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## RECOGNISING THE LIMITS TO GROWTH: A CHALLENGE TO POLITICAL ECONOMY

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Political economy in the past has tended to focus on distributional issues, especially regarding wealth and power. It has not been very concerned about the possibility that the amount of commodities being produced is too great. Indeed almost all identifiable political groups have taken for granted the desirability of raising output and 'living standards' and have assumed that that the supreme goal of national policy should be to increase production, i.e., to raise the GNP.

From the 'limits to growth' perspective, political economists have been as fundamentally mistaken as the neo-liberals with respect to what is now the most crucial issue confronting the world. This is to do with the gross over-production and over-consumption characteristic of the rich countries, and aspired to by the rest. This is the realm with which political economy most urgently needs to come to terms.

Marxists in particular have resisted any suggestion that our problems are due primarily to resource scarcity and ecological limits to production and consumption, preferring to heap all the blame for our predicament on capitalism and assuming that when we have got rid of it the available productive forces will have been freed to boost production and thereby eliminate human deprivation and suffering. The limits to growth perspective on the global situation sets major challenges to traditional Marxist thinking, both with respect to goals and the transition process.

This article considers the limits to economic growth, explores principles for a sustainable society, discusses the politics of social change and sets out some important implications for political economy as a field of study.

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### An Indication of the Limits

For thirty years the 'limits to growth' analysis has been steadily gaining strength. Some of the main lines of argument are as follows.<sup>1</sup>

- If the 9 billion people expected to be living on earth soon after 2070 were each to consume minerals and energy at the present *per capita* rate of wealthy countries, world annual output of these items would have to increase to about 8 times present levels. For about one third of the 35 basic minerals, all potentially recoverable resources are likely to be exhausted in under 40 years (Trainer, 1995a). All potentially recoverable oil, gas, shale oil, and coal (assuming 2000 billion tonnes) and uranium (via burner reactors) would probably be exhausted in about the same time span. To produce the required amount of energy from nuclear sources would require approximately 700 times the world's present nuclear capacity, all in the form of breeder reactors, given that fusion power is not likely to be available on the necessary scale for many decades, if ever. This would mean that at any one time approximately three quarters of a million tonnes of plutonium would be in use.
- Petroleum seems to set the most urgent resource limits (Campbell, 1997). World supply will probably peak in the next 5 to 15 years, and by 2030 be down to about one-fifteenth of the amount that would enable present Australian *per capita* consumption to be extended to all the people living at that time.
- To produce the average North American diet requires 0.5 hectares of crop land per person. If 9 billion people were to have such a diet 4.5 billion hectares would be needed, but that is about 3.5 times all the crop land in use on the planet.
- It takes about 13 hectares of productive land to provide one person in North America with their current living standard. If 9 billion were to live with that 'footprint', we would require 117 billion

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<sup>1</sup> For a more detailed account see Trainer, 1999, or <http://www.arts.unsw.edu.au/tsw/06b-Limits-Long.html>

hectares of productive land, but that is about 15 times all the accessible productive land in use on the planet!

- Since the early 1990s the UN Inter-governmental Panel on Climate Control has been stating that if we are to prevent the amount of carbon dioxide in the atmosphere from increasing we must reduce the rate of carbon release by 60-80%. If we reduced it by 60% and shared the available fossil fuels equally among all 9 billion people, you and I would have to get by on only about one-thirteenth of the *per capita* quantity we now use.
- Water represents one of the most worrying of the looming resource scarcities. We are using water much faster than it falls as rain which means we are reducing the water stored in the ground. If we reduced water use in agriculture to the rate at which rainfall delivers it, we could feed 480 million people less than we do now.

Most people seem to have little idea of the magnitude and implications of these kinds of figures. Clearly our rich world ways of life are not just a little unsustainable; they are far beyond levels of resource use, production and consumption that are sustainable or extendable to all people.

The foregoing notes refer only to the difficulties set by the present levels of consumption. The situation becomes far more problematic when we consider the implications of our society's fundamental commitment to economic growth. If we in Australia were to maintain our recent 3.7% p.a. rate of growth, and if by 2050 the living standards of the expected 9 billion people had risen to equal our own, total world economic output would then be 60 times as great as it is now, and would double every twenty years or so thereafter. The present levels of production, consumption, resource use and environmental impact are already grossly unsustainable, yet we are committed to an economic system that will quickly take us towards far higher levels.

It is commonly assumed that technological advance will solve the general resource and environment problem, i.e., that the development of more energy efficient technologies and more recycling will make it possible for us to go on pursuing ever rising 'living standards' and economic growth while reducing resource depletion and ecological

impacts to sustainable levels. But the multiples are far too great to make this even remotely plausible.

The best known 'tech-fix' advocate, Amory Lovins, argues that resource costs and environmental impacts per unit of production could be cut to one-quarter of present amounts, and maybe eventually to one-tenth. (Lovins and Von Weisacker, 1997). But this would still be far from sufficient to ensure both social equity and sustainability. Present total world production is probably at least double the long-term sustainable volume, given that carbon emissions need to be cut by at least two-thirds. Therefore, to enable us to continue present growth rates, and raise all people to our 'living standards' by 2050, technical advance would have to make possible 60 times the present levels of production and consumption while generating only one half of the present resource impacts and environmental costs. In other words a 'factor 120' reduction would be needed, not 'factor 4' or even 'factor 10'.<sup>2</sup>

The core assumption in the 'tech-fix' position is that renewable energy sources can and will substitute for fossil fuels. Although a sustainable society must eventually be based on renewable energy sources, it is not feasible that they could provide the quantities needed even to meet the present world energy demand for electricity and liquid fuels, let alone any projected demand based on economic growth.<sup>3</sup>

These various lines of argument constitute a persuasive case that the living standards and systems of rich countries such as Australia today are grossly unsustainable. We can have them for a short time only because we are taking far more than our fair share of the world's resources, especially the produce of Third World land and labour, and because we are consuming our ecological capital.

This 'limits to growth' analysis provides the appropriate perspective from which to understand several major global problems, most obviously the destruction of the environment. The ecosystems of the planet cannot be restored without dramatic reduction in the volume of producing and consuming taking place.

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2 For a critique of Lovins see Trainer, 2002a. See also Hayden, 2001.

3 The case is detailed in Trainer, 1995b, and Trainer, 2002b in press.

Secondly, given the resource limits, development (conventionally defined) for the Third World is impossible. Similarly it will not be possible to achieve a peaceful world while all pursue endlessly rising 'living standards' when there are already savage struggles over control of land, water, oil etc. If we in the few rich countries wish to remain affluent, we will need to remain heavily armed. (Trainer, 2002.)

In addition to the gross unsustainability of the global economy, it is also extremely unjust. Its fundamental market mechanisms enable a few to take most of the available resources (simply by being able to pay more) and, more importantly, by gearing much of the Third World's productive capacity, its land and labour, into producing goods for export to rich world supermarkets. Thus conventional development should be seen as a form of legitimised plunder.

'Globalisation' constitutes a stunningly successful drive by the corporate rich, via agencies such as the World Bank and World Trade Organisation, to secure access to those resources and markets previously protected for the benefit of local people and ecosystems.<sup>4</sup> In addition a great deal of effort goes into keeping in place the regimes that run Third World economies in the ways that suit the rich countries and their corporations. From time to time this involves assassinations, terrorism and invasion.<sup>5</sup>

### Principles for a Sustainable and Just Society

If the foregoing discussion of the limits to growth is basically valid we have no choice but to conceive a satisfactory society in terms of the following principles. These can be thought of as constituting 'The Simpler Way'.<sup>6</sup>

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4 <http://www.arts.unsw.edu.au/tsw/DocsGLOBALISATION.html>

5 See Trainer, 2002, and <http://www.arts.unsw.edu.au/tsw/10-Our-Empire.html>  
For extensive documentation see <http://www.arts.unsw.edu.au/tsw/DocsOUREMPIRE.html>

6 For the detail see Trainer 1995 or <http://www.arts.unsw.edu.au/tsw/12b-The-Alt-Sust-Soc-Lng.html>.

Firstly, material living standards, levels of production, consumption and resource use *per capita* must be low. This does not mean deprivation and hardship. It means being content with what is sufficient, being frugal, and deriving satisfaction from activities other than consuming.

Secondly, there must be a high degree of self-sufficiency – at the household, national and especially local level. Local resources of land, labour and capital must produce most of the goods and services needed, via mostly small decentralised enterprises. Thriving and diverse landscapes must include many firms, farms, woodlots, villages and towns, enabling bicycle access to work and eliminating most current need for transportation. There could still be national and international economies, but these would be far less extensive or important because relatively few goods would be travelling long distances.

There must also be many highly cooperative and participatory systems, including community workshops, development and use of local commons, sharing, working bees, committees and town meetings. These will enable participatory democratic arrangements to take control over most local affairs; it will make no sense for the government of many tiny regions to be carried out primarily by central authorities.

Above all there must be an economy in which market forces and the profit motive are not major determinants, there is no economic growth, the GDP is a small fraction of present levels, and in which there is a large cashless sector including gifting, produce from the commons, working bees, mutual aid and free goods from 'edible landscapes', i.e., many public spaces densely planted with fruit and nut trees etc. There might still be many small private firms and a place for market forces, but there would have to be social control over the economy as a whole. In a radically decentralised landscape this could be carried out via participatory local mechanisms. It must be emphasised that there would be far less consumption, factories, infrastructure, trade and work and therefore opportunities for investment of capital than there are now. Clearly a de-developed and stable sustainable economy cannot be a capitalist economy.

These changes in structures and settlements cannot be achieved without profound cultural change, to values and arrangements which contradict

current preoccupations with competitiveness, selfishness and especially acquisitiveness. The new local economies cannot function satisfactorily unless people are willing to work for the common good, share, cooperate and take collective responsibility for their fate. The Simpler Way need not involve loss of desirable modern technologies, such as in medicine or information technologies. Indeed, the elimination of the present vast quantities of wasteful production and consumption should enable increased resources to be devoted to research on socially important problems.

Whether or not a transition to such a radically different society is likely to be achieved is not central to this discussion. (There are obviously good reasons for concluding that it is not.) The fundamental point is that if the limits to growth analysis is more or less valid we have no option but to conceive of a sustainable and just society in terms of the foregoing principles of The Simpler Way.

The last two decades have seen the emergence of what could be labelled a Global Alternative Society Movement in which many individuals and groups have begun to build and live in settlements and systems more or less of the required kind. Its largest element, the Eco-village movement, now probably includes more than 2000 small settlements. (Hagmeier *et al*, 2000: FIC, 2000: Note 4).

### **Implications for the Politics of Social Change**

The 'limits to growth' perspective sets a number of important and at times radical implications for the politics of social change.

#### *The Good Society Cannot be an Affluent Society.*

We cannot develop a sustainable and acceptable world order while we have a capitalist economy, but we must do much more than transcend capitalism. If we eliminated capitalism and implemented socialism everywhere but remained committed to affluent living standards and ceaseless increase in the volume of production and consumption we

would inevitably still have almost the same range of global problems that we have now. The rich world would have to go on grabbing most of the scarce resources because there aren't enough for all to be as rich as we are, and more and more Third World productive capacity would have to be geared to rich world consumption. More environmental damage would accumulate, regardless of how hard a socialist economy tried to eliminate waste, corruption, advertising and inefficiency. Remember, present levels of production and consumption are quite unsustainable, and current growth rates will multiply these many times within coming years, and no realistic assumptions about pollution control or a rational socialist economy can reconcile such multiples with planetary resource limits.

The fundamental point here is that *a good, post-capitalist, society cannot be an affluent, industrialised or consumer society*. It cannot have high material 'living standards' and it cannot have a growth economy.

Affluence is not a necessary condition for a high quality of life. Marx was wrong in assuming that scarcity is the basic problem thwarting the emergence of a good society and that socialism is not possible without high levels of development of the productive forces. Many 'primitive' societies and presently functioning alternative communities show that only very low material living standards and levels of industrialisation and technology are necessary for a high quality of life. The most important task for advocates of The Simpler Way is to help people within consumer society to see that living more simply, frugally and cooperatively can yield a higher quality of life than most people experience at present.<sup>7</sup>

The idea that the goal must be transition to a Simpler Way can be difficult for political economists to accept as it clashes with taken for granted notions of development and progress. It is not surprising that there tends to be a less than favourable response to the notion that 'living standards' must fall dramatically.

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7 On the benefits of The Simpler Way see <http://www.arts.unsw.edu.au/tsw/D65TW-Benefits.html>

*Centralised "Big-State" Socialism is Neither Desirable nor Viable*

In a planet of limited resources most governing will have to be carried out by small local communities, drawing heavily on voluntary inputs in order to administer their realms. Centralised states could not run all these communities. Viable societies will have to depend on enthusiastic citizenship and participation on the part of ordinary people who understand local conditions and the ecosystems on which they all depend. Thus there would be relatively little bureaucracy, few professionals in government, and mainly technically simple administrative tasks. Much of the governing process would be carried out in the informal public discussion of issues which would slowly clarify the best policies for the region. All would be acutely aware of how their welfare depends greatly on the health of the local ecosystems and social systems which provide their resources and quality of life. Thus there would be powerful forces tending to focus the political process on finding the best solutions for all within the region, rather than on zero-sum struggles between interest groups as at present.

*Development as 'Modernisation' Must be Rejected*

As has been noted, if the 'limits' analysis is valid it will not be possible for the Third World to rise to current rich world living standards, technologies or institutions. A radically different conception of the goal of development must be adopted, along with understandings of 'progress', 'welfare', and 'development' that depart from those embedded in 'modernisation'. The *Simpler Way* points to the importance of thinking about development in terms of 'subsistence'. (Mies and Shiva, 1993, Benholdt-Thomsen, Faracis and Von Werlhof, 2001).

Many societies, especially rural intentional communities, show how mistaken the conventional conception of development is. Most Third World villages could in principle have very satisfactory housing, food supplies, leisure systems, basic clothing and goods, aged care, health and education if people were allowed to organise their existing material, physical, biological, social and cultural resources to those ends. In other

words, we could, in principle, cut to where we want to be without having to go down the long and dreadful conventional development path defined in terms of capital accumulation.

*The Mode of Consumption is as Important as the Mode of Production.*

If there is one essential and defining element in the Marxist account it is its focus on the mode of production. Progress to a Marxist is to do with the transition to 'a more advanced mode of production'. The limits to growth perspective indicates that the mode of consumption is at least as important. Again, if all we do is abandon the capitalist mode of production without changing to the mode of consumption characteristic of The Simpler Way, we cannot achieve a sustainable society.

*The Role of Force and Power*

It is commonly assumed by political economists that fundamental system change will inevitably involve force, the exercise of power, and overt, intense and violent conflict. Indeed, conflict tends to be embraced, because the capitalist class will not voluntarily step aside. The Alternative Movement represents a quite different orientation. Its literature almost never discusses opposing the capitalist system, let alone doing so via overt conflict or armed violence. It is getting on with building the new without any interest in confronting the old, and certainly without assuming that we cannot begin our new ways until we have defeated the enemy.

Force, power and confrontation are of little relevance or use to the alternative philosophy, or are in direct conflict with it. Given the kind of society to be built, the fact is that force and power are not means that can help us to build what we have to build. (They might become means we will have to adopt at some far distant time in order to defend what we have built.)

We cannot have thriving local economies unless people in general willingly adopt them and make them work because they understand why

such arrangements are necessary, because they have developed the many necessary skills and attitudes and, more importantly, because they find those ways of living satisfying. Eco-villages and local economies simply cannot work without a motivation whereby people in general find strong intrinsic values and rewards in living simply, cooperatively and self-sufficiently and in living with the knowledge that only by following The Simpler Way can we enable a satisfactory life for all other people. Force, power and confrontation can make no contribution to achieving this goal. It is not possible to force people to eagerly and conscientiously pitch into building and running their own frugal household economies and local cooperative economies. Either people will want to do the crucial things primarily for the satisfaction these activities yield or those things will not be done at all.

Certainly this vision has little or no role for state power. To Marxists it is essential to eventually seize and use state power. But *state power cannot make eco-villages work!*

#### *What Comes First, the Revolution or the Value Change?*

Marx claimed that after the revolutionary seizure of state power there would have to be a long period of 'dictatorship of the proletariat' during which new habits, ideas and values would be established among people in general. Then a cooperative society would be able to function without the need for a coercive state.

The Alternative Movement stands for a reversal of this order of events. The movement assumes that the required new ideas and values must be developed and must become widely embraced over a long period *before* the revolution can take place and make the structural changes possible.

#### *Undermining, not Confronting, Capitalism*

The Movement's implicit strategy for defeating capitalism is not to confront it, engage it in desperate struggle and eventually destroy it. In fact the Movement hardly even acknowledges capitalism, let alone seeks

to attack it. Its implicit strategy is in effect to ignore capitalism to death. That is, the underlying rationale is that, if in time enough people can be persuaded or attracted to quit the mainstream economic system and its values and move into alternatives, the capitalist system will sicken and crumble. (It is not being assumed that this is a sufficient strategy, only that it is the most appropriate strategic focus in our present circumstances.)

Most theorists of social change would probably scoff at the naivety of the assumption that it can be a non-confrontational revolution. It is usually taken for granted that there is no possibility of getting rid of capitalism without a titanic, mortal contest. However, there are occasions when radical change does seem to have occurred without overt conflict. Sometimes it is more like the fading out of a once-dominant paradigm, to be replaced by a newly popular one. This is in fact the norm at the level of big paradigm change in science (Kuhn, 1970), and in many cultural realms such as art, pop music and fashion. A particular view or theory or form is dominant for a time, but then supporters more or less lose interest in it and move to another one. In science dominant paradigms are rarely if ever shown to be wrong and therefore dropped.

Some of the most significant political changes of the twentieth century seem to have occurred in this way, notably the collapses of the Soviet Union and the apartheid regime in South Africa, and the fall of the Berlin Wall. All seem to have been characterised not by set-piece, head to head, violent confrontations in which one side was driven off the field, but mostly by people 'voting with their feet' and ceasing to support, after a long period of growing disenchantment and loss of legitimacy and increasing awareness of the desirability of other ways.

*The Anarchists Seem to Have Been Right.*

The classical anarchists could not have seen how well their recommendations for social organisation and for transitional strategies align with the prerequisites arising from the 'limits to growth' analysis. The Simpler Way necessarily involves decentralised, autonomous communities in which participants willingly come together to contribute

to the building and running of small scale physical and social structures, with relatively little dependence on central authorities or on the state. Authoritarian leadership, power, coercion, and violence can have no place. Above all, the Global Alternative Society Movement assumes that the new society can and should be 'prefigured', i.e., that we can begin to build it now within the society to be replaced.

### **What Then is to be Done?**

The major implication for activists deriving from the foregoing discussion is that the top priority should be to get the 'limits to growth' perspective and The Simpler Way on the agenda of public discussion. The most effective way to do this is to work within the Global Alternative Society Movement to help to establish alternative lifestyles, systems and settlements, here and now. These will be examples that will constitute our best bases and tools for persuading people that consumer capitalist society is unacceptable and that The Simpler Way makes far more sense in terms of sustainability, global justice and quality of life.

Again the implications differ markedly from those usually found within the literature of political economy. If it is the case that a transition to The Simpler Way must eventually be achieved, then this sets the question how could we possibly get there from here. The transition cannot be instituted by state authorities, legislatures or revolutionary leaders. It can only come via the slow development of the required world view and values through participating in building new local economies and the associated world view. Nothing is likely to contribute more to this than the establishment of highly visible examples enabling people to see and experience the merits of the alternative way and providing bases for educational activities and the building of a politically effective movement. (The additional merit is that we can begin to experience and enjoy elements of post-capitalist society here and now, whereas the orthodox Marxist strategy does not permit this until after the revolution.)

It is not being assumed that the mere creation of the examples is all that will be needed. The claim is that, given the dominance of capitalism, the

lack of other promising options for activism, the form a sustainable society must take, and the changes in mentality that must be achieved, building alternatives is likely to be the most effective work to be done right now. At a later stage other goals might become priorities, including overt conflict with a system that identifies these initiatives as a threat and moves to eliminate them.

There are good reasons for thinking that, by the time the Alternative Movement is perceived as a significant threat, capitalism is likely to be in such serious difficulties that its capacity to deal with the Movement will be severely limited. If the petroleum crunch comes as expected, and/or if the skyrocketing debt brings the financial house of cards down, it is not so likely that state authorities will be willing and able to root out the thousands of small highly self-sufficient communities that have emerged in slums, ordinary neighbourhoods, dying country towns and rural valleys and throughout the Third World.

I should stress that it is not being assumed here that this strategy is likely to succeed. There are good grounds for thinking that it is too late in the day to retrieve the accelerating deterioration in ecosystems and, more importantly, in socio-political systems. The argument has only been that, given our situation and the kind of society to be worked for, this is the best option.

### **Implications for Political Economy as a Field of Study.**

Because political economy has not identified affluence and growth as major problems it has tended to give a partial and misleading understanding of the predicament capitalism has led us into, and of the way out. Following are some of the questions to which political economy should give more attention.

- What are the differing class interests at stake with respect to affluence and growth? Those of the capitalist class are transparent, but what about the professional and managerial ranks, and the working and *lumpenproletariat* classes, (which currently seem to be no less enthusiastic about rising 'living standards' than the rich).

- What are the ideological forces at work reinforcing the commitment to affluence and growth? What conceptions of 'progress', 'development', 'welfare' and 'living standards' are built into conventional discourse? What mechanisms discredit the radically alternative values and conceptions indicated by The Simpler Way, notably frugality, self-sufficiency, simplicity, and subsistence? In what ways are differing classes mistaken about what is in their interests with respect to affluence and economic growth? (There is considerable evidence that for most people the quality of life is now falling).
- What are the connections between the dominant ideology of affluence and growth and the media, educational institutions, Postmodernism and the culture industry? Is Postmodernism essentially the cultural form which capitalism generates in its drive for ever more consumption?
- What are the connections between affluence and alienation? Has shopping become a dominant life preoccupation primarily because capitalism has eliminated most other sources of satisfaction?
- What are the implications for the concept of emancipation? More than liberation from capitalist productive relations is required. What are the implications for varieties of socialism, communism and the general discussion of what constitutes the good society?
- What are the implications for thinking about the role of the working class in the required transition, about power, and the state?

Not the least interesting questions concern the significance of the 'limits to growth' perspective for the class interests of academics in general, and political economists in particular. It would seem to confront a number of taken for granted assumptions and values regarding progress, welfare, redistribution, industrialisation, manual labour, revolution, sophisticated technology, the working class, specialisation, and 'the idiocy of rural life'. Unfortunately, at first encounter The Simpler Way is likely to be unattractive to the intellectual ranks of consumer society.

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