capitalist economy in which the profit motive operates through the institution of private property and, in the process, ignores concern for the urban environment in the urban development process. There is no reason to suppose that the rural environment receives any better treatment.

The Industrial Development of Westernport: 'Speculators Dream . . . Environmental Nightmare'¹³

Governments may be solely concerned with the better running of 'the economy'. But the description of the system as 'the economy' is part of the idiom of ideology, and obscures the real process. For what is being improved is a *capitalist* economy; and this ensures that whoever may or may not gain, capitalist interests are least likely to lose. (Miliband 1969: p. 73).

The decision of the Bolte Liberal Government to promote industrial development in Westernport Bay was made, the agreement with British Petroleum was signed, and the enabling Bill was rushed through Parliament without time for it even to be read by members.¹⁴ The fate of Westernport indicates the priorities of, and the interests behind, the government's decisions concerning the state's development. And the history of land transactions in the area over the past ten years provides one of the best examples available of the way powers available under statutory planning are exploited, and the objectives undermined, both by individuals using positions of influence within councils and by big companies using their political leverage at state government level.¹⁵

The agreement between the state government and BP was followed by one with Esso-Hematite (*Westernport Development Act* 1967) and another with Lysaghts (*Westernport Steelworks Act* 1970)—both companies being subsidiaries of BHP. In March 1969 the Westernport Regional Planning Authority (WRPA) was formed to prepare and implement a planning scheme for the area. It comprises two councillors from each of the six shires in the region and a full-time director. Members of the Authority are not restricted from voting on matters affecting their own properties and meetings are not open to the public. No provision is made for the representation of residents or for qualified architects, biologists or conservationists. Conflicts between the pro-

fessional officers and the councillors are settled by councillors making their decisions 'in camera'.

Of the 12 councillors on the Authority in 1971 at least six were known to be involved in land dealings in the area. Other landholders included BHP, Esso, BP and the Gas and Fuel Corporation. BHP and East Coast Development Pty Ltd own large tracts of land on French Island (in the middle of the Bay), which is not represented on the WRPA. In 1970, the Authority accepted a report from Dr R. M. Buchanan, a Sydney chemist, on the feasibility of using French Island for most of the industry to be located at Westernport. Buchanan was also a Director of East Coast Development Pty Ltd. In the same year, the WRPA received a draft report on the feasibility of re-zoning thousands of acres around the bay for industrial use. This report was referred to the Authority's Industrial Development Advisory Committee (which included representatives from BHP, BP, Lysaghts, CIG, Nylex Corporation and Dowd Associates). These members all had financial interests in land and industrial activities in the area. Heavy speculation followed for six months (December 1970 to June 1971) before the Director reported to the Authority on the findings of the consultants and the proposed designation of boundaries within which industry could locate.

By that time local residents were objecting to the fact that the future of the Peninsula was in the hands of 'American consultants, the WRPA, and a combine of industrial speculators' (*Age*, 3 April 1971) and that they were not permitted to see the consultants' reports. The Save Westernport Coalition¹⁶ did manage to see a copy of the American report however, and revealed its contents in a pamphlet *The Shame of Westernport* in July 1971. It concluded that

The needs of human beings evaporate into the pages of statistics: people are simply 'the labour supply', to be moved as close as possible to the industrial area while simultaneously being robbed of all its recreational possibilities . . . The most urgent study of all—the relationship of the scheme to the welfare of the city has not even been undertaken . . . It is doubtful if, in recent years, any large city anywhere has been asked to hand over such an enormous recreational area to so few people (Save Westernport Coalition 1971: pp. 3-8).

Nevertheless, despite rising local opposition, the WRPA voted in July 1971 to zone a 5000 acre belt of farmland for industry. Premier Bolte still maintained that the industrial zone would be 'a big lift for Victoria. I can see it having the biggest tonnage of any port in Australia.' (*Age*, 9th July 1971). And later in the year the government overrode objections by the Hastings Council and granted large rate concessions to the \$1000 million Lysaghts steelworks.

Such heavy-handed government and WRPA action provoked increasing local and state-wide protest. A Save Westernport Rally attracted 2,000 people. The Peninsula Conservation League and the

Institute of Landscape Architects called for a freeze on development until an independent review of plans for the heavy industry complex was carried out. By August 1972, 28,400 people had signed a petition calling for a freeze on development pending ecological and social surveys. Finally, in February 1973, under a new Liberal Premier the State Government announced a freeze on the development of heavy industry for two years during a \$1 million environmental survey.

It should be emphasised that it was not just the nature of the plans for Westernport that angered residents. It was also the planning procedure. Not only was the industrial plan drawn up first, with the ecological study to follow at some point in the distant future *after* the industrialists had taken what they wanted, but also the land-use planning was done in the greatest secrecy, excluding local residents, yet including the industrialists.

Westernport is not an isolated case of state and private capital working hand in hand to exploit the environment. Similar procedures and plans (for dumping and off-loading coal thirty miles south of Sydney by the Clutha Development Company; for developing a nuclear power station and assorted industries at Jervis Bay in NSW; and for intensive farming of the Little Desert in the west of Victoria) have similarly angered sections of the public and resulted in well-organised protests.

Clutha

In 1968, the NSW Liberal Government declared the Oakdale State Mine unprofitable and sold it to Clutha Development Pty Ltd, a coal mining company owned by an American shipping millionaire. By purchasing Oakdale, Clutha obtained a monopoly of coal production in the Burratorang Valley. Four-fifths of the coal extracted by Clutha was sold overseas.

In 1970-71, considerable controversy was aroused and opposition generated over a proposal by Clutha to bring coal from its mines in the Burratorang Valley, via a private railway, to a dump that it would establish at Maddens Plains thirty miles south of Sydney. From the dump, conveyors would carry the coal down the face of the Illawarra Escarpment to the coast near Coalcliff, and then along a mile-long pier at the end of which the company's bulk carriers could moor in deep water. The building of the railway and loader required the sanction of a special Act of Parliament.

Within four miles' range of the company's proposed dump, lived some 12,000 people, many of whom were concerned at the likely effects of the proposals on the local air, environment and coastline. Their apprehension was heightened by Clutha's refusal to reveal the details and extent of their planned operations, to consult with residents before announcing their plans, or to send representatives to a public meeting to discuss the matter when invited.

In the face of mounting local and state-wide opposition (on the grounds of conservation and depletion of our best reserves of coking coal by a foreign capitalist) the State Government rushed the Clutha Development Pty Ltd Agreement Act through Parliament, determined not to offer any opportunity to opponents of the Bill to use the occasion for thorough debate. After only 3 hours debate the Government applied the gag and the second reading was carried. In committee the gag was applied after half an hour (NSW Parliamentary Debates, November 1970). The Upper House debated the Bill for less than two hours. Later, in September, 1971, the Labor Opposition sought leave to introduce a Repeal Bill into the Upper House, where standing orders permit the mover of such a motion to speak without limit. Leave was refused, for the first time since 1879.

The passing of the Act in 1970 revealed the magnitude of the proposed operation, (the dump was to hold a million tons, and the company expected to mine 10 million tons a year) confirming speculation about likely pollution and making arguments about the loss of coking coal reserves even more compelling. Even more outrageous were the terms of the Act. Not only did it involve a poor financial deal for the State of NSW but it also violated certain civil liberties: Section 7 of the Act exempted the company from the operation of town and country planning schemes administered by local councils; Section 8 exempted the roadstead created by the offshore loader from the regulation of the Maritime Services Board; Section 10 allowed the company to resume land without regard to Parts III, IV and IX of the Public Works Act, and Clause 11 (2) of the Agreement empowered the Minister to resume land (other than Crown land) on behalf of the company; and Clause 3 of the Agreement granted all the powers of the company to ill-defined 'associate companies' (Hagan 1972: p. 140).

The three Westernport Development Acts (involving BHP, BP, Esso-Hematite and Lysaghts) and the Clutha Development Pty Ltd Agreement Act, in their privileged treatment of big companies by State Governments, are classic examples of that development in western economies which has been called 'neo-capitalism'¹⁷—the unification of business with administration and politics and the management of the State's political apparatus in the interests of business and industry.

Given their view of the existing economic system, it becomes clear that although governments in western industrialised countries wish to help business in every way, they do not feel that this entails any degree of bias towards particular classes or interests. For if, as they believe, the 'national interest' is inextricably bound up with the fortunes of capitalist enterprise, apparent partiality towards it is not really partiality at all. What is good for General Motors is good for America, and BHP for Australia. And if GM or BHP is taken to stand for the world of capitalist enterprise as a whole, the slogan is one to which governments in capitalist countries explicitly subscribe.

They do so because they accept the notion that the economic rationality of the capitalist system is synonymous with rationality itself, and that it provides the best possible set of arrangements in a necessarily imperfect world. (Miliband 1969: p. 69)

The beneficiaries of this cosy relationship are obvious. So too are the victims—the environment and the people. For, as Premier Bolte once said—'We are concerned about water pollution, but it is not as important as a \$100 million industry . . . Pollution of minds is a more important problem than air or water pollution' (*Age*, 12 March and 14 April 1970).

Why Pollution Laws Don't Work

Laws to control pollution in Australia's two most industrialised States are so soft, and in the case of NSW, so toothless as to cause little concern to cost-conscious industry which must choose between the cost of defying the law and installing expensive pollution control systems.

Both NSW and Victoria have passed what amounts to a new style of law to protect the environment—laws which see penalties as a matter of last resort, or, on occasions, of no resort at all. Thus, in Victoria the director of the Environmental Protection Agency (EPA) says the role of his authority is educative. And in NSW the Minister for Health, who administers some of the pollution laws, says that 'Prosecuting a polluter is just like closing the stable door after the horse has bolted'. With this sentiment big business would readily agree. It is therefore not surprising to find top business leaders in both States in positions on environment protection authorities. With the EPA in Victoria launching only three prosecutions since its formation, and the NSW State Pollution Control Commission yet to prosecute a single offending company, the effectiveness of present anti-pollution laws must be questioned.

State pollution laws in NSW offer few problems to industries which pollute the air, land or water. If caught, they usually face a smaller fine than a drunken driver. The stiffest penalty imposed in 1972 was \$500, in 1973 \$800. The State Government allows major environmental mishaps involving key industrial companies to take place without any substantial penalty being imposed. The lethargy with which the Government has implemented Acts to control pollution is indicative of its lack of concern for the environment when this threatens to reduce private profits. For example, the Waste Disposal Act was passed in Parliament in December 1970 but the powers it contains have still not been proclaimed. The Clean Waters Act also passed through Parliament in 1970 but did not become law until November 1972.

There are no recognisable conservationist leaders on the Governments policy committees and pollution control panels. And the courts have refused to impose anywhere near the maximum penalties on polluters, 1972 statistics indicating many fines as low as \$20. After two and a

half years, the Department of the Environment and the State Pollution Control Commission (SPCC) have not yet recommended or instructed the prosecution of a single offending company. The Minister in charge of the Department was formerly Minister for Industrial Development. The department's director is a former manager of the Caltex Oil Refinery at Kurnell, and the government's appointed 'conservation representative' on the SPCC is Mr F. S. Buckley, NSW manager of the big chemical firm ICI. Mr Buckley is a former President of the NSW Chamber of Manufacturers and was awarded the O.B.E. for services to industry in 1971. He told the Chamber's 1970 annual meeting that to blame industry for environmental pollution was 'an emotional fallacy' (Ross 1974: p. 48).

While awaiting the amalgamation of the State Planning Authority with the Department of the Environment, effective anti-pollution control (for what it's worth) has rested with the NSW Health Commission and the Maritime Services Board. The Health Department is responsible for administering the Clean Waters Act, but this Act does not give the Government power to enforce its restrictions on industry. It can only ask them to co-operate! During 1972-3 the Maritime Services Board prosecuted thirty cases of oil spillages in navigable waterways. Seven cases were dismissed. The rest paid fines totalling only \$4820, an average of \$210 each. According to the Board it will cost BP about \$1 million to clean up Sydney Harbour and pay compensation after the oil spill at its Berry's Bay depot in December 1973. BP admitted to 380 tons of oil escaping into the harbour. The MSB is still undecided whether it will prosecute BP.

The Metropolitan Water Sewerage and Drainage Board sets limits on the impurities which it allows to enter its drainage system. During 1972-3, the Board handled 595 infringements involving illegal discharges. Only three companies were prosecuted. But ironically the Board itself is a major source of waterways and ocean pollution,¹⁸ and has enjoyed complete legal protection. Clearly, state authorities apply the same limited 'cost' criteria in their use of the environment as do private industries. The ethos of growth and/or 'efficiency' weighs as strongly with state bureaucrats as it does with private entrepreneurs.

Where then do 'the people' fit into this overall scheme of environmental neglect and exploitation in a capitalist society. Are we to assume that 'the people have got what they wanted', when in fact 'the people' have never, in any comprehensive, intelligent fashion, been consulted on what is happening to their environment? (Nor have they been given sufficient information or education to express opinions on such issues.)

The people of Adelaide were not consulted as to whether or not the hill faces behind the city should be pocked by quarries, or the city itself overrun by ninety-seven miles of freeways. Mr Bjelke Petersen did not invite the electorate's views before he parcelled up the Barrier Reef among oil companies. Sir Charles Court made no reference to West

Australians before delivering his notorious New York speech in late 1969 to American industrialists, in which he said that the government would not let conservationists and anti-pollutionists stand in the way of even more massive overseas investment in his State.

'The people' have been conditioned to believe that they live in a democracy and that any thing done under the mantle of economic growth and private enterprise is essentially good. *That* is indeed a 'pollution of the mind' as dangerous as (because it ultimately leads to) air and water pollution.

This next section deals with some of the short-term policy changes and the longer term changes in values and institutions that will be necessary if we are to preserve Australian resources and to protect our environment not just for the 'haves'¹⁹ but also for the 'have-nots'.

The Future

It is becoming ever more apparent that the central issue of the future will lodge in the capability of dealing with the environment. What are the practical steps that need to be taken—not legislative restrictions but rather the actions that such legislation is supposed to induce, the changes in the productive system that are needed to bring it into harmony with the eco-system?

Industry, agriculture and transportation will have to meet the inescapable demands of the ecosystem. This will require the development of some new technologies, including systems to return sewage and garbage directly to the soil; the replacement of synthetic materials by natural ones; the reversal of the present trend to retire land from cultivation and to elevate the yield per acre by heavy fertilisation; replacement of synthetic pesticides by biological ones; the discouragement of power-consuming industries; the development of land transport that operates with maximum fuel efficiency at low combustion temperatures and with minimal land use; containment and reclamation of wastes from combustion processes, smelting, and chemical operations; recycling of metal, glass and paper products; ecologically sound planning to govern land use, rural and urban.

Some of the policies which *should* be introduced immediately include the elimination of cars from our central cities; banning commercial advertising; taxing polluters an amount equal to the cost of cleaning up the pollution; recovering some of the freedom of choice which has been lost in the race for economic growth by building pollution-free cities for those who prefer to do without air, water and noise pollution and who are prepared to do without cars, planes, motorcycles and power lawnmowers; institute comprehensive national land-use planning; limit population growth; institute workers control over their jobs (perhaps along the lines of the Workers' Management System in Yugoslavia) and

community control over what is produced; decentralise government and industry and return to neighbourhood control of schools, police and so on (if a sense of community is to emerge).

What sort of institutional changes would be necessary to attain a condition of ecological equilibrium? Instead of selecting out certain aspects of ecology and environment, as liberals tend to do,²⁰ we must be as concerned about ecocide and genocide in Vietnam as we are about conserving parks. The ecology crisis will only be solved in the political sphere. Everyone must change, starting now, but the task is not so much to change the colour of the toilet paper we use, or to stop driving cars, but rather to take action against those who colour toilet paper and produce motor cars purely for profit. Central among institutional changes would be an extension of public control to include family size, consumption habits, and volume and composition of industrial and agricultural output.

What sort of system is likely to cope best with these sorts of challenges. To start with the capitalist system, it is obvious that the threatened depletion of resources and the other ecological dangers that loom further into the future (the heat emission danger zone for example) directly threaten a main characteristic of capitalism—its strong tendency to expand output. This tendency serves three main functions. It expresses the drives and social values of the dominant social class; provides the means by which a market system can avoid the dangers of a 'glut'; and accommodates the strivings of the majority for larger rewards. Thus, expansion has always been considered as inseparable from capitalism. Conversely a 'stationary' non-expanding capitalism has always been considered as either a prelude to its collapse or a betrayal of its historic purpose. Economists from Adam Smith and Marx to Keynes have pointed out that a 'stationary' capitalism is subject to falling rates of profit as the investment opportunities are used up, and a deflationary spiral of incomes and employment begins. This may not be inevitable in a managed state capitalism. A high level of demand could be provided by government investment in housing, health, education and so on, or by transfer payments within the nation.

This brings us to what would clearly be the most difficult aspect of the transition to a stationary system in a capitalist society—the problem of managing the social tensions of a society in which growth had been greatly reduced. How would the demands of the working classes for higher living standards be satisfied while the upper classes still attempt to protect their privileges, as happens in capitalist reformism. A stationary or no-growth capitalism must confront the explosive issue of income distribution in a way that an expanding capitalism is spared. The efforts of the lower classes to improve their positions could be met only by reducing the absolute wealth of the upper classes.

I know of no calculations to date of the precise implications of this

for Australian society. But we are not simply dealing with the dismantling of a few large fortunes. What is at stake is the wealth of the middle and upper middle classes. Heilbroner (1974: p. 28) has estimated that for America, this includes the upper fourth or fifth of the nation's incomes, a stratum by no means composed of millionaires alone. In the US in the 1970s, a family entered the upper fifth with an income of about \$15,000. This stratum enjoys about 40 per cent of the nation's total income. This gives some indication of the magnitude of the political strain to which a massive pressure for redistribution would give rise.

In Australia only 1 per cent of the population has a taxable income greater than \$12,000 a year (Mayer 1973: p. 69). But this conceals the real wealth of the upper classes who, in the absence of any capital gains tax, simply transfer their taxable incomes into non-taxable capital gains like land, and shares in expanding companies. No effective redistribution of wealth is likely to occur in Australia without a capital gains tax, accompanied by death duties, a wealth tax, and a more progressive income tax. Such major changes are unlikely to be achieved by the current political system, which refuses to pass even the innocuous Australian Industries Development Corporation legislation.

Heilbroner points out that growth might be permitted to continue indefinitely if it is confined to outputs that consumed few resources and generated little heat. Thus an expansion in the services of government, administration of justice, provision of better health and education, arts and entertainment would rescue the system from a fatal encounter with the environment and might produce enough 'growth' to ease the income distribution problem. But we must not lose sight of the global context in which this shift must be made.

A transition to a more equitable distribution of income within capitalist nations will have to take place at a time when the larger struggle will focus on the distribution of resources among nations. If this struggle is decided in favour of the underdeveloped world, whether out of humanitarian motives, the pressure of nuclear blackmail, or simply by the increased political cohesion and bargaining power of the poorer regions, the citizens of the wealthy nations will find themselves in a long period of declining physical output per capita. (Heilbroner 1974: p. 28).

The problem is then not merely a question of calling a halt to the increasing production of cars, dishwashers or homes, while encouraging the output of doctors' services or theatrical activities, but of distributing a shrinking production of cars, appliances, homes. Such a transformation may well exceed the obdurate limits of the reformist capabilities of representative democracy, and may result in severe authoritarian measures.

It seems much more likely that a socialist system—that is, a society built on the public ownership of goods and the replacement of the market by widespread planning—could successfully adapt its industrial society to a stationary equilibrium. The replacement of private ownership by public, and the displacement of the market by planning in an industrial socialist society would not necessarily usher in an age of high social morale and economic and ecological performance. The forces and structures of scientific technology underlying industrialism can impose values and methods as destructive of the individual under socialism as under capitalism. But are these forces *imperative*? (Efficiency, with its tendency to subordinate the human scale to the optimum technical scale; the priority of production itself; life lived by the clock, organised by the factory or office, obsessed with material achievement, attuned to highly quantitative modes of thought, rich in every dimension except that of the cultivation of the human person.) It is surely questionable to assert that technology has ‘imperatives’. Technology is a tool to be used in the way men choose. If the industrial apparatus to date has imposed its dehumanising influence on capitalist and socialist countries alike, there remains the possibility that in another milieu that apparatus can be turned to human account. A society that does not have to deal with the profit drive should much more easily achieve control over the direction of science, its rate of incorporation in technology, and over the pace of industrial production as a whole, if that society is characterized by extensive decentralisation, workers control, and community control of production.

It is on these goals therefore that the struggle in Australia should focus; a ‘no-growth’, ecologically-sane economy, the predominant features of which would be redistribution of wealth and workers control. If at present the capitalist system seems locked into its own self-destructing dynamic (the tragedy of the commons) and the possibilities of revolution seem remote, we ought to remember that in 1970 it was inconceivable that any trade union would take a stand on environmental issues. But in 1971 the Builders’ Labourers Federation’s Green Bans emerged. They are at present holding up \$3000 million worth of ‘development’ in Sydney alone. And other unions are now following suit (for example the Transport Workers Union and the Miners Federation).

Remember also, that in 1955 in Montgomery (Alabama), Rosa Parks, a black seamstress, sat down in the front of a bus in a seat reserved for whites. She denied ‘objective reality’ and forced a breakthrough in the black movement. Jack Munday and the BLF ‘denied objective reality’ when they applied their first Green Ban in June 1971 and forced a breakthrough for radical action on environmental issues. We have yet to find the way in which we can all sit down, as it were, in the front seat of the bus.

NOTES

- 1 1971 Census. See Lampard *The Urbanising World* in Dyos and Woolf (1973).
- 2 The demographic situation of virtually all of South-east Asia, large portions of Latin America, and parts of Africa portends a grim Malthusian outcome. South-east Asia, e.g., is growing at a rate that will double its numbers in less than thirty years; the African continent every twenty-seven years; Latin America every twenty-four years. Thus, whereas the industrialised areas of the world will have to support 1.4 to 1.7 billion people a century hence, the underdeveloped world, which today totals around 2.5 billions, will have to support approximately forty billions by that date if it continues to double its numbers every quarter century. (Heilbroner 1974:22)
- 3 As examples Commoner cites profits made in the detergent industry, the synthetic chemical industry, nitrogen fertiliser. In 1969 the profits (as a percentage of total sales) from steel production and lumber production were 12.5 per cent and 15.4 respectively. In contrast, the products that have displaced steel and lumber yielded significantly higher profits; aluminium 25.7 per cent; cement 37.4 per cent and plastics and resins 21.4 per cent. (Commoner 1972:256-76)
- 4 See J. G. Gurley ‘Capitalist and Maoist Economic Development’ and S. Andors ‘Revolution and Modernisation: Man and Machine in Industrialising Societies, the Chinese Case’ both in Freedman & Selden (edd.), *America’s Asia*.
- 5 In a pasture open to all, each herdsman tries to keep as many cattle as possible on the commons, maximising his individual gain. The negative effect of this action by all herdsmen is the overgrazing and deterioration of the land. The addition of one animal to his herd is a positive utility of +1 for each herdsman, while the negative utility, shared by them all, is only a fraction of -1. So each thinks it rational to add another animal, and another, and so on. The tragedy is that each man is locked into a system that compels him to increase his herd without limit—in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all.
- 6 The members of the CRA are involved in insurance, finance, manufacturing, retailing and commerce in the city. Of the forty-two members of the CRA’s executive council in 1972, at least thirty were directors of several large companies (Meares 1972: pp. 3, 7). Eleven of the twelve CRA aldermen on the present Council live at upper class addresses outside the electorate (Loveday 1972: p. 142).
- 7 Expressed in the *City of Sydney Strategic Plan* (1971) prepared for the Council by consultants.
- 8 The most quoted exposition of this theory is R. A. Dahl, *Who Governs? Democracy and Power in an American City* (1961).
- 9 Bryson & Thomson, *An Australian Newtown* (1972); P. Tension *The Marriage Wilderness* (1972); T. Brennan *New Community: problems and policies* (1973).
- 10 By property-ownership here I am referring to land-owners specifically, rather than to owners of stocks and shares, although the two usually go together. See table in Manning (1973: p. 10) for comparative holdings in land and other assets of different income groups.
- 11 They are dealt with in detail in my PhD thesis, ‘Property, Politics and Power: a history of city planning in Adelaide, Melbourne and Sydney since 1900’, submitted in March 1974.
- 12 *ibid.*, chapter 7, ‘Melbourne: Capitalism, Crude and Uncivilised’ for details of corruption in a planning authority, planning appeals tribunal, and city council.
- 13 Subtitle of a pamphlet published by the Save Westernport Coalition in July 1971, *The Shame of Westernport*.
- 14 See Victorian Parliamentary Debates 1962-3:3789.
- 15 Space forbids elaboration in this essay but curious readers will find details in Appendix I of my PhD thesis (*op. cit.*), ‘Highlights of land dealings on the Westernport Region 1963-73’.
- 16 Consisting of the Port Phillip Conservation Council, the Westernport and Peninsula Protection Council, the Citizens Environmental Action League and the Clean Air and Environment Council of Victoria.

- 17 See R. Miliband, *The State in Capitalist Society* (1969); J. Playford, *Neo Capitalism in Australia* (1969).
- 18 The Senate Select Committee on Water Pollution (1970) reported that one-third of the pollution of the nation's rivers and coastal waters is caused by the discharge of sewage.
- 19 British socialist Anthony Crosland has argued that the current champions of the no-growth, ecologically stable society are 'often kindly and dedicated people. But they are affluent; and fundamentally, though of course not consciously, they want to kick the ladder down behind them. They are militant mainly about threats to rural peace and wildlife and well-loved beauty spots; but little concerned with the far more desperate problem of the urban environment . . .' Australian environmentalists do care about the urban environment. They are concerned to protect it. But for themselves, *not for the poor*. See Sandercock, 'Munday's child is fair of face', *Nation Review*, 11-18 April 1974.
- 20 The 'liberal' or 'reformist' solution to the environmental crisis emphasises individual guilt and responsibility. 'If we clean up our own backyards and streets, industry will clean up the rivers etc. that it pollutes.' Central to this approach is an optimism about the machinery of the bourgeois state; the bureaucracy, the courts etc. So the liberal 'style' involves committee work, negotiations and so on rather than direct action and confrontation. A recent newspaper advertisement by the Australian Government took just this position . . . 'To keep our country in good shape we have to care. We have to care about leaving drink cans in the park, throwing things out of cars, dropping rubbish in the streets, keeping the garden in good nick, keeping the weeds down, the grass neat and tidy, the fence freshly painted. . . . Government can legislate against big industry pollution problems fairly satisfactorily. It's up to us to look after "people" pollution. In a thousand and one ways, we have to care.' *Australian*, 17 April 1974.

REFERENCES

- ANDORS, S. (1971). 'Revolution and Modernisation: Man and Machine in Industrialising Societies, the Chinese Case', in Friedman & Selden (edd.), *America's Asia*.
- ARCHER, R. (1967). 'Market Factors in the Redevelopment of the Central Business Area of Sydney 1957-1966', in P. Troy (ed.), *Urban Redevelopment in Australia*, Canberra.
- BARAN, P. & SWEEZY, P. (1966). *Monopoly Capital*. Monthly Review Press, N.Y. *City of Sydney Strategic Plan*, 1971.
- COMMONER, B. (1972). *The Closing Circle*. Jonathan Cape, London.
- COOMBS, H. C. (1972). *Matching Ecological and Economic Realities*. Australian Conservation Foundation, Occasional Publication no. 9.
- CUMBERLAND COUNTY COUNCIL (1948). *County of Cumberland Planning Scheme Report*.
- EHRlich, P. & EHRlich, A. (1970). *Population, Resources, Environment*. W. H. Freeman, San Francisco.
- GURLEY, J. (1971). 'Capitalist and Maoist Economic Development', in Friedman & Selden (edd.), *America's Asia*.
- HAGAN, J. (1972). 'Clutha: the politics of pollution', *Politics* vii, 2 (November).
- HARDIN, G. (1970). 'The Tragedy of the Commons', in Love & Love (edd.), *Ecological Crisis: Readings for Survival*.
- HARRISON, P. (1972). 'Planning the Metropolis: a case study', in Parker & Troy (edd.), *The Politics of Urban Growth*.
- HEILBRONER, R. (1974). 'The Human Prospect', in *New York Review of Books*, 24 January.
- LAMPARD, E. (1973). 'The Urbanising World', in Dyos & Woolf (edd.), *The Victorian City: Images and Realities* vol. 1, London.
- LOVEDAY, P. (1972). 'Citizen Participation in Urban Planning', in Parker & Troy (edd.), *The Politics of Urban Growth*. ANU Press.
- MACFARLANE, B. (1968). *Economic Policy in Australia*. Cheshire, Melbourne.
- BURNET, SIR MACFARLANE (1971). 'Man's Responsibilities', in *The Consequences of Today*. Royal Australian Institute of Architects, Centenary Convention, Sydney.

- MANNING, I. (1973). *Municipal Finances and Income Distribution*. Urban Research Unit, Canberra.
- MAY, R. (1972). 'A Survey of the Crisis', in *Australian Left Review* no. 36, July.
- MAYER, H. (1973). *Australian Politics, A Third Reader*. Cheshire, Melbourne.
- MEADOWS, D. (1972). *The Limits to Growth*. New York.
- MEARES, H. (1972). *City of Sydney Strategic Plan: Planning in a Political Environment*. B.A. Thesis, Sydney University.
- Melbourne Transportation Study*, 1969. Vol. 1 *Survey*; vol. 2 *Parking*; vol. 3 *The Transportation Plan*.
- Metropolitan Adelaide Transportation Study*, 1968.
- MILIBAND, R. (1969). *The State in Capitalist Society*. Weidenfeld and Nicolson, London.
- O'HARA, J. (1972). 'A free enterpriser bows out', *Sydney Morning Herald* 16 June.
- PLAYFORD, J. (1969). *Neo-Capitalism in Australia*. Arena Publication, Melbourne.
- ROBERTS, A. (1973). *The Ecological Crisis of Consumerism*. 'International' Publication, Sydney, September.
- ROSS, M. (1974). 'N.S.W. pollution laws are no deterrent to big industries'. *National Times* 21-26 January.
- Senate Select Committee on Water Pollution, 1970.
- STRETTON, H. (1970). *Ideas for Australian Cities*. Orphan Book, Adelaide. *Sydney Region Outline Plan*, 1968 (State Planning Authority).
- VANDERMARK, E. & HARRISON, P. (1972). *Development Activities in Four Sydney Suburban Areas*. Urban Research Unit monograph, Canberra.
- WEAVER, J. (1971). 'The results of the pursuit of economic growth', in *The Consequences of Today*. Royal Australian Institute of Architects, Sydney.
- WEISBERG, B. (1971). *Beyond Repair: The Ecology of Capitalism*. Beacon Press, Boston.
- WHITE, L. (1968). *Machina ex deo: essays in the dynamism of western culture*. M.I.T. Press.
- WHITELOCK, D. (1971). *A Dirty Story: Pollution in Australia*. Sun Books, Melbourne.