Qingzhi Huan
Editor

Eco-socialism as Politics

Rebuilding the Basis of Our Modern Civilisation

Springer

Eco-socialism as Politics

Qingzhi Huan
Editor

Eco-socialism as Politics

Rebuilding the Basis of Our Modern Civilisation

Springer

Editor
Qingzhi Huan
Institute of Marxism
Peking University
Beijing
China, People's Republic
qzhuan@pku.edu.cn

ISBN 978-90-481-3744-2 e-ISBN 978-90-481-3745-9
DOI 10.1007/978-90-481-3745-9
Springer Dordrecht Heidelberg London New York

Library of Congress Control Number: 2010923405

© Springer Science+Business Media B.V. 2010
No part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher, with the exception of any material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work.

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Acknowledgments

This book is to a large extent the final result of a three-year research project of 2005-2008 (05JJD710007) under the framework of 'the Key Research Institutes for Humanity and Social Science Projects' funded by Education Ministry of China, culminating at the 'International Conference on Environment and Socialism' held in Jinan on 17-19 May 2008, for which the Institute of Contemporary Socialism and the International Office, Shandong University, have also provided significant financial support. My first thanks therefore go to the above-mentioned funds and institutions for supporting this important endeavour. For the publication of this volume, I wish also to thank Alexander von Humboldt Foundation for providing with me a two-month research fellowship at the FFU, Free University Berlin in June/July 2009 to complete all the editing work. Finally, I want to express my sincere gratitude to Mr. Fritz Schmuhl and Mrs. Takeesha Moerland-Torpey of Springer – it is their kind invitation and encouragement which make the publication of this collection possible.

Contents

List of Contributors

Takis Fotopoulos is a Greek political philosopher, editor of *Society and Nature/Democracy and Nature/The International Journal of Inclusive Democracy*; He is also a columnist for the Athens Daily *Eleftherotypia*. His books include *Multi-dimensional Crisis and Inclusive Democracy* (2005) and *Towards an Inclusive Democracy* (1997) which has been translated into French, German, Spanish, Italian, Greek and Chinese.

Lixin Han, received his Ph.D. in social science at Hitotsubashi University, is an associate professor at the Department of Philosophy, Tsinghua University, China. His current research focuses on Marxist philosophy (MEGA studies), environmental philosophy and ethics, and eco-socialism. He is the author of *Ecology and Marx: A Unification of Naturalism and Humanism* (2001) and *Environmental Axiology, Environmental Ethics: A True Moral Revolution* (2005).

Qingzhi Huan is a professor of comparative politics at Research Institute of Marxism, Peking University, and School of Political Science and Public Administration, Shandong University, China. His main research areas are environmental politics, European politics and left politics. Among others, he was a Harvard-Yenching Visiting Scholar of 2002/2003 and a Humboldt Research Fellow of 2005/2006. He is the author of *International Comparison on Environmental Politics* (2007) and *A Comparative Study on European Green Parties* (2000).

Do-wan Ku is the director of Environment and Society Research Institute, an independent research centre based in Seoul, Republic of Korea. He also works for Korean Association of Environmental Sociology as a secretary. He was an advisor to the minister of the Ministry of Environment and a chief research fellow for the Presidential Commission for Sustainable Development between 1999 and 2004. He has published *Environmental Sociology of the Korean Environmental Movement*, and many other books and articles concerning environmental movement and policy.

Yitian Li is an assistant professor at the Institute of Contemporary Marxism, Central Compilation and Translation Bureau (CCTB), China; he is also an editor of *Marxism and the Reality* (Beijing). His main fields of research are modern ethics and political philosophy.

Feng Lu is a professor at the Department of Philosophy, Tsinghua University, China. His fields of research cover environmental philosophy and ethics, philosophy of science and technology, and critique of modernity. He has worked as a visiting scholar at Harvard University (US), University of St Andrews (UK) and Yonsei University (Korea). His main publications include *Home of Human Beings: Philosophical Reflections on the Contradictory of Modern Culture*, *After Enlightenment: Gain and Loss of Modern Western's Value*, *Living Styles of Modern People and Environmental Protection*, and *Applied Ethics: Philosophical Reflections on Contemporary Human Lives*.

Masatsugu Maruyama is a professor of political theory at Yamanshi Gakuin University, Japan. He is the author of *Ecological Political Theory* (2006) and has published various articles on environmental political philosophy. His current research focuses on building the idea of ecological citizenship based on the subsistence perspective.

David Pepper is a professor emeritus of geography at Oxford Brookes University, the UK. He authored the books of *Modern Environmentalism: An Introduction* (1996), *Eco-socialism: From Deep Ecology to Social Justice* (1993), and *Communes and the Green Vision: Counterculture, Lifestyle and the New Age* (1991).

Ariel Salleh is a researcher in political economy at the University of Sydney, Australia. Formerly associate professor in social inquiry at UWS and editor of *Capitalism Nature Socialism*, she is the author of *Ecofeminism as Politics* (1997) and *Eco-Sufficiency and Global Justice* (2009) (www.ArielSalleh.net).

Saral Sarkar is an Indian Green thinker who has been living in Cologne, Germany, since the early 1980s. He is the author of *Eco-Socialism or Eco-Capitalism*? (1999) and *Green Alternative Politics in West Germany* (1994/1993).

Brian Tokar is a long-time activist and writer, and the current director of the Institute for Social Ecology, based in Plainfield, Vermont, USA. He is the author of *Earth for Sale* (1997) and *the Green Alternative* (1992), edited two books on the politics of biotechnology, *Gene Traders* (2004) and *Redesigning Life* (2001), and co-authored the forthcoming collection, *Agriculture and Food in Crisis: Conflict, Resistance and Renewal*. He lectures widely on a variety of environmental and political topics.

Victor Wallis teaches political theory in the Department of Liberal Arts at the Berklee College of Music, Boston, USA, and is the managing editor of *Socialism and Democracy*. His writing on ecology and technology have appeared in *Capitalism Nature Socialism*, *Monthly Review, Organisation and Environment*, *Socialism and Democracy* and *the Historisch-Kritisches Wörterbuch des Marxismus*, and have been translated into nine languages (www.victorwallis.com).

Hyoung-Beom Yeo studies urban and environmental planning at the Graduate School of Environmental Studies, Seoul National University. He is writing his Ph.D. dissertation on the dynamics of watershed governance, focusing on the relation

between watershed restoration policies and urban regeneration policies, and the role of policy mediators in policy process. His research interests also include political ecology, social constructing of urban and environmental planning, and ecological economics.

Shulan Zhang is an associate professor at School of Political Science and Public Administration, Shandong University, China, and an editor for the journal *Issues of Contemporary Socialism* (Jinan). She was visiting scholars at St Antony's College, Oxford University in 2006/2007 and at the Centre for East Asian Studies, Jawaharlal Nehru University in 2008. Her academic interests focus on Indian and South Asian politics and environmental movements.

Part I
Introduction

Chapter 1
Eco-socialism in an Era of Capitalist Globalisation: Bridging the West and the East

Qingzhi Huan

Abstract Eco-socialism as a red-green politics has progressed rapidly during the past decade, elaborating a distinctive diagnosis and prescription for the ever deteriorating environmental problems in the world today. Meanwhile, it seems quite clear that eco-socialism cannot function as a more convincing political discourse and influential practical movement for the green transformation until it effectively overcomes the enormous difficulties brought about by a capitalist globalisation. To meet these challenges, in the author's point of view, there is an urgent need for eco-socialism to focus on the following three tasks: to refine a coherent and convincing interpretation of the on-going process of globalisation, to make arduous efforts to assimilate the substance of environmentalism (ecologism); and to pay more attention to the political potential of non- and/or anti-capitalist ideas and practices in the contemporary East.

Keywords Capitalist globalisation • the East • Eco-socialism • Eco-socialists • the West

Eco-socialism is indeed many things to many people. From the perspective of environmental politics, it can be broadly described as a radical *homocentric* (as distinct from ecocentric) application of ecologism (interchangeable with ecologism on most occasions in this chapter) to socialist analysis and prescription. In other words, it is a red-green pattern of socialism, designed to create a socially just and ecologically sustainable society. Over the decades, eco-socialists of all kinds – in this volume by definition including the green socialists, the left Greens, the eco-Marxists, the social ecologists, the socialist eco-feminists, the ecologist social democrats, etc. – have been distinguishing their stance from other green political

Q. Huan (✉)
Research Institute of Marxism, Peking Centre for Environmental Politics Research, Peking University, 100871 Beijing, China
e-mail: qzhuan@pku.edu.cn

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_1, © Springer Science+Business Media B.V. 2010

theories such as ecological communalism or anarchism and ecological modernisation. Simultaneously, eco-socialist or non-capitalist alternative experiments are thriving at the grassroots level, mainly in the post-industrialised Western societies (Pepper, Chapter 3, this volume).

Nevertheless, a critical review of developments in eco-socialism since the mid-1990s has clearly shown (Huan 2005; 2006), to be a convincing political discourse and influential practical movement for green transformation, eco-socialism is still facing enormous challenges. There has been an explosion of the eco-Marxist literature in this period, especially owing to the contribution of the academic group surrounding the journal *Capitalism Nature Socialism* in the US. Yet a methodological divergence over how to conceptualise the theoretical basis of eco-socialism, 'Marx's ecology' or 'the Marxist ecology', is still unsettled. Of them, Burkett (1999), Foster (2000) and Kovel (2001), by and large belong to the former group, and Benton (1996), O'Connor (1998) and Löwy (2002), the latter one.

Second, the major strength of eco-socialism – as an alternative to green capitalisms – lies in its socio-political criticism of the ecological maladies of capitalism. But eco-socialism is less successful when it comes to promoting the rationality and attractiveness of its institutional design for a red-green replacement. In other words, eco-socialism, with such variant titles as 'socialist ecology', 'ecological materialism' or 'revolutionary ecology' (Hampton 2007; Salmon 2007; Socialist Resistance 2007), functions well to illustrate why ecological problems cannot be resolved or avoided in the capitalist regime; whereas it faces tremendous difficulties in convincing the majority of common people 'why another world is desirable and possible'.

Third, the practical influence of eco-socialism as a political discourse and strategy is to a large extent confined to the left-wing of the Greens and the green-wing of the Socialists. And in neither of these political camps, does eco-socialism enjoy a dominant or leading position. The eco-socialists themselves are certainly not the sole cause of this collaborative failure, however, this fact does show that 'the problem of transformation agency' for eco-socialism is far from resolved (Goodin 1992). At a macro level, European integration and the globalising world driven by the interests of capital accumulation and proliferation, have been proceeding very fast in the last decade. And in this context, the 'problem of transformation agency' appears even more troublesome: for unless the green movement and the red movement can unite eco-socialism is unlikely to make any real change to the grey reality of captalism (Young 2000). But, how will eco-socialism achieve this?

The purpose of enumerating the weaknesses of eco-socialism above is certainly not to demonstrate its obsoleteness or irrelevance to the capitalist globalising world, but quite the contrary, it is to emphasise the necessity for eco-socialist thinking and practice to broaden itself from a global perspective and accordingly find a new impetus for moving forward. To imitate one motto coined out by the Greens, eco-socialism should 'both think globally and act globally!'. Therefore, an urgent innovation for eco-socialists today, in the author's point of view, is transcending the boundaries of nation states and the artifice of the developed and developing

worlds. It is time to contemplate what contributions eco-socialism can make - and how to achieve them – to an ever more complex interacting world.

Of course, it is far beyond the reach of this brief introductory chapter to provide a detailed 'to do' list for eco-socialism or recipes for how to revitalise its political relevance. But for eco-socialism to move forwards to a new stage, that is, to become a really effective global political discourse and movement for social justice and ecological sustainability, then the following three tasks might be an appropriate starting-point.

A matter of paramount importance to the agenda for eco-socialism is to elaborate a more coherent and convincing interpretation of the globalisation which has been spreading with surprising rapidity since the late 1970s. Today, for the first time in history, even the common people – no matter whether from the affluent US or struggling Africa – clearly feel that they are living in an ever interplaying or integrating world. In this respect the current financial and economic crisis from which almost every corner of the globe is suffering offers thousands of troubling examples everyday. Yet, there is still no consensus among the academics or the politicians on nature and motivational mechanism of globalisation or its regional versions such as European integration. Unfortunately, the same lack of consensus is also true for eco-socialists. For instance, some scholars argue that the dynamic globalising expansion and associated environmental deterioration lies in the inherent logic of capitalism. Thus, according to one line of thought there are 'two inner contradictions of capitalism', the second one being 'the ecological contradiction' (O'Connor 1998). Another line emphasises that the market-oriented economy and its international institutionalisation, once established or adopted, is an irreversible process (Fotopoulos 1997). These 'essentialist' arguments may well explain why there is no effective solution to environmental problems within the current capitalist institutional framework. But arguably, they may simply leave an inpression that, given the nature of business dominated globalisation, there is actually no real possible replacement of capitalism.

As far as understanding the era of globalisation is concerned, other than the 'big' issues mentioned above, there are also many 'small' questions which need to be answered by eco-socialists. For example, even if economic globalisation were a process with no way out, is no structural change possible regarding beneficiaries and losers? It is obviously a too simplistic generalisation that developing countries are only immiserated through the process of globalisation (Fotopoulos 2008). If that is the case, we must identify a new configuration of political forces in the search for a socially just and ecologically sustainable society. These might be global organisations, inter- or transnational institutions, nation state governments, political parties, or NGO networks. In a nutshell, it is not good enough for contemporary eco-socialists to say that eco-capitalism is hopeless in the long run whereas eco-socialism is impossible in the near future (Pepper 1993). Furthermore, in addition to its alternative social-ecological experiments and popular anti-globalisation movements, eco-socialism may, and should, have even more diversified dynamics or practical forms – ones which are promoted or even created by globalisation.

Another ‘must to do’ for eco-socialism is making more arduous efforts to assimilate the substance of environmentalism or ecologism. The eventual success of eco-socialism in achieving a socially just and ecologically sustainable society very much depends upon its continuing self-improvement in a two-directional manner. That is to say, to input more socialist analysis and prescription into environmentalism, and simultaneously more environmentalism into socialist analysis and prescription. So what are the major truths highlighted by environmentalism that eco-socialism should fully understand and learn? In my view, two points are most worthwhile: (a) the adoption of a sincere respect for nature, even recognition of the inherent value of nature as ecologists do, and (b) the adoption of economic limits to large-scale material production and consumption. In this aspect, Saral Sarkar, an India-born Germany-lived eco-socialist, is pioneering in declaring that a real eco-socialist society can only be established upon a new basis. For Sarkar, the new socialist Man will have a strong feeling and morality towards nature and a steady economy, realised though a ‘great regression’ from the current level of production and consumption (Sarkar 1999). This is probably the very reason, however, why he has been not quite popular in the mainstream of Green political parties and the mainstream of eco-socialism. Farewelling the over-faith of traditional socialism in material progress and demonstrating that progress remains possible in an economically steady society is still a hard job for eco-socialists.

Even if there was a political consensus on pursuing unlimited economic expansion there remain a lot of urgent issues for eco-socialists. For instance, in what sense can the current financial and economic crisis presage the possibility that capitalist globalisation is close to turning against itself, and thus providing an opportunity for initiating eco-socialist transformation? The world is certainly ready for a true change (unlike what Barack Obama propagated in his presidential campaign) (Sarkar 2008). If this critical point has not arrived, eco-socialists must be able to provide a convincing explanation as to why this seemingly greatest opportunity in a century has to be a missed one. Eco-socialists must then imagine a more ‘ideal’ scenario in which worldwide economic growth will be stuck in a more severe regression for a longer time. In this sense, what the current economic crisis offers for eco-socialism is both a great opportunity and a rigorous challenge.

Finally, eco-socialism needs to pay more attention to the political potential for green transformation of non- and/or anti-capitalist ideas and practices in the contemporary East. In the literature of green politics, compared with the relatively frequent references to the ancient Oriental wisdom of ecology, there is a serious absence of modern Asian ecological alternatives. There is no exception for eco-socialism in this regard. Indeed, the field of environmental politics is still missing an explicit position on the question of whether eco-socialist ideas can be carried out in non-Western regions. If the answer is positive, which country – economically rich Japan, Buddhism-flourishing India, or socialist China – is closest to initiating a red-green transformation? In what sense does that country lead? And how might it do so? More significantly, eco-socialists today can only answer this question in the context of the globalising world. On one hand, any possible eco-socialist breakthrough for a certain country or region is to a great extent subject to the world situation as a whole, which

implies that a green political revolution in one country becomes even more difficult and impossible. On the other hand, if such a revolutionary action takes place, it will definitely have both regional and global influence, especially if occurring in giant world powers like Japan and China.

China is a good example here in at least three senses. First of all, China was, and still is, a socialist country. As a socialist state, for a quite long time it attempted to create a nationally-planned or centralised system of economy, politics and society restricting the capitalist mode of production as well as living style and eventually eliminating the roots of capitalism. In this sense, the liberal reform and openness policy introduced in the late 1970s is to some extent a U-turn change, shifting the national priority from political struggle for the purity of socialism to economic development for material prosperity mainly through learning from and/or competing with the advanced West. Admittedly, China has created an economic miracle over the past 3 decades. From an eco-socialist perspective though, such a great success is not unproblematic: both in terms of how to transcend the ever increasing capitalist elements of the Chinese economy and how to overcome the ever deteriorating ecological crisis which results from the growth model. Thus it is a very interesting question to investigate whether China can find a way out of this capital-oriented thinking and practice over time.

Secondly, China was, and still is, what the international polity calls 'a developing country'. There are thousands of ways by which to define what 'developing country' means. But, one of the key features for China as a developing state is the great unevenness in economic prosperity and living standards among different regions, provinces, cities, and social strata. Even recognising the necessity for fairer wealth distribution, it is commonly believed that this problem will be alleviated (in *no* way resolved, of course) by further economic development. However, this in turn will undoubtedly bring about more ecological and environmental burdens to the country, as well as to the globe. Predictably, in the China of today – as in the other developing countries, the most difficult work for environmentalists, including eco-socialists, is to convince the majority of people that the current mode of development is unsustainable, and more importantly, that a conversion of direction is unavoidable.

Thirdly, China was, and still is, a transitional country. As a transitional state, China, on the one hand, has no substantial alternative to participating in the capitalism-dominated world, at least in its initial stage of economic modernisation. On the other hand, both as a result of its gradual peaceful rise to the status of a giant world power and because of so many extremely troublesome challenges confronting it, it is not impossible that China might eventually be able to turn its progress in a new direction. This new China might establish a socially just and ecologically sustainable society, which transcends both the greening of capitalism and conventional socialism.

With the above analysis, we can reasonably say that eco-socialism is still one very young enterprise with bright prospects, at least in the sense that there remains much hard but meaningful work for the eco-socialists to do. Such a general understanding, of course, also constituted the primary motivation for editing this collection, as the final result of a 3-year research project on the subject of

eco-socialism, culminating with the international conference on environment and socialism in Jinan, China, on May 6–8, 2008. The ambition of this volume, however, is very limited. In brief, it seeks to provide an international East-West academic forum on contemporary eco-socialism in order to enhance scholarly dialogue among researchers. Thematically, this collection aims to update and offer a critical reflection on the possible epochal contribution of eco-socialism as a red-green politics to rebuilding the basis for modern civilisation. Therefore, though quite diverse research issues and writing styles at first glance, the contributions in the three sections of this volume all attempt to demonstrate why and how co-socialism can provide a better understanding of environmental problems than green discourses – such as deep ecology and ecological modernisation theory (Huan 2007). The essays reveal the potential of an ever-broadening literature of eco-socialism as a true alternative to deteriorating ecological crisis within the context of a capitalist globalisation.

The volume begins with Lixin Han's reflective review on relations between Marxism and ecology. His approach is to examine the dual logic of labour process theory in *Capital*. Some scholars assert that Karl Marx is an anthropocentrist advocating the 'domination of nature' for human ends, while others argue that Marx is a nature-centrist emphasising 'the root source of nature'. In Han's point of view, introduction of the concept of material metabolism gives Marx's concept of labour strong implications for modern ecology. On the surface, the twofold logic of Marx's labour concept seems contradictory. If seen from the perspective of materialist dialectics, however, it is a kind of unity at a higher level, namely, a dialectical unity of 'realisation of purpose' and 'material metabolism' based on 'nature as the root-source'. Therefore, he argues, a Marxist methodology on environmental issues will be neither 'natural-centrism' or 'life-centrism' nor 'technology optimism' or extreme 'anthropocentrism'; instead, it should be a materialist dialectical theory which has abandoned the inherent confrontation of the humanity versus nature dualism and achieved the dialectical unity of them.

In Chapter 3, David Pepper offers a critical appraisal of contemporary eco-socialism in the West. According to him, there have been two major developments for eco-socialism in recent years. The first one is that eco-socialism is more willing to acknowledge the complexity of the modern globalising world and thus to move away from that crude economism which has disillusioned many would-be Marxist theorists and practitioners in the past. The other one is that eco-socialism pays more attention to the *practical* side of political change, envisioning and constructing alternatives to capitalism, which are dominated by social and environmental considerations and by the principle of *production for social need rather than profit through consumerism*. These alternatives form a *community* economy of alternative spaces within capitalism, though as Pepper reminds us, the *transgressive* potential of such 'transitional forms' might make them become a force for the status quo.

Socialism and technology is one of the critical issues for an eco-socialist transformation. In the fourth chapter, through a sectoral overview, Victor Wallis argues that both for the economy as a whole and for each of its sectors, it is already possible to outline the main features of current capitalist practice, the implicit requirements for a socialist alternative, and the degree to which the conditions for

satisfying these requirements are present. In a word, a society-wide shift to cleaner and more sustainable technologies is already conceivable. For Wallis, the distinctive contribution of socialism lies not in any particular inventions that might emerge but rather in the reorganisation of society in such a way that technological choices are no longer made on the basis of marketability and profit-potential, but rather on the basis of compatibility with the overall requirements of humanity and the natural world.

Chapter 5 is Yitian Li's eco-philosophical analysis on the concept of local community in the context of globalisation. According to him, the local community approach of eco-politics is both a 'diagnosis' and 'prescription' for dealing with the environmental crisis, but though it has theoretical potential, it can not be workable in reality. This is because the fundamental feature of modern ecological crisis is that it is no longer merely a problem at the local community level but exists as a global one. Furthermore, the very idea of emphasising the priority of 'community' makes it difficult to find solutions to ecological problems at the global level. Thus, he suggests, more attention to the unique value of eco-Marxism as an integral part of eco-politics in addressing ecological crisis in the contemporary world.

In Chapter 6, Feng Lu provides a socio-historical analysis of the evolution of consumerism and the logic of capital, by comparing how it occurred in the West – a long and gradual process – and in China – a short and radical one. Either way, the outcome is that the 'logic of capital' has become the dominant common ideology and the 'key logic' behind institution building and social life. Accordingly, people who choose money-making as their main pursuit of life turn into the backbone of society. However, as Lu argues, the ever worsening global ecological crisis cautions us that the lifestyle of 'massive production – massive consumption – massive waste' stimulated by consumerism has to be changed through a 'progressive revolution', if the nations are to survive on the globe in security. The key for such a revolution lies in the popularisation of ecological values. This change will originate not only from promotion and education but also from the warnings exerted directly by pollution and ecological degradation.

The following chapter is Takis Fotopoulos' theoretical criticism of the so-called 'de-growth project' – written from the perspective of inclusive democracy. The 'de-growth project' has emerged as a significant development within ecological thought and activism during the last 10 years – a proposal for transcending the contemporary world economy through a 'radical' reform within the market economy institutional framework, especially the creation of decentralised urban eco-villages. However, Fotopoulos strongly believes, such a plan is simply non-feasible within a market economy and particularly so within the international system whose fundamental element, the open and liberalised market, is crucially incompatible with de-growth. Achieving the de-growth, which is absolutely necessary for green transformation, presupposes a new system of economy and society beyond the internationalised market. This is a goal which the inclusive democracy project has been proposing for some time.

In the eighth chapter, Brian Tokar summarises the life-long efforts of Murray Bookchin, the founding father of social ecology. The chapter asseses Bookchin's

contributions to the red-green social movements, and asks what contributions social ecology can make in the future. Bookchin predicted in the 1960s the corrosive simplification of living ecosystems and the retreat into an increasingly unstable and synthetic world. Now this has evolved from a disturbing future projection to a global reality, the long-term survival of life on earth to a large extent depends on the human capacity to challenge the dominant capitalist system at its core and evolve a broad, counter-hegemonic social movement. But this movement must refuse to compromise its values and settle for partial measures, and it is here that the revolutionary and reconstructive social and political vision of social ecology can still play an enlightening and encouraging role.

In the last chapter of Part II, Ariel Salleh argues that unless eco-socialism is sex-gender literate, it cannot even begin to function as a democratic politics. This chapter first amplifies eco-feminism using the ecological footprint indicator, and addresses sex-gender differences in energy consumption patterns, preferred solutions to climate change, and policy decision-making styles at international forums like the IPCC. Then from a clear eco-feminist standpoint, Salleh argues that an eco-socialist politics must find a way to accommodate the implications of sex-gender 'difference', if it is to theorise and act as a globally just and deep green movement.

In Chapter 10, Masatsugu Maruyama makes a primary assessment of the reform of Japanese agricultural policy from an eco-socialist perspective. By accepting a broad definition for eco-socialism, then stressing the specific characteristics of farming labour, his investigation of the Japanese case demonstrates that the goal of environmental protection in rural areas is essentially incompatible with an internationalised agricultural market. Maruyama claims that to integrate agricultural production policy with environmental protection policy, we have no alternative but construct a decentralised market where local people can physically confirm the absence of environmental risk for themselves. He then argues, that the agricultural environmental policy reforms pursued in Western industrial countries, including in Japan, can not meet these requirements, even if they are not moving in a wrong direction.

The next chapter is a case study on Korea by Do-Wan Ku and Hyoung-Beom Yeo. This country is commonly recognised as a 'successful model of a developmental state'. To the contrary, from an ecological perspective, in their opinion, Korean capitalism can only be properly described as a success story of neo-liberal globalisation. In other words, the Korean model of development, like that in other capitalist countries, is neither just nor sustainable. Setting out four ecological discourses on alternative development: eco-authoritarianism, liberalist environmental managerialism, welfare state ecologism, and ecological communities and associations, the authors maintain that the latter two are more desirable and/or feasible in terms of an alternative theory and strategy, although for quite different reasons. Moreover, a really workable discourse and strategy should be an appropriate combination of the two. This option involves converting developmental or capitalist states into ecological welfare states on the basis of ecological communities or associations, and meanwhile, creating a self-governing system of associations that would develop ecological democracy beyond the framework of nation state.

In Chapter 12 Shulan Zhang offeres a distinct conceptualisation of Indian environmentalism. She begins by emphasising that environmentalism as a green ideology and social movement is a comprehensive subject, which can only be studied in an interdisciplinary manner. She places the Indian environmental movement within a theoretical framework of 'social justice vs. deep ecology'. Zhang characterises this movement as organised around the principles of social justice, non-violence, grassroots democracy, and local economy. She has no doubt that Indian environmentalism will continue to be a type of 'eco-socialist' movement, struggling for a sustainable development alongside social justice as well as ecological sustainability.

The last country case study in this volume is on China with Qingzhi Huan, focusing on the emerging growth economy there and its ecological impacts. While identifying the developing features of China as a growth economy, he argues that a real ecological threat is also growing there, as a result of the increasing dependence of Chinese economy and society on economic growth. In order to reverse this tendency, Huan looks to 'building socialist ecological civilisation', or a new pattern of eco-socialism, which may function as a greener and more fruitful political ecology. After 30 years of carrying out the reform and openness policy, in his observation, China is now standing at a crucial crossroad: but its real challenge is not so much in terms of the stages of its economic growth, but whether it can move forward to a sustainable future.

The concluding chapter is from Saral Sarkar, on the prospects for eco-socialism. For him, the present-day crises and development of productive forces driven mainly by the capitalist market-economy have clearly shown that idea of socialism on the basis of a highly developed industrial society has no chance of being realised. The traditional concept that a socialist regime's first task is to develop its productive forces and thus increase labour productivity and the output of goods does not make sense any more. Thus, Sarkar writes that socialists today must replace the concept of primacy of human needs and rights with the primacy for environmental protection. The primary task of a new socialist regime will be to organise the transition to an economy based largely on renewable resources. To achieve or move towards such a socialism, or *eco-socialism*, Sarkar believes that eco-socialists today should not focus on how to further prepare *material conditions* but to create the *subjective readiness* for change among the majority of the people in the world.

Readers can judge whether the arguments of the chapters in this volume are well-articulated, illuminating and convincing, but I am quite sure that the major message conveyed is very clear. The commonly described 'environmental crisis' is actually not just an environmental one, but is rooted in an historically evolved socio-political structure. And accordingly, this crisis can not be resolved, let alone eliminated, by technical or economic methods and fixes without structural change. Eco-socialists need to take immediate actions to create a socially just and ecologically sustainable society. This must substantially transcend the currently dominant capitalist market system and its political derivatives. 'Our future is green', the Greens say; although we eco-socialists would revise this slogan a little bit: 'yes, it is true, but it can only be a red-green future', given the context of a globalising world.

References

Benton, T. (ed). (1996). *The greening of Marxism*. New York: Guilford Publications.
Burkett, P. (1999). *Marx and nature: A red and green perspective*. New York: St. Martin's Press.
Foster, J. B. (2000). *Marx's ecology: Materialism and nature*. New York: Monthly Review Press.
Fotopoulos, T. (1997). *Towards an inclusive democracy: The crisis of the growth economy and the need for a new liberatory project*. London: Cassell.
Fotopoulos, T. (2008). Is sustainable development compatible with present globalisation? *The International Journal of Inclusive Democracy*, 4/4. Retrieved February 5, 2009, from http://www.inclusivedemocracy.org/journal/main.htm
Goodin, R. (1992). *Green political theory*. Cambridge: Polity Press.
Hampton, P. (2007, May 27). Why I am skeptical about eco-socialism? *Worker's liberty*. Retrieved February 6, 2008, from http://www.workersliberty.org
Huan, Q. (2005). A critical review on the study of eco-socialism in the West. *Marxism and the Reality (Beijing), 4*, 89–96.
Huan, Q. (2006). A critical review on the study of eco-socialism in China. *Jianghan Forum (Wuhan), 4*, 13–18.
Huan, Q. (2007). Ecological modernisation: A realistic Green road for China? *Environmental Politics, 16*(4), 683–687.
Kovel, J. (2001). *The Enemy of Nature*. New York: Zed Books.
Löwy, M. (2002). From Marx to eco-socialism. *Capitalism Nature Socialism, 13*(1), 121–133.
O'Connor, J. (1998). *Natural causes: Essays in ecological Marxism*. New York: Guilford Books.
Pepper, D. (1993). *Eco-socialism: From deep ecology to social justice*. London: Routledge.
Salmon, C. (2007, August 13). The spectre of eco-socialism. *Worker's liberty*. Retrieved February 6, 2008, from http://www.workersliberty.org
Sarkar, S. (1999). *Eco-socialism or eco-capitalism? A critical analysis of humanity's fundamental choices*. London: Zed Books.
Sarkar, S. (2008, November 7). To all my American friends (an open letter to the US eco-socialists regarding the victory of Barack Obama in the 2008 presidential election).
Socialist Resistance. (2007, September). Savage capitalism: The eco-socialist alternative. *International Viewpoint, 392*. Retrieved February 13, 2009, from http://www.international-viewpoint.org
Young, S. C. (2000). *The emergence of ecological modernisation: Integrating the environment and the economy?* London: Routledge.

Part II

Chapter 2
Marxism and Ecology: Marx's Theory of Labour Process Revisited

Lixin Han

Abstract This chapter will reflect on the relations between Marxism and ecology by probing into two kinds of comments which are derived from the dual logic of labour process theory in *Capital*: some scholars claim that Karl Marx is an anthropocentrist advocating 'domination of nature', while others argue that Marx is a nature-centrist emphasising 'the root source of nature'. In the author's point of view, it is the seemingly featureless introduction of the concept of material metabolism that has endowed Marx's concept of labour with modern ecological implication. On the surface, the twofold logic and evaluations of Marx's labour concept seem contradictory. If seen from the perspective of materialist dialectics, however, it is a kind of unity at a higher level rather than a contradiction any longer, namely, a dialectical unity of 'realisation of purpose' and 'material metabolism' based on 'nature as the root-source'. Therefore, the author argues that Marxist methodology on environmental issues can neither be 'natural-centrism' or 'life-centrism' nor 'technology optimism' or extreme 'anthropocentrism'; instead, it should be a materialist dialectic theory which has abandoned the inherent confrontation between and achieved the dialectical unity of them.

Keywords Environmental thoughts • Labour process theory • Marx's ecology • Mastery over nature • Material metabolism

When we discuss the relations between Marx and ecology, we are sometimes apt to pay attention to Marx's concept of labour first of all. The reason why we have such a reflection is due to the nature of environmental problem itself, which is determined by the relations between human beings and the surrounding natural world. The concept of labour has precisely embodied mankind's attitudes towards

L. Han (✉)
Department of Philosophy, School of Humanities and Social Sciences, Tsinghua University, 100084 Beijing, China
e-mail: hanlixin@mail.tsinghua.edu.cn

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_2, © Springer Science+Business Media B.V. 2010

nature as well as the relations between humanity and nature. As a result, in the research of eco-Marxism, no matter the critiques or defenses towards Marx, his Labour concept is always a matter of paramount importance to be addressed. In a sense, Marx's theory of labour process has been becoming a touchstone to check whether there is ecological thinking in Marx's thoughts as well as whether Marxism has the potential to offer effective thought resources for solving the contemporary environmental crisis or not.

Eight years ago, in my book *Ecology and Marx* (2001), I discussed the environmental thoughts in Marx's theory of labor process in detail. At that time, the emphasis of my analysis was to respond to the critiques raised by the scholars such as Ted Benton and Yoshirou Tamanoi on Marx's labor process theory. Accordingly, I did not expound the essence of Marx's theory of labour process hiding behind the critiques, especially the dual logic ('realisation of purpose' and 'material metabolism') which is embodied in the labour process. Whereas, I believe that further work in this regard can better respond to the critiques towards Marx from the green theorists, and constitutes the appropriate starting point to probe into Marx's environmental thoughts. Nowadays, research on eco-Marxism has achieved considerable progress. For example, in Japan, Takashi Shimazaki published *Eco-Marxism* (2007) and Jyun Takada published *Exploration of Environmental Issues* (2003), and so on. Moreover, some representative works of eco-Marxism in the West such as John B. Foster's *Marx's Ecology* have been translated into Chinese and Japanese. On the whole, eco-Marxism study is entering into a new stage by turning from speaking of superficial and radical critiques to internal analysis of Marxism. In this chapter I will concentrate my analysis on the core issue in the discussion of eco-Marxism, namely, to analyse the relations between Marxism and ecology by probing into two kinds of comments on Marx, which are derived from the dual logic of labour process theory in *Capital*: on one hand, some scholars claim that Marx is an anthropocentrist advocating 'domination of nature', while on the other hand, others argue that Marx is a nature-centrist emphasising 'the root source of nature'.

The Definition of 'Labour Process'

As we all know, the most classic definition of labour comes from the Chapter five – 'The Labour Process' – in *Capital*, Vol. I. In this chapter, Marx defined labour process clearly as follows:

> Labour is a process in which both man and Nature participate, and in which man of his own accord starts, regulates, and controls the material re-actions [Stoffwechsel] between himself and Nature. He opposes himself to Nature as one of his own forces, setting in motion arms and legs, head and hands, the natural forces of his body, in order to appropriate Nature's productions in a form adapted to his own wants. (Marx 1969: 192)

Thus, the elementary factors of labour process include: the personal purposeful activity of man (i.e., work itself), the subject of that work and its instruments (Marx 1969: 193).

From this definition, labour process can be classified into two aspects: 'man of his own accord starts, regulates, and controls' and 'the material re-actions [Stoffwechsel] between man and Nature'. The former aspect puts emphasis on that labour is a purposeful activity of human beings to reconstruct nature, while the latter focuses on that labour is a metabolist process of natural substance. Takashi Shimazaki has once described these two aspects as 'on one hand, the objectification activity of purpose realisation; on the other hand, the natural process of material metabolism' (Shimazaki 1997: 209). Throughout this chapter, I will comply with the description of Takashi Shimazaki to the two aspects of labour as 'purpose realisation' and 'material metabolism', and go further to call them as the dual logic of labour process.

According to Aristotle's differentiation of 'form' and 'matter', the form is active and the matter is passive. Anything in the world is a combination of form causes and matter causes. If we apply this differentiation to the interpretation of labour process, human beings are form causes while natural objects are matter causes. Labour is a combination process of humanistic form and natural substance. Correspondingly, 'realisation of purpose' refers to a formalisation process in which natural objects are endowed with humanistic forms by human beings. During this process, humans are the subject of labour with special purposes such as wills and plans; by contrast, natural substances are only labour objects and instruments without special motive, as well as are the means to realise human purposes and to prove their inbeing power. The differentiation of ends and means has inevitably led to the position-imbalance between humanity and nature, which gives rise to the following result: human beings impose their intentions on nature from outside, so as to cause nature to succumb to the human wills. By contrast, 'material metabolism' refers to that natural substances still maintain their identity during the process of formalisation. Although having been vested with humanistic forms, natural substances themselves have not been changed at all and still carry on 'self-implementation' with obstinacy. As a result, in the definition of 'material metabolism', natural substances are the eternal master of their own destiny while the vested humanistic forms are temporary and accidental.

Obviously, the two defining aspects of labour process are heterogeneous and antagonistic, and people can make two completely opposite observations from the ecological perspective. In the first place, some scholars may emphasise the meaning embodied in 'realisation of purpose', making an interpretation that Marx is an anthropocentrist advocating 'domination of nature'. For instance, in the paper of 'Marxism and natural limits' which provoked a hot debate in the following years, Benton criticised that 'Marx under-represents the significance of non-manipulable natural conditions of labour process and over-represents the role of human intentional transformation process vis-à-vis nature' (Benton 1989: 64). As a result, Marx was described as an extreme advocate of 'domination of nature'. Secondly, the others may focus on the defining meaning of 'material metabolism' and argue that Marx is a nature-centrist emphasising 'the root source of nature'. For example, John B. Foster, starting from Marx's materialism, has drawn a bold conclusion that Marx's theory itself is one kind of ecology. In the next sections, we will take a close look at the two dimensions of labour process and the two derived oppositional evaluations.

‘Realisation of Purpose’ and ‘Domination of Nature’

What is ‘Domination of Nature’

What is ‘domination of nature’? Why most of the environmentalists abhor the concept of ‘domination of nature’? In this context, eco-socialist Reiner Grundmann has once made a wonderful summary:

> Among the many ideas which have shaped the debate about ecological problem in recent years, the issues connected to the notion of ‘mastery over nature’ or ‘domination of nature’ have been of great importance. A unifying element among ecologists is the belief that the Promethean project of mankind and modern attitude towards nature are the ultimate causes of ecological problems. From this assumption, they proceed to a rejection of the modern attitude towards nature and tend to embrace an eco-centric outlook. In their view mankind’ attempts to master nature have resulted above all in a destruction of the natural environment.’ (Grundmann 1991: 2)

From the perspective of acceptation, ‘domination’ embodies the meaning of dictatorship or authoritarianism, and is often interpreted as absolute manipulation to the servants from the masters. By contrast, ‘mastery’ is quite different from ‘domination’. Besides the meanings of reigning and overruling, it also includes the connotations of skill, proficiency, and controlling. As a result, ‘mastery’ could be interpreted as the reigning and controlling built on the basis of fully respecting and familiar with the objects. Therefore, although the two terms have the similar basic meanings, there are some subtle differences among them. Such a semantic difference might not be enough to construct the basis of our argument,[1] but it does provide a theoretical approach to solve our problems, that is to say, we can consider the concepts of ‘mastery over nature’ and ‘domination of nature’ as two distinct theoretical categories. This distinction has a key significance in our following analysis of Marx’s concept of ‘mastery over nature’.

First of all, **absolute domination** works like the master towards the servants. It is an arbitrary attitude of humanity towards nature that humans define their roles like the autocratic monarch to domineer over nature, attempt to dominate nature and make nature subordinate to themselves. Within such a framework of dominant relation, human beings actually consider nature as their own accessories. Whatever they do towards nature and no matter how they exploit nature is not subject to moral constraints. This is the common understanding to the term of ‘domination of nature’.

---

[1]From the etymological perspective, ‘mastery’ derives from ‘master’. The latter word originates from the Middle Ages English ‘maistre’. ‘Maistre’ is the transformation of Latin word ‘magister’, which is the derivative of the adjective ‘magnus’. ‘Magnus’ refers to the persons, especially organisational leaders, teachers or overmen, who have a certain ‘large’ authority or power. ‘Domination’ derives from the Latin word ‘dominatio’. As a noun, ‘dominatio’ originates from the verb ‘dominor’, whose precursor is ‘dominus’. ‘Dominus’ also means host and governor. Therefore, ‘mastery’ and ‘domination’ are largely identical but with minor difference.

Secondly, **mastery with responsibility** shows the full respect for natural laws. It is Australian philosopher John Passmore who for the first time made the distinction between mastery and domination. He argued that besides the master-servant 'tyrant' dominant tradition, there is also a 'moderate' dominant tradition, namely, the tradition of stewardship and co-operation with nature. The so-called 'stewardship' means that the God entrusts the world to human beings, and let them become the steward of nature rather than dominate it. To be more obviously, human beings are just the administrator rather than the dominator of the earth.[2] As the administrator, we have to take on the corresponding responsibility of management, including the managed objects' welfare. As Socrates once pointed out that, the employable shepherds are those who treat the sheep well and raise the sheep to grow stronger; by comparison, the competent administrators are those who treat nature friendly. So-called 'to assist nature' means 'to help nature become sound' (Passmore 1974: 28). Nature itself is an original and defective formation; since human beings are the only kind of sensible animals on the earth, we have the responsibility to assist nature to evolve into a reasonable and completely realistic formation. In fact, the reasonable and completely realistic formation of nature is a status when nature best meets the human needs. Therefore, to make nature sound is to transform nature in conformity to the human purposes. However, this kind of transformation should imitate the outstanding sculptor to endow the fodders with humanistic form according to their original appearance and features based on the full understanding of these fodders. Thus, 'to assist nature' is different from either the mysticism which claims that humans should not interfere in nature or the 'absolute domination' theory which advocates that human beings could transform nature arbitrarily. 'To assist nature' is just in the middle of the two extreme percepts. Apparently, 'stewardship and co-operation with nature' is much more humble than 'absolute domination' in the attitude towards nature. Although it admits that humans could make use of nature, it does not recognise the metaphysical proposition that nature only exists for human beings' greed; although it acknowledges that humans are the administrator of nature, it at the same time stresses the importance of human beings' protective duty to nature, thus this management is a kind of 'mastery with responsibility'.

Then, in front of the environmental challenges, how should we make our choice between the two attitudes above? The former, 'absolute domination', is obviously the ideological cause leading to environmental problems, because it locates nature on such a low position only to exist and serve for human beings. Thus, there should be no controversy to exclude this position. However, for the latter, 'mastery with responsibility', we might draw different conclusions from different standpoints. If you are a radical eco-centrist, you will probably deny this position, for that 'mastery with responsibility' is still on the grounds of anthropocentrism; if you are a

[2] 'Stewardship' is a concept that has caused the largest amount of discussions in green religious theory. In the Christian history, what God entrusts human beings to be the trustee was the churches or those who need supervising, rather than nature. Since 1960s, in order to respond to the critiques from the environmentalists, some Christian researchers and clergies have enlarged the explanation of 'stewardship', that is to say, to expand the mandatory objects to natural objects, such as trees and rivers.

moderate anthropocentrist, you can not deny it easily, for that the management and utilisation of nature is also beneficial for environmental protection. For myself, I basically holds the latter position, that is to say, 'mastery with responsibility' is not the cause of environmental crises.

Marx and 'Mastery over Nature'

There are two main arguments from the green theorists claiming that Marxism stands for 'domination of nature'. The first argument, or the direct one, is that there are lots of discourses relating with 'domination of nature' in the works of Marx and Friedrich Engels. For instance,

> It is neither the direct human labour he himself performs, nor the time during which he works, but rather the appropriation of his own general productive power, his understanding of nature and his mastery over it by virtue of his presence as a social body – it is, in a word, the development of the social individual which appears as the great foundation-stone of production and of wealth. (Marx 1981: 581)

The second argument is that Marx's labour theory contains the logic of 'domination of nature'. As mentioned above, 'realisation of purpose' is a significant dimension of Marx's labour process theory. It consists of three points: firstly, natural objects will be transformed according to human's purpose in labour process; secondly, nature is regarded as the labour objects and instruments in labour process, and is also considered as the sources of use-value and wealth; thirdly, humans achieve their own aims through working on nature. From the perspective of environmentalism, the three features of labour, 'universality of objects transformation', 'nature as use-value' and 'implementation of purposeful awareness' undoubtedly contain the implications to take advantage of nature from an anthropocentric standpoint. This implication in Marxism did not draw very much attention in its early developing stage, however, since the 1970s, along with the deterioration of environmental crisis and the flourishing of environmentalism, it has been regarded as the root of Marx's view of 'domination of nature' by some green thinkers.

Judging from the first argument, since Marx did use the concept of 'mastery over nature', it seems quite reasonable to conclude that Marx is an advocate of 'domination of nature'. However, it is inappropriate to infer the implications of Marx's view of 'mastery over nature' and its relations with environmental thoughts just from several paragraphs of quotations, because Marx has discussed this concept in quite different occasions and contexts. Therefore, a correct answer to this question should come from the second argument, that is to say, to analyse Marx's concept of nature in the theory of labour process, because only in this way can we make clear of the thinking logic of Marx himself and only through researching this question can we judge that whether Marx advocates 'domination of nature' or not.

Before making any final conclusion, we had better firstly take a look at the antecedent research of 'mastery over nature' by Alfred Schmidt, Howard Parsons and Reiner Grundmann. To my knowledge, the discussion of Marx's 'mastery over

nature' is originated from Schmidt's work. When Schmidt interpreted Marx's concept of nature, he touched upon the issue of 'mastery over nature' by chance. He wrote,

> In later life he no longer wrote of a 'resurrection' of the whole of nature. The new society is to benefit man alone, and there is no doubt that this is to be at the expense of external nature. Nature is to be mastered with gigantic technological aids, and the smallest possible expenditure of time and labour. It is to serve all men as the material substratum for all conceivable consumption goods. (Schmidt 1971: 155)

From the statement above, it seems that the propositions of Marx are quite similar with those scholars advocating 'domination of nature'. However, Schmidt did not arrive at such a simplistic conclusion, instead, he put forwards that the basic contentions of Marx have two points different from other scholars. Firstly, Marx does not only emphasise on the technological 'mastery over nature' and the increasing amount of productivity, what he pays more attention to is the issue that in what kind of society can we carry out a reasonable mastery. In other words, Marx's 'mastery over nature' is conjoint with the whole development of human beings and the progress of production relations, aiming for the realisation of welfare for the whole human society. Secondly, Marx's concept of labour also contains the aspect of 'material metabolism'. From this perspective, nature has a property of non-identity with humanity. Even if nature has been incorporated into human society, it could not be placed under the mastery of humanity entirely.

The first point above can be used to illustrate the difference of Marx's 'mastery over nature' from other scholars, while the second point can provide a chance for us to have a clear understanding of whether Marx indeed advocates 'domination of nature' or not as well as to what extent. This is an issue with great significance, for it relates to how we evaluate the relations between Marx's theory and ecology. As a matter of fact, after Schmidt, most of the eco-socialists go ahead along the first clue, and unfortunately, the second clue has been overlooked by the majority of the eco-socialists.

The representative scholars along the first clue are Parsons and Grundmann. Parsons, as an orthodox Marxist, published his book *Marx and Engels on Ecology* in 1977, in which he came down to the issue of Marx's 'mastery over nature' from the perspective of environmental thoughts. Grundmann once launched a debate with Benton on the issue of 'mastery over nature' in *New Left Review* in the early 1990s. Based on this debate, Grundmann wrote his book *Marxism and Ecology* to make a brand new interpretation for Marx's view of 'mastery over nature'. Although the two scholars separated at intervals of almost 2 decades, they have done nearly the same job.

First of all, they have weakened the tendency of Schmidt to interpret Marx as an advocate of 'domination of nature' and corrected the fault that equates Marx's 'mastery over nature' with 'exploitation' and 'interference'. Grundmann also applied a comparison of a musician playing musical instrument to explain the meaning of Marx's 'mastery'. He wrote: 'It does not mean that one can behave in a reckless way towards it, in the same ways as we do not suggest that a mastery player dominates his instrument (say a violin) when he works upon it with a hammer' (Grundmann 1991: 61). In his point of view, Marx's 'mastery over nature' is based on the full respect for natural laws and to control nature in accordance with her inbeing.

Second, they have made a much clearer distinction between 'mastery over nature' of Marxism and 'domination of nature' of capitalism than Schmidt, asserting that the latter is the root cause of environmental damage. Parsons pointed out that, for Marx the aim of 'mastery over nature' is to meet the needs of all people under the precondition of maintaining the ecosystem in balance rather than to satisfy the 'money-making' purpose of small group ruling class. Grundmann further linked the concept of 'mastery over nature' with Marx's communism, and advanced a very bold proposition: environmental damage is due to that humans have not truly realised the 'mastery over nature', and in order to prevent natural destruction, what we need to do is to strengthen our capacity of mastering the nature. Mastery in the communist society is the highest state for mankind to master over nature.

In conclusion, there are two main points in Marx's concept of 'mastery over nature'. First, it has no similarity with the absolute domination of master-servant relations. To this point, besides the justifications from Parsons and Grundmann, we can also find more evidences in the discourses of Marx and Engels. We know that the meaning of 'mastery' includes two dimensions. In addition to the meaning 'to do something according to master's own will', it also embodies the meaning of 'controlling the others to obey the master's will'. According to the latter, if there is something without will, there will be no kind of obedience. Thus, the objects of mastery can only be the existence with will. In *Economic Manuscripts of 1857–1858*, Marx wrote:

> Basically the appropriation of animals, land etc. cannot take place in a master-servant relation, although the animal provides service. The presupposition of the master-servant relation is the appropriation of an alien will. Whatever has no will, e.g. the animal, may well provide a service, but does not thereby make its owner into a master. (Marx 1976: 404)

Judging from this passage, Marx does not recognise a mastery relation between humanity and nature at all. So-called 'mastery over nature' only embodies some metaphor meanings. In addition, although Engels – as the ally of Marx – has many discourses relating with 'mastery over nature' (in fact, the majority of the critiques towards Marxism from the green theories are pointing to Engels), it does not mean that Engels recognises that humans can take advantage of nature in a plundering and 'exploiting' way. Engels once wrote:

> We by no means rule over nature like a conqueror over a foreign people, like someone standing outside nature – but that we, with flesh, blood and brain, belong to nature, and exist in its midst, and that all our mastery of it consists in the fact that we have the advantage over all other creatures of being able to learn its laws and apply them correctly'. (Engels 1972: 518)

In other words, if humans do not show their respect for natural laws, we will suffer from 'the revenge of nature', sooner or later. In this point of view, Marx and Engels' concept of 'mastery over nature' can only mean to utilise nature in a rational way, obeying to the intrinsic laws of nature. The premise for such a kind of mastery is that humans have clearly realised that 'man is just a part of nature'. If utilising the standards of classification we have discussed above, it is the 'responsible mastery' named by Passmore.

Secondly, Marx's 'mastery over nature' is not merely a question how to make use of nature in a rational way in accordance with natural laws. Moreover, it is also an issue concerning how to carry out a 'social criticism' in order to overcome the capitalist relations of production. This is a unique feature of Marx's theory. When Marx refers to the relations between 'realm of freedom' and 'realm of necessity' in *Capital* Vol. III, he wrote as follows:

> Just as the savage must wrestle with Nature to satisfy his wants, to maintain and reproduce life, so must civilised man, and he must do so in all social formations and under all possible modes of production. With his development this realm of physical necessity expands as a result of his wants; but, at the same time, the forces of production which satisfy these wants also increase. Freedom in this field can only consist in socialised man, the associated producers, rationally regulating their interchange with Nature, bringing it under their common control, instead of being ruled by it as by the blind forces of Nature; and achieving this with the least expenditure of energy and under conditions most favorable to, and worthy of, their human nature'. (Marx 1983: 828)

Here, Marx not only affirmed the necessity for humans to make use of nature, but he also proposed that it is important to conduct 'reasonable adjustment' and 'common control' for the material metabolism between human beings and nature. Because the essence of material metabolism between human beings and nature is human labour, 'mastery' here can be understood as the regulation and controlling over labour as well as its performance forms, such as technology and productivity. In addition, Marx has brought forwards some specific conditions to realise this aim, that is to say, 'the associated producers', 'achieving this with the least expenditure of energy' and 'under conditions most favorable to, and worthy of, their human nature'. Apparently, all these conditions contrapose to capitalism. In capitalist system, due to the unlimited pursuit of profits by capital and brutal market competition, the productivity and technology tends to develop with a trend of 'natural growth', which can not be controlled effectively by society. In communist system, however, the comprehensive development of humans will provide a prerequisite for society to regulate human behavior in a rational way and accordingly society has the capacity to control the trend of 'natural growth' within the range of natural tolerance. In short, the premise of so-called 'mastery over nature' advocated by Marx is the transformation of capitalist production relations. In the author's point of view, this is also the very reason why Marxist approach to deal with environmental issues is referred to eco-socialism or eco-Marxism.

These two conclusions above are commonly accepted by the majority of the eco-socialists or eco-Marxists. But, it is undeniable that these two points are still based on the judgment that Marx alleges 'mastery over nature', which very easily leads to classify Marxism into the category of anthropocentrism. Needless to say the green theorists, in fact, except for few Marxists such as Ernst S. Bloch,[3] Foster, etc.,

[3] In *Principle of Hope*, Bloch interpreted Marx from the natural philosophy perspective of Friedrich W. J. Schelling and from the German Romanticism, illustrating nature as a 'nature as subjectivity' with a mysterious color while also stressing the conformity of humanity and nature and the root-source of nature.

the majority of the eco-socialists have admitted this judgement openly. For instance, Grundmann asserted that 'it is plain that Marx had an anthropocentric world-view and did not set up moral barriers to the investigation of nature. He was clearly a follower of Enlightenment thinkers like Bacon and Descartes' (Grundmann 1991: 58).

However, such an interpretation to Marx's environmental thoughts will be faced with an unavoidable problem: the fundamental value-orientation of environmentalism is its anti-anthropocentrism, and what the green theory critics and even the left-wing thinkers such as Benton criticise Marx furiously is exactly his anthropocentrism. Although we can say that Marxism is not an ordinary kind of anthropocentrism, but a kind of anthropocentrism beneficial for the majority of humans, this defense can hardly make the critics convinced. From this point of view, to demonstrate the compatibility of Marxism with ecology, it is necessary to show some evidences that Marx does not advocate 'mastery of nature'. Fortunately, we can find such evidences precisely from Marx's theory of labour process which is besieged by the critics.

'Material Metabolism' and 'the Root-Source of Nature'

As a matter of fact, 'material metabolism', the other key understanding in Marx's concept of labour process has not been received due attention for a long time. The reason why this situation exists is mainly due to the subjective initiative feature of labour itself as well as the limitations of labour view framework in modern times established by Adam Smith and Hegel. However, along with the ever increasing study of relations between Marx and environmental thoughts, the concept of 'material metabolism', as M. Fischer-Kowalski has observed, is becoming 'a rising star of new concept' (see Foster 2000: 162). Schmidt is probably the first scholar discussing this concept, who extracted it from Marx's economic works in 1962. Thereafter, eco-socialists in the West such as Parsons, Grundmann, David Pepper, Tim Hayward, Paul Burkett and so on, have also gotten involved with this research. Regrettably, all of them did not contribute much new thinking to this concept. By comparison, eco-Marxists in Japan have achieved a lot in this field, mainly contributed by Shigeaki Shiina, Fumikazu Yoshida, Kirirou Morita, Naomichi Hayashi, Shigeru Iwasa, Takashi Shimazaki, Jyun Takada and so on.

'Material metabolism' is the translation of the German term 'Stoffwechsel'. In German, 'Stoff' means substance, material and fodder, and 'wechsel' means interchange and transform. From the literal perspective, 'Stoffwechsel' means the interchanging and transforming process of substance, material and fodder between two things. If we apply Aristotle's 'matter-form' framework to illustrate this concept, 'Stoffwechsel' is the 'matter interchange' compared to the 'form interchange', and we can call the connotation of 'matter interchanging' as philosophical 'Stoffwechsel'. However, such a literal combination meaning is not the only implication of this term. This concept was first put forwards by chemist G. C. Sigwart in 1815, and it has been prevailing in physiology, chemistry, agriculture and other natural science fields in the modern times.

'Stoffwechsel' here does not means material interchanging in the common sense, but metabolism in the sense of physiology as well as life circulation in a broad sense of ecology. So-called metabolism refers to assimilation and alienation activities of living bodies for sustaining and maintaining the living existence; so-called life circulation refers to the interdependence relations in the food chains and ecosystems in which include animals, plants, microorganisms, and human beings. Accordingly, we can call the connotation of 'material metabolism' as 'Stoffwechsel' of natural science.

The reason why Marx's concept of material metabolism has received the good graces by the scholars mentioned above is due to the twofold meanings of it. On one hand, material metabolism is a concept of natural science, especially a physiological concept. If taking this concept as a basis, Marx's illumination on the relations between humanity and nature will appear a strong sense of environmentalism, enabling him to criticise capitalism from an ecological perspective. On the other hand, material metabolism as a philosophical concept also means 'matter interchanging', which enables Marx to observe nature in a unique way. For instance, he puts more emphasis on the root-source and non-dominant feature of nature, which is different from most of the scholars in modern times.

Material Metabolism in the Sense of Natural Science

Marx has once used the concept of material metabolism for several times in *Capital*, *Outline of Economics Critiques* (*Economics Manuscripts of 1857–1858*) and other works, but he did not make detailed explanation for this concept. So, in what exact sense does Marx apply it? Schmidt, Shigeaki Shiina, Fumikazu Yoshida and other scholars have conducted a lot of study on this issue. Although they have bifurcations on the question that Marx's concept of material metabolism derives from Jacob Moleschott and Ludwig Büchner or from Justus von Liebig, what they are in common is that it is a concept in the sense of natural science.

First of all, they all agree with that Marx used this concept in the sense of physiology. On this point, Schmidt has a wonderful comment:

> The description of the labour process as the the metabolism between man and nature, as it dominates the preliminary studies and the final version of *Capital*, belongs to the physiological rather than to the social sphere. …[Marx] understood the concept of metabolism not only metaphorically but also in an immediately physiological sense. (Schmidt 1971: 89)

Indeed, from Marx's own usages, such as 'metabolism between man and nature', 'metabolism between man and land', as well as from his critiques to the capitalist production mode which leads to the depletion of land fertility and the 'disturbance' of metabolic process, we can draw a conclusion that the standpoints of Schmidt is correct.

In the second place, Marx uses this concept in a broader sense of natural life circulation. Labour, or say more broadly, production and human life of consumption are only part of a large circulation constituted by fauna and flora. No matter how great and supernatural they look like, they can not undermine the life circulation

of nature. In the following critiques of Marx on capitalism the concept of material metabolism is exactly used in this sense:

> Capitalist production, by collecting the population in great centres, and causing an ever-increasing preponderance of town population, on the one hand concentrates the historical motive power of society; on the other hand, it disturbs the circulation of matter between man and the soil, i.e., prevents the return to the soil of its elements consumed by man in the form of food and clothing; it therefore violates the conditions necessary to lasting fertility of the soil. (Marx 1969: 528)

Some years ago, Japanese scholar Naomichi Hayashi once said that Marx 'penetrates an insight in a talented way into' the capitalist essence of natural destruction, and commented 'this insight is really acclaimed as the peak of perfection' (Hayashi 1972: 14). Taking this point as a basis, later Burkett made an argumentation of the contradiction between 'capital and nature', and Foster further observed that Marx has grasped 'the nature of sustainable development concept' in about 100 years ago. Indeed, these contentions of Marx could be favorably compared with the views of outstanding eco-socialists and eco-Marxists today.

Labour Process as Material Metabolism

Marx does not only apply the concept of material metabolism to the critiques of capitalism, but also introduces this concept to the definition of labour process. In the author's point of view, it is this seemingly featureless introduction that has endowed Marx's concept of labour with the ecological implication, distinguishing itself from the definitions of economists and philosophers in the modern times.

First of all, compared with the dimension of 'realisation of purpose' mentioned above, labour' dimension of 'material metabolism' embodies much more significance. In the understanding of 'realisation of purpose', humans' labour behavior is a kind of formalising activity to endue the objects with humanistic forms. Through the humanistic production activities to transform the natural objects, humans realise their own targets or aims. During this process, the original forms of natural objects are replaced by the humanistic forms, and the natural objects themselves undergo a process of formalisation, namely 'form interchanging'. Thus, the whole process presents a strong tendency of subjectivity. However, if defining labour process as 'material metabolism', labour itself is no longer 'a formalising activity to endue natural objects with humanistic forms'. Rather as Schmidt has pointed out, just like humans penetrate through natural materials, nature as use-value also penetrates through humans, thus labour is a process of 'matter interchanging' which starts from and returns to nature.

In the relation between 'matter and form', Aristotle advocates that form has precedence over matter from the standpoint of idealism; while Marx advocates that matter takes precedence of form, and matter is the foundation of formalisation from the standpoint of materialism. In the labour process theory, Marx holds this position and emphasises the fundamental importance of 'matter interchanging' 'form interchanging', a basic feature of Marx's labour concept which distinguishes him from other idealist scholars. Schmidt is still the first person who has noticed this feature.

He wrote: 'the *material* side of the metabolism between man and nature emerges more sharply in Marx, notwithstanding his recognition of the historical mutability of its formal determinations' (Schmidt 1971: 90). Of course, the aim of Schmidt emphasising on this point is not to explore the contemporary ecological implication of Marx's theory, but to reveal the self-contradiction of Marx's nature concept. In Schmidt's own words, 'it, for all its scientific air, is none less speculative in character' (Schmidt 1971: 76).

Then, what are the implications of this 'matter interchanging' thought for modern environmentalism? Although Marx said that labour is 'the living fire of creation' (Marx 1976: 272), just like the form cause put forwards by Aristotle, however, any kind of humanistic form is temporary and accidental compared with natural substances. The formalised natural substances will remain their independence with obstinacy rather than being dissolved by the form. In other words, although natural substances and humanistic form are two basic elements of labour, these two elements are transeunt and independent. To illustrate this point, Marx once applied an example of table production in *Capital*: timber can be produced into table by labour (Marx 1969: 85). During this process, although the form of timber has been changed, its substances still remain the same. As the combination of labour (form) and timber (matter), if the table is out of use for a long time and is accordingly at the disposal of 'destructive power of natural material metabolism' (Marx 1969: 198), along with the passage of time, the wood will become decayed and the metal will get rusted, and eventually the table will return to nature by the erosion of natural forces. The form of table will have disappeared, but the matter still exists. In this sense, labour can only change the natural forms rather than the natural substances. Just as Marx said, 'the labour can work only as Nature does, that is by changing the form of matter. Nay more, in this work of changing the form he is constantly helped by natural forces' (Marx 1969: 57f).

Labour representing the subjective force of humans can not determine the fate of matter representing of the natural material force. Natural substance has a kind of 'intractability' which can not be dominated by human society and labour subjects. Marx called this 'intractability' as 'material indifference to the form' (Marx 1976: 271), and Schmidt ever titled it as 'non-identity' of subject and object (Schmidt 1971: 74). Responding to the critiques from the ecological scholars, we can regard it as 'non-dominance of nature'. Benton once criticised that Marx only focuses on 'intentional structure' and 'manufacturing transformation labour' in his theory of labour process, and therefore he is an advocate of 'domination of nature'. From the previous analysis, however, we can reasonably say that the criticism of Benton is shooting pointless.

Skepticism for the Material Metabolism Theory

From the discussion above, it is justified to make an ecological interpretation for Marx's labour theory through the concept of material metabolism. But unexpectedly, Schmidt, as the first scholar noticing that Marx brings the concept of material

metabolism into the labour process, did not go further to link this idea with environmental thoughts. Instead, it is Japanese scholar Kirirou Morita who is aware of this point keenly and applies it into the environmental analysis.

Kirirou Morita advanced this question through the way of skepticising the labor process theory. In his point of view, if to grasp the meaning of labour process according to material metabolism in the sense of physiology, the labour process should be like the metabolic process of living body, including not only the assimilation of external things (nature ⇒ humans), but also the dissimilation of excreting the acquired things to the external environment (humans ⇒ nature). If the process above corresponds to the manufacturing and consumption of products, the former is 'nature ⇒ humans' process of acquiring products, while the latter is 'humans ⇒ nature' process of consuming products and abandoning wastes, or a process of the products returning to nature. However, one might find that 'in *Capital*, the labour process theory has only analysed the former assimilation stage of acquiring the products' (Morita 1976: 48), but did not go further to address the latter dissimilation stage. How is this going on? Kirirou Morita himself disagrees with the conclusion above and does not think it is justified to hypercriticize Marx by this defect: because the dissimilation discourses of Marx can be found in *The Outline of Economics Critiques*, and the dissimilation part belongs to consumption behavior out of labour process and thus should be analysed through an entire production process (production – circulation – consumption).

However, this seemingly resolved issue has recently attracted scholars' attention again. Jyun Takada raised almost the same question as Kirirou Morita in his paper 'the material metabolism in Labour and the material circulation in nature'. He pointed out that, 'if we understand material metabolism by the model of assimilation-dissimilation, then the conclusion has no option but to admit that Marx is in want of the survey on dissimilation dimension, and his discussion on material metabolism in the labour process is one-sided' (Takada 2004: 35–36). Indeed, in the labour process chapter of *Capital*, we could not find the discourses of 'consuming the products and abandoning the wastes'. In this strict sense, the critiques from Kirirou Morita and Jyun Takada are correct, that is to say, 'there is not a corresponding side of dissimilation' in the labour process chapter.

However, 'assimilation and dissimilation' is only a metaphor here, which is merely to stress the two directions of 'nature ⇒ humans' and 'humans ⇒ nature' mentioned above. Moreover, if we read the labour process chapter of *Capital* with care, we will find that the theoretical framework used by Marx is 'matter and form' rather than 'production, consumption and abandonment of the products'. If we illustrate the two directions of labour process according to the framework of 'matter and form', natural substances are endowed with humanistic forms can be regarded as the 'nature ⇒ humans' process, and the formalised natural substances still carry on 'self-implementation' with obstinacy can be regarded as the 'humans ⇒ nature' process. Accordingly, the entire labour process presents a 'matter interchanging' of 'matter ⇒ form ⇒ matter' or a 'material circulation' of 'nature ⇒ man ⇒ nature'. Therefore, as long as we do not merely understand 'assimilation and dissimilation' as the 'manufacturing, consumption and abandonment of products', the labour

process understanding of Marx's material metabolism is complete and logical, and the questions such as 'one-sidedness' and 'absence of the corresponding side of dissimilation' raised by Kirirou Morita and Jyun Takada will disappear.

In summary, if we see the process of 'dissimilation' or 'humans ⇒ nature' as the self-implementation of natural substance, we can eliminate the skepticism from Kirirou Morita and Jyun Takada. In fact, it is that Marx has introduced material metabolism in this sense to the definition of labour process which makes his views of labour distinguish from the idealistic scholars such as Hegel. Jyun Takada has noticed the questions such as matter interchanging, form transformation and the root-source of matter vs. form in the labour process understanding. Furthermore, Kirirou Morita has mentioned that the labour definition in the perspective of material metabolism 'requires us to reflect our traditional understanding of labour, which overemphasises on the human subjectivity as well as the realisation of human purpose' (Morita 1976: 49). Unfortunately, both of them seem to be obstinate to understand 'dissimilation' in a narrow sense as 'the consumption and abandonment of products'. Therefore, they are trapped in a dilemma on this issue: affirming the significance of material metabolism concept, while at the same time accusing the incompleteness of Marx's labour process theory.

Conclusion: For a Perspective of Materialist Dialectics

We have discussed the twofold definitions of Marx's labour process as well as the two kinds of derived evaluations. Then, why does the same labour process result in two totally contrary conclusions? How can we integrate the two approaches of thinking together?

This issue has once brought a great distress on Schmidt. In his book *The Concept of Nature in Marx* published in 1962, he first put forwards the well-known assertion that 'it is the socio-historical character of Marx's concept of nature which distinguishes it from the outset' (Schmidt 1971: 15). According to this well-known assertion, Marx's nature concept mainly refers to the nature, which enters into human practical fields as objects and use-values of economic and technical activities and has the 'feature of non-ontology' (Schmidt 1971: 19). On the contrary, the nature concept of Engels' dialectics of nature as well as the Soviet Union Marxist philosophy based on dialectics of nature refers to 'the nature before naissance of human beings' and 'the nature separating from human social practice'. In other words, it is an 'ontological definition' in the sense of fontal world. Schmidt argued that, different from Engels, the nature concept of Marx is a 'social-historical' rather than 'ontological' concept.

However, during the process of unwinding Marx's nature concept, Schmidt raised the above-mentioned theories again such as the concept of material metabolism, the 'indifference' of natural substance to form', and the 'non-conformity of subject and object', to demonstrate the difference of nature views between Marx and Hegel, Georg Lukacs, Bloch and others. In accordance with these concepts and thoughts, nature is obviously not a 'social-historical concept' corresponding to

human labour, but an ‘ontological concept’ which Schmidt did his utmost to oppose. As a result, the elaboration of Schmidt includes two quite contrary conclusions of ‘social-historical nature’ and ‘ontological nature’ at the same time. Confronted with this evident logical contradiction, Schmidt has once made illustrations on this issue twice in the ‘English version preamble’ and ‘postscript’ of his book *The Concept of Nature in Marx*.

> This is in full awareness of the contradiction between emphasizing the ‘non-ontological’ character of Marxist materialism and then introducing the term ‘negative ontology’: this is a contradiction within the facts, not an error to be eliminated by changing a word, or the result of a logical inconsistency. (Schmidt 1971: 11)

In other words, from the point view of Schmidt; this contradiction is not the result of his own interpretation, but rather the inherent contradiction of Marx’s theory.

From the defense of Schmidt, he does not look upon ‘the social-historical concept’ and ‘the feature of ontology’ of nature equally. He merely acknowledges the concept of nature in the sense of ontology ‘negatively’. He regards it as Marx’s ‘inherent natural speculation’ and ‘hidden natural speculation’ with derogatory sense. On the contrary, he puts much more emphasis on ‘the social-historical concept’, and considers it as the fundamental difference between Marx and other scholars on the concept of nature. Therefore, in fact he tries to eliminate this logical contradiction by carrying out the conclusion of ‘social-historical concept’ forcefully.

Although the defense of Schmidt is painstaking, it seems a failure from the author’s point of view. So-called logical contradiction in Marx’s nature concept is not an inherent contravention of Marx’s theory itself, but it is nothing other than the interpretation contradiction of Schmidt. Marx himself did not like Schmidt to define nature simply as ‘a social-historical concept’. Contrary to Schmidt, Marx stands on the position of materialism, setting out from ‘the root-source of nature’ and then moving to the ‘social-historical nature’. Even when he brings nature into the social-historical field, he still lets natural substances keep their own properties and allows the ‘indissolubility’ between humanity and nature to maintain. This can be called **the materialistic truth**. Furthermore, Marx does not stop at such an understanding instead go further. From the view of Marx, ‘nature as the root-source’ can also move forward by itself and divide into two parts of human beings and natural substances. These two parts reunite by endowing natural ‘substance’ with humanistic ‘form’ in the labour process. In other words, when nature as the root-source develops into humans’ self-consciousness, it will lead to opposition between humanity and nature. At the same time, nature also combines with itself together through humans’ theoretical and practical activities. Marx is always trying to conduct a dialectical unity between the two parts by the logic of ‘internal mutual infiltration of nature and society within the natural macrocosm’. This can be called **the truth of dialectics**.

The combination of materialism and dialectics is the materialist dialectics; and it is from the perspective of materialistic dialectics Marx constructs his concept of nature. Only in this way, can the seemingly contradictory ‘nature as the root-source’ and the ‘social-historical nature’ be reunited. The reason why Schmidt is trapped in the predicament and could not extricate himself from it is that, he insists doggedly the false cognitions such as ‘there is no dialectics in nature’ or ‘there is

no compatibility of materialism with dialectics'. Had he realised the significance of materialist dialectics, he would have probably drawn quite different conclusions.

Finally, let us back to the theme of this chapter, 'ecology and Marx's labour process theory'. On the surface, the twofold logic and evaluations of Marx's labour concept seem contradictory. If seen from the perspective of materialist dialectics, however, it is a kind of unity at a higher level rather than a contradiction any longer, namely, a dialectical unity of 'realisation of purpose' and 'material metabolism' based on 'nature as the root-source'. Therefore, Marxist methodology on environmental issues can neither be 'natural-centrism' or 'life-centrism' nor 'technology optimism' or extreme 'anthropocentrism'; rather, it should be a materialist dialectic theory which has abandoned the inherent confrontation between and achieved the dialectical unity of them. To quote the words from *Economic and Philosophical Manuscripts of 1844*, that is the unity of 'humanism' and 'naturalism'. In his book of *Eco-Marxism*, Takashi Shimazaki argued that the fundamental feature of Marxism is 'a unified ecology which inherits and develops the tradition of 'materialism' and 'dialectics' since the ancient Greek times' (Shimazaki 2007: 25–26). This chapter can be regarded as a proof for this argument. In addition, it also aims to be a primary argumentation for the ecological possibility of materialist dialectics.

References

Benton, T. (1989). Marxism and natural limits: An ecological critique and reconstruction. *New Left Review, 178*, 51–86.

Engels, F. (1972). The part played by labour in the transition from ape to man. In *Marx and Engels collected works*, Vol. 3. Beijing: People's Press.

Foster, J. B. (2000). *Marx's ecology: Materialism and nature*. New York: Monthly Review Press.

Grundmann, R. (1991). *Marxism and ecology*. Oxford: Oxford University Press.

Han, L. (2001). *Ecology and Marx – the unification of naturalism and humanism*. Japan: Jichousha Press.

Hayashi, N. (1972). *Historical materialism and economics*. Japan: Otsuki Shoten Book Store.

Marx, K. (1969). *Das Kapital, Kritik der politischen Ökonomie (Capital, Critiques of Political Economy) Bd. I.*. Berlin: Dietz Verlag.

Marx, K. (1976). *Ökonomische Manuskripte 1857/58* (Economic Manuscripts of 1857–58), In *MEGA* II 1.1. Berlin: Dietz Verlag.

Marx, K. (1981). *Ökonomische Manuskripte 1857/58 (Economic Manuscripts of 1857–58), in MEGA II 2*. Berlin: Dietz Verlag.

Marx, K. (1983). *Das Kapital, Kritik der politischen Ökonomie* (Capital, Critiques of Political Economy) Bd. III, In *MEW* Band 25. Berlin: Dietz Verlag.

Morita, K. (1976). Nature-man relation and Marxist economics. *Economic Review*, supplement of June.

Passmore, J. (1974). *Man's responsibility for nature, ecological problems and Western traditions*. London: Duckworth.

Schmidt, A. (1971). *The concept of nature in Marx*. (B. Fowkes, Trans.). London: NLB.

Shimazaki, T. (1997). *The thoughts and methodology of post-Marxism*. Japan: Koychi Book Store.

Shimazaki, T. (2007). *Eco-Marxism*. Japan: Chisensha Press.

Takada, J. (2003). *Exploration of environmental issues*. Japan: Aoki Shoten Book Store.

Takada, J. (2004). The substance interchanging in the labour process and natural cycle. *Sapporo Materialism* 49.

Chapter 3
On Contemporary Eco-socialism

David Pepper

Abstract The chapter aims to offer a critical appraisal of contemporary eco-socialism in the West. As a radical *homocentric* (not ecocentric) application of socialist analysis and prescriptions to environmentalism, a major development for eco-socialism in recent years is that it is more willing to acknowledges the complexity of the modern globalising world and thus to move away from that crude economism which has disillusioned many would-be Marxist theorists and practitioners in the past. A further development in eco-socialism has been growing interest in manifestations of the *practical* side of eco-socialist theory and envisioning, constructing alternatives to capitalism which are dominated by social and environmental considerations and by the principle of *production for social need* rather than *profit through consumerism*. These alternative forms are diverse and together form a *community* economy of alternative spaces within capitalism, although the *transgressive* potential of such 'transitional forms' could perhaps be limited making see notes above them become a force for the status quo.

Keywords Alternative capitalism • Contemporary eco-socialism • Critique • Global modernisation • Transitional forms

Principles of Eco-socialism

Socialism, as understood by many in the West, e.g. by the Socialist Party of Great Britain, involves the following: The establishment of a system of society based upon the common ownership and democratic control of the means and instruments for producing and distributing wealth by and in the interest of the whole community (see Duncan 2000: 199).

D. Pepper (✉)
Department of Geography, Oxford Brookes University, Oxford, UK
e-mail: dmpepper@brookes.ac.uk

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_3, © Springer Science+Business Media B.V. 2010

Eco-socialism is a radical *homocentric* (not ecocentric) application of socialist analysis and prescriptions to environmentalism. It also modifies traditional socialism to take account of environmental issues and perspectives. Its critical analysis of history, social change and economics draws historically on Marx's writings, partly as interpreted by William Morris in the nineteenth century (see Thompson 1977). Its prescriptions often revive Morris' utopian socialist traditions of decentralisation, direct economic democracy, communal ownership of the means of production, etc. Hence the type of socialism represented is close to anarchist-communism, although there are some major differences between eco-anarchists and -socialists concerning analysis and strategies. Eco-socialism's historical materialist analysis locates the causes of contemporary environmental abuse in the workings of the economic mode of production of capitalism, and the institutions and world view necessary to its functioning. Eco-socialism argues that environmentally unsustainable development is inherent to capitalism, therefore to end the former the latter must be abolished and replaced by socialism. In socialism, it is argued, people can end the alienation from nature, and from each other, that causes environmental degradation. Yet, production and industry in pursuit of *Enlightenment Project* ideals could continue. (This is where eco-socialists disagree with ecocentric environmentalists, such as deep ecologists, and other postmodernists.) Eco-socialist production, with distribution, would be rationally planned, perhaps by an enabling state – but in general eco-socialism mistrusts the state and has more anarchistic visions, of confederations of local communities and regions.

Eco-socialist society would rediscover and express people's real relationship to nature – neither separation and superiority, as contemporary capitalism presupposes, nor mere equality, as ecocentrism believes. Rather, society and nature are dialectically related, so that each is a manifestation of the other. Nature is socially produced, and what humans do is natural. Against the principles of 'deep ecology' eco-socialist communities would recognise that humans are not intrinsically bound by nature's limits in quite the way that other species are. But nonetheless these communities are likely to want to steward, protect and wisely manage relationships with nature, for the benefit of all community members.

It is important to recognise that eco-socialism considers that the antagonism between the interests of capital and those of environmentalists is *inherent*. Eco-Marxists (e.g. from the *Capitalism, Nature, Socialism* group in the US and West Europe), argue that a *second, ecological, contradiction of capitalism* can be seen to operate (Gare 2000). Whereas the first contradiction of capitalism involved the system's inherent tendencies to undermine its labour force and the conditions in which that force produces, so that ultimately the proletariat would rise against the bourgeoisie and bring the system down before creating a classless socialist/communist society, the second contradiction involves:

1. The inherent tendency of capital to overproduce in relation to the market's capacity to purchase all it produces.
2. This, plus the competition to attract investors by creating ever-expanding profit margins is a driving force for global spread and intensification of capitalism with neo-liberal economics.

3. Couple these with the extremely competitive conditions under which production takes place, and the short-term time horizons of capitalist investors – all these forces militate for an ever-intensifying productivity drive, in which there is an inherent *tendency* for firms to want to discount the costs of protecting the environment, e.g. by using end-of-pipe rather than preventative production techniques of dealing with pollution, and also by externalising onto society as a whole the costs of dealing with environmental degradation – rather than not degrading the environment in the first place via preventative technologies or the non-creation of waste, etc.
4. The demand for unceasing expansion and circulation of capital has to be supported by spread and intensification of a consumer culture, supporting mass consumer markets. This gnaws away at the resource base and tends to cause more pollution (e.g. greenhouse gases). Limited attempts to recycle materials are quite insufficient to offset the production of waste and the depletion of raw materials, including non-renewable energy sources.
5. The ultimate scenario is the collapse of the production base on which capitalism depends, in the face of environmental and social threats produced by the risk society, e.g. that of global warming, nuclear power.

Where Eco-socialism Is Today

In its theoretical development, eco-socialism in the West has tried to avoid the 'promethean tendency' in Marxism, which tends to promote a vision of history as a process of 'mastering' nature in a way that is ultimately exploitive and wasteful. Eco-socialists argue that Marxism does contain another, perhaps neglected, tradition, where humans and nature are, and should be, more subtly bound in a wholistic, dialectical way (Pepper 1993). To do this, eco-socialists have largely accepted the ecocentric arguments of some radical environmentalists, that there are indeed limits to economic and population growth imposed by earth's carrying capacity. Eco-socialism has thus moved somewhat in the direction of critical realism, and away from strong social constructionism, accepting that there are limits to and constraints on the extent to which society can practice unbridled, exploitative 'mastery over nature'. Furthermore, these constraints may operate in a relatively a-historical sense, applying across time and space – yet at the same time their precise manifestation is shaped by the prevailing mode of production, i.e. conditions in the material base of society.

Notwithstanding this last point, there is a desire amongst most eco-socialists to abandon crude economic determinism, and simplistic interpretations of the 'base-superstructure model', according recognition to the role of what we may summarise as 'cultural factors' in creating history. Hence eco-socialist academic literature may devote attention to the role of cultural interpretations and constructions of 'nature' – nature and environmental problems may be seen as belonging to different language 'discourses' produced by social, cultural, and psychological, as well as economic, factors (Dryzek 1997).

Further reconstruction of Marxist theory centres on debates about feminism, and eco-feminism. Here, the influence of socialist feminists has been to take eco-feminism away from the trap of an 'essentialism', which over-emphasises what is imagined to be universal and 'fundamental' relationships between women and nature (women as caring, nurturing, more in touch with the material realities of life, etc.). At the same time, eco-feminists have wanted to modify Marxist theory, so that instead of focusing exclusively on the importance of the *mode of production* in influencing and shaping our relationship with nature, Marxists focus equally on the mode of *social reproduction*, in which women in the West have played an overwhelmingly dominant role. (And despite the gains of the feminist movement since the 1960s in opening up opportunities in the employment market, women still do dominate the sphere of reproduction, centred on the domestic life which perhaps Marxism under-emphasised in the past.)

These trends may all be considered as 'healthy' developments of eco-socialist theory, acknowledging the complexity of the modern globalising world, and moving away from that crude economism which has disillusioned many would-be Marxist theorists and practitioners in the past – and especially has alienated some radical environmentalists. Yet at the same time we should be concerned about the prospect of an over-enthusiasm for the 'cultural', and a corresponding unjustified neglect of the importance of the economic base, in shaping and influencing world events, and especially in influencing attitudes to environmental conservation and protection. It is all a matter of emphasis, and we sometimes underemphasise the importance of material, economic, vested interests in shaping processes of global modernisation, and global *ecological modernisation*. Yet since the wave of neo-liberalisation beginning in the 1970s, the central role of such interests in social, political, cultural and ecological spheres has been very evident for all to see.

Thus, in Europe for the past decade, there have street protests against the economic forces of globalising capital, the liberalisation of trade and the cutting of government spending on the welfare state – and, recently, votes against a new EU constitution which will be underwritten by the neo-liberal agenda. All of these forces militate against social protection of citizens – not only protection against unemployment, sickness, low pay and poor work conditions and the problems of getting old – but also against environmental dangers. While there have undoubtedly been some gains in environmental quality in the West, on the whole the attempts to deal in a meaningful way with really *big* environmental problems, such as global warming, the production and disposal of waste caused by consumerism, global poverty, etc.: these attempts have fallen woefully short of what is needed. And they have often met with stubborn resistance from powerful business and industrial lobbies, such as the European Round Table, an unelected body which has campaigned effectively for *de*regulation and *lower* environmental standards on the grounds that economic competitiveness must be prioritised. Indeed, some firms have threatened to pull out of production in Europe if nation states and the EU did not give in to their demands. The power of their lobby derives ultimately from the threat that in capitalism too much environmental protection undermines the global competitiveness of business and industry. In 2010, with the onset of global recession and economic

depression, we may expect such anti-environmentalist arguments to gain renewed vigour, despite the no-doubt genuine concerns of governments about climate change. We may see an increase in the considerable political power of the oil industry lobby in the US, which stems of course from the vital strategic economic role which oil still occupies. This power caused the world's biggest consumer of fossil fuels to drag its heels on progressing the Kyoto Treaty on global carbon emissions.

Practical Eco-socialism – Alternative, Eco-socialistic Forms of Organisation

A further development in eco-socialism has been growing interest in manifestations of the *practical* side of eco-socialist theory and envisioning. That is, in *utopian* eco-socialism, and the attempt to construct alternatives to capitalism: alternatives which are dominated by social and environmental considerations, and by the principle of *production for social need rather than profit through consumerism* (Fournier 2002).

These alternative forms are thriving in some places. They are diverse and together form a *community* economy of alternative spaces within capitalism – spaces which are sometimes readily recognisable as eco-socialist, and sometimes not so recognisable. However, theorists and practitioners of eco-socialism may see them alike as *transitional forms*: perhaps stages on the way to a green-socialist society.

These alternative forms are not abstract utopias – not mere fantasies within an ever expanding and engulfing neo-liberal globalisation model. They all *exist* in Western capitalist countries, and in some developing local economies in Africa, India and East Europe. In fact, in Western economies like the UK, 30–50% of all hours worked by people are *not* worked in the market economy, comprising, as they do, things like household work, government work, and alternative forms of commodity production.

These organisational forms vary. On the one hand they are '*alternative capitalist*', e.g. quite large firms selling in the conventional market place, but pointedly attempting to practice environmental and social ethics. An example is the Scott-Bader Commonwealth in the UK, a network of cooperatives formed in the 1950s who refuse, for instance, to have anything to do with arms production. On the other hand there are *non-capitalist* enterprises, usually communally owned, not-for-profit and usually small. The type of labour in both is varied, including cooperative, self-employed, and volunteer or voluntarily low-paid.

Their purpose varies also. It may be simply to survive within a capitalist framework. Or it may be more intentionally utopian, viz. to *liberate* society ultimately from the capitalist economy and the type of individualisation associated with it. These forms are partly about exploring different ways of being together, and creating a sense of community, whereas the mainstream capitalist economy tends to destroy communities. They may also embody the self-conscious attempt to create an *ecological*

benign society embodying *socialist* principles, or they could be driven by religious ideals or other ideological purposes (Morris 1996).

One important principle they have in common is that they are focused on *capturing the wealth they create*, and being able to marshal their surpluses for further community investment. It is also important to note that in these potential manifestations of eco-socialism the focus of socialism is simultaneously the realisation of *individuals* and their potential, and the promotion of the *collective*, where this collectivity is usually manifest as living communities at regional and local level, rather than as the nation state.

Examples

These range from highly organised operations, international in scope, to more spontaneous and informal ones, very locally based.

Much cited are the *Mondragon* collectives in the Basque region of N Spain (Morrison 1991). They were started in the 1950s, and founded on the principles and inspiration of Robert Owen, founder of the cooperative movement in Britain. Today they have 30,000 worker owners and 160,000 workers, with sales of 9.6 billion euros in 2003. Their primary coops produce goods and services for the international market such as automobile components, white goods (Ulgor and Fagor brand names) and food products, and many other diverse enterprises. But these are not merely alternative forms nesting in the conventional capitalist economy and dependent on it for sustenance. For they support their own secondary coops, servicing the primary ones with community banks, education and training, and tertiary coops, producing independent infrastructure (social security, health, housing). And there is now a global network of associated cooperatives.

The Mondragon Cooperative Corporation's principles include the *subordinate nature of capital* (where there is an attempt to balance business and financial soundness with social and environmental aims), and the *appropriation of the surplus for community and workers* (not capitalists or shareholders). The surplus after wages is distributed as 10% to charity, 70% to individual cooperators, and 20% retained by the coops.

Other examples at this end of the geographic scale include manufacturing and service enterprises who form networks such as the Scott Bader Commonwealth in the UK, or the Second Economic Model network (e2m) in the US (Massachusetts) (Kassman 1997). Businesses here donate part of their surpluses towards community purposes, whilst members of the community favour e2m-accredited businesses, hence the relationship is of mutual benefit. The outcome is not only the generation of more businesses and jobs: it is also a series of initiatives directed towards environmentally sustainable development, through a regional economic council, democratically run. E2m's businesses deliberately renounce profit maximisation, considering that 'excessive' profiteering is at the root of many environmental and social ills. They also believe that it is possible to use capitalism to 'serve the people'.

Hence these are by no means 'pure' eco-socialist experiments, isolated from the capitalist context in which they are embedded, and there are many problems concerning the extent to which they are 'adulterated' by the context of the international market economy (see below). Neither are they examples of what some call the 'localisation' movement, in opposition to globalisation: that is, they are not small scale attempts to retreat from global economics and governance. Some people use the term '*place-based globalisation*' to describe their outlook – one which retains an international perspective, but tries to revive and revitalise the individual identities and economic independence of place, locality and community (c.f. the 'reinhabitation' of the bioregion in deep ecology) (Norberg-Hodge 1996).

Smaller experiments include:

1. Local, soft renewable energy for businesses (brushwood, solar, hydro, wind).
2. Community farming, including urban growing spaces for food and community development.
3. Community capacity building: helping people to organise.
4. Producer and consumer co-operatives.
5. LETS (local currencies) – local employment and trade systems.
6. Other forms of local finance, Inc., banks, credit unions, plus confederal forms like *Wirtschaftsring* in Switzerland (an 'economic circle' for lending large amounts to business members) (Kumar 1998).
7. Community councils, for democratic decision making.

These may embody the following ecological and socialist principles:

1. More regional and local self reliance, providing safety from remote economic control.
2. Local production for local needs, safeguarding local jobs, and causing less environmental damage through transportation of goods.
3. Community common ownership of means of production.
4. Community banks and financial support.
5. Production decisions freer from market forces, hence more environmentally rational decisions are possible, and interests of future generations can be allowed to outweigh short term financial and development gains.
6. Security and quality of life compensate for any losses in standard of living.
7. Attempt to achieve self reliance, (not self sufficiency), but still strongly outward looking – building confederations and mutual aid relations with other regions/nations (Dodge 1990).

Examples of small scale alternative forms have been studied, as 'rural social enterprises' (see Johanisova 2005). Here are things like community co-operatives owning village shops and helping to create affordable housing for those with little capital; small industries like an apple juice manufacturing plant; 'alternative communities' such as Laurieston Hall in Scotland (where the 30 members spend half of their working week on sustenance activities for the community); ethical community banks (supporting, for instance, community-sponsored farms and farmers markets which sell direct from the farm to the consumer) (Imhoff 1996).

Their strategies for survival include loans, grants, and apportionments of land via the mainstream economy; cheap labour (voluntary, low-pay, workshare); internal cross subsidy; some barter and reciprocity arrangements (Mollison 1990). These are all *social enterprises* i.e. examples of enterprises which may partly trade in mainstream markets but also attempt to prioritise social and environmental aims along with economic viability. They are socially owned, not only by workers but also by *stakeholders* i.e. those in the community who may have an interest in the enterprise, and because they have social as well as economic aims they may give up gains in 'efficiency' (e.g. by mechanisation) deliberately in order to maintain people in work (Arthur et al. 2003).

Similar social enterprises are being studied in the old 'communist' bloc of E Europe, e.g. Poland and Slovakia. Partly they are survivors of the old, pre-capitalist economy. They embody a mix of forms, capitalist and non-capitalist, involving formal and informal work arrangements, flexibility (several jobs done by one person), domestic production (e.g. of food), reciprocity in goods and services, and income from state benefits and from remittance payments from family abroad. And all are linked via personal networks for sharing and doing work – describable as nested geographies of economic practices, centering on the household rather than the workplace as the major strategic site. They articulate with one another in a complex set of power relationships.

In more affluent communities, a major alternative form embraced by those with an ecological and community conscience is the local currency, or *local employment and trading system* (LETS), which has attracted the attention of much academic research, as a form of lifestyle politics (Fitzpatrick and Caldwell 2001). Since the 1970s, hundreds of these systems have developed in towns and cities across West Europe, North America and Australasia. LETS provides alternatives to the mainstream currency, in the form of work tokens used as a medium of exchange in the non-mainstream economy. They are more flexible than straight bartering, allowing multilateral trading. Typically people will offer goods and services to others in the community, and in return they will be paid in currency tokens which are valid only in the local area. Anything from 20–30 to a hundred or two people may be involved in any given LETS scheme. Because the 'currency' is not valid outside the relevant area, and because there are no notes and coins, merely tokens recording transactions, LETS overcomes many disadvantages associated with universal currencies. There can be no commoditisation of money itself, or currency speculation or fluctuations in value engendered by speculation. And removing wealth from a locality by repatriating profits to the homeland of a multinational branch plant, so characteristic of capitalist development, becomes impossible. LETS therefore shields people against external economic practices and conditions. It is the social community aspects of LETS which attracts eco-socialists, for they are a way of networking in a local community, of developing community awareness, of recompensing otherwise unpaid labour and of helping low-income people to gain self reliance and esteem. And they can be constructed in such a way that no accumulation of riches is possible (e.g. the currency tokens can be made valid for only a limited, specified time period). Indeed, these systems break down when people merely try to accumulate tokens rather than engaging in exchanges.

Again we are not talking about basing an entire economy on these small-scale arrangements. They exist alongside a macro-economy, and as adjuncts to the mainstream macro currency. The two may be linked but not in a hierarchical fashion – the local currency can sometimes do things that the national one cannot, and vice versa. Eco-socialists sometimes apply the biological maxim to such economic arrangements, that a *diversity* of currencies creates more *resilience* in the face of outside influences (in 2008 failures of US banks triggered off world-wide financial collapses), and therefore is 'healthier'. Also the kinds of markets created by local currencies are more humane and less alienating that the impersonal markets of globalisation, where commodities are fetishised. The local currency markets must be based on knowledge of the 'customer' i.e. that person for whom you are creating the goods or services (Meeker-Lowry 1996). It is impossible to be unaware of the social relations of production in such markets, and very difficult to treat people other than with respect.

Whereas conventional economic and development theory may regard much of the above as retrogressive, greens and socialists alike may see it as progressive, in terms of gaining quality of life through:

1. Enhanced social interaction and community.
2. Re-empowerment economically (i.e. not at the mercy of distant economic forces and decisions).
3. Therefore re-empowerment democratically.
4. Increased priority for environmental goals (Panitch and Leys 2000).

Note that unlike state 'socialist/communist' arrangements, this is a form of development from the bottom up, rather than being imposed by a centralised state. However the state can play an important enabling role.

Critique: Are These Transitional Forms?

Many green and socialist inclined commentators suggest that the above forms can constitute part of a set of economic and social arrangements which are 'transitional' to the ultimately-desired green socialist (or perhaps green anarchist) society (Prugh et al. 2000). This perspective on them derives from Marx's formulation of 'immanent critique' i.e. clarification of that towards which the world is already striving: the objectively real possibilities as manifest by anticipatory *practices* in the here and now (O'Connor 1998). Such anticipatory practices also would help to develop a revolutionary, eco-socialist *consciousness* amongst those involved.

They are part of a strategy which *prefigures* post-revolutionary society, a concept which reflects the anarchist Martin Buber's contention that in working towards the utopian society there cannot be dissonance between means and ends, and there should be continuity within revolution. (So, for example violence or vanguardism cannot be countenanced as means to secure a *non*-violent, *non*-elitist society) (see Taylor 1982). This implies that the method of revolution must be to set up features of the desired society in the here and now.

Thinking along these lines, the socialist geographer David Harvey describes money as the most important expression of spatio-temporality in contemporary capitalist society: its social power currently depending on a hegemonic territorial configuration constituting a system of privilege and social control. He argues, therefore, that because LETS has new spatial-temporal characteristics (currencies being invalid outside a local area for instance) its adoption enables alternative, non-hegemonic social practices to be established (Harvey 2000). Other socialists call for 'socialised markets' comprising autarkic local economies embedded in egalitarian social relations, which, they believe, can be established by building on already-existing initiatives such as LETS and fair trade organisations, where prices are determined by social-environmental rather than commercial objectives.

From a radical green perspective, reduced affluence, self sufficiency, small-scale living, localised economies, participatory democracy and alternative technologies – all are key ingredients of an ecologically benign and socially just society. Ted Trainer, a green activist, stresses how these ingredients already exist in what he calls the '*global ecovillage movement*' – a network of intentional communities, city neighbourhoods, producer/community coops and local currencies (Trainer 1998). He characterises this movement as 'theoryless and apolitical', but nonetheless part of the implicit transition strategy of building post-capitalist society within existing society.

However the dilemma of such 'transitional forms' is that in place of *transgressive* potential they could perhaps become a force for the status quo – for reasons which, fundamentally, Marx and Engels detailed in their critique of utopian socialism. For focusing on reform at the local *community* level might be seen as an admission that we cannot change the *bigger* system, and have therefore given up the hope or pretence that this is possible – hence we confine ourselves to small changes which may or may not be incremental towards an eco-socialist society.

This danger is increased by virtue of the fact that supporters of and participants in these alternative forms often tend to reject theory and politics, downplaying the contemporary material forces and processes which encourage the majority of people to behave and think in capitalistic ways. Hence, they may encourage a false consciousness which imagines (a) that by their appeal to reason and 'common sense' they are setting an example which the mass of people would want to follow, and (b) that if these alternative forms grew to seriously challenge existing power hegemonies that challenge would be tolerated by these hegemonies.

One potential danger of such lack of realism could be blindness to the risks of assimilation into the mainstream culture. For some ostensibly 'transitional' ideas can easily become institutionalised, so that, for instance, some LETS schemes now support the state by paying national taxes. And the 'farmers markets' and 'fair trade' enterprises, which bitterly oppose the control of food markets by large, centralised profit-driven firms, may now often be seen to feature in major supermarkets. Indeed, some revolutionary socialists might be inclined to argue that inasmuch as such alternative forms might permit poor and conventionally unemployed people to continue to participate in conventional society, then they are taking the pressure off the state to supply social insurance – effectively, some might say, *prolonging* the legitimacy

of an economics which inherently creates social exclusion. From this argument, such alternative forms are counter-revolutionary rather than transgressive.

An allied danger is that 'transitional' *form*, rather than *process*, becomes most important (Sargisson 2000). Thus, much eco-socialist envisioning presumes that self-sufficient communes and worker cooperatives intrinsically benefit the environment, because of their small scale, potential contribution to quality of life, and imagined concern about local community interaction with environment. Yet this is all highly questionable – small scale is not inherent to co-operatives, for instance. Neither do they necessarily exemplify democracy, inclusiveness or environmental concern (Swyngedouw 1997). Frequently they can become vehicles for alienation and self-exploitation, as their workers strive to compete in a capitalist environment (Carter 1996). In this sense, form of itself is not crucial, co-operatives being a vessel into which almost any meaning can be poured.

In reality it is the *context* of potentially 'transitional' forms which could be the key. These forms need to be set within a culture of non-capitalist values and a clearly radical social change agenda. This is why Takis Fotopoulos (an eco-anarchist informed by Marxist perspectives), in arguing for transitional forms nonetheless opposes Ted Trainer's apolitical position for its *lack of clear goals for systemic change* (Fotopoulos 1997). An unambiguous programme for such change – ultimately to a stateless moneyless economy, says Fotopoulos – is needed if the movement towards an eco-social democracy is to succeed. Without such things the necessary majority to effectively oppose today's huge concentrations of power will be missing.

Thus, revolutionary eco-socialist ideals, if built on unsound foundations, can slide towards counter-revolutionary pragmatism and reformism: not insisting ultimately on a new society but lamely content to merely 'rebuild the ship while at sea', and to inspire 'the making of more environmentally friendly choices', to use the words of one academic commentator on green utopianism (De Geus 1999). Perhaps this is why the UK green activist Jonathan Porritt warns of the danger to environmentalists of embracing so-called 'green growth' as an goal in itself. In his view green growth is ultimately a contradiction in terms, and Western environmentalists should champion such growth *only* if it is seen as a transitional means to a much more radical end – that is the elimination of consumerism itself. How to support such intermediary reformist measures without losing sight of the ultimate radical goal, is, he says, 'a basic dilemma which most environmentalists remain remarkably reluctant to confront'. One cannot help but feel that this is a most pertinent observation.

References

Arthur, L., Scott Cato, M., Keenoy, T., & Smith, R. (2003). Developing an operational definition of the social economy. *Journal of Cooperative Studies, 36*(3), 163–189.

Carter, N. (1996). Worker Coops and green political theory. In B. Doherty & M. de Geus (Eds.), *Democracy and green political thought* (pp. 56–74). London: Routledge.

De Geus, M. (1999). *Ecological utopias: Envisioning the sustainable society*. Utrecht, the Netherlands: International Books.

Dodge, J. (1990). Living by life: Some bioregional theory and practice. In V. Andruss, C. Plant, J. Plant & E. Wright (Eds.), *Home! A bioregional reader* (pp. 5–12). Philadelphia: New Society Publishers.

Dryzek, J. (1997). *The politics of the earth: Environmental discourses*. Oxford: Oxford University Press.

Duncan, C. (2000). The centrality of agriculture: History, ecology and feasible socialism. In L. Panitch, & C. Leys (Eds.), *Necessary and unnecessary utopias: Socialist Register 2000* (pp. 187–205). Rendlesham, Suffolk: Merlin Press.

Fitzpatrick, T., & Caldwell, C. (2001). Towards a theory of ecosocial welfare: radical reformism and local exchanges and trading systems (LETS). *Environmental Politics, 10*(2), 43–67.

Fotopoulos, T. (1997). *Towards an inclusive democracy: The crisis of the growth economy and the need for a new liberatory project*. London: Cassell.

Fournier, V. (2002). Utopianism and the cultivation of possibilities: Grassroots movements of hope. In M. Parker (Ed.), *Utopia and organisation* (pp. 189–216). Oxford: Blackwell.

Gare, A. (2000). Creating an ecological socialist future. *Capitalism, Nature, Socialism, 11*(2), 23–40.

Harvey, D. (2000). *Spaces of hope*. Edinburgh: Edinburgh University Press.

Imhoff, D. (1996). Community supported agriculture. In J. Mander, & E. Goldsmith (Eds.), *The case against the global economy: And for a turn towards the local* (pp. 425–433). San Francisco: Sierra Club Books.

Johanisova, N. (2005). *Living in the cracks*. Bideford, Devon: Green Books.

Kassman, K. (1997). *Envisioning ecotopia: The US green movement and the politics of radical social change*. London: Praeger.

Kumar, S. (1998). Gandhi's swadeshi: The economics of permanence. In J. Gray (Ed.), *False dawn: The delusions of global capitalism* (pp. 418–424). San Francisco: Sierra Club Books.

Meeker-Lowry, S. (1996). Community money: The potential of local currency. In J. Mander, & E. Goldsmith (Eds.), *The case against the global economy: And for a turn towards the* local (pp. 446–459). San Francisco: Sierra Club Books.

Mollison, B. (1990). Strategies for an alternative nation. In V. Andruss, C. Plant, J. Plant, & E. Wright (Eds.), *Home! A bioregional reader* (pp. 149–152). Philadelphia: New Society Publishers.

Morris, D. (1996). Communities: Building authority, responsibility, capacity. In J. Mander, & E. Goldsmith (Eds.), *The case against the global economy: And for a turn towards the local* (pp. 434–445). San Francisco: Sierra Club Books.

Morrison, R. (1991). *We build the road we travel: Mondragon, a cooperative social system*. Santa Cruz: New Society Publishers.

Norberg-Hodge, H. (1996). Shifting direction from global dependence to local interdependence. In J. Mander, & E. Goldsmith (Eds.), *The case against the global economy: And for a turn towards the local* (pp. 393–406). San Francisco: Sierra Club Books.

O'Connor, J. (1998). *Natural causes: Essays in ecological Marxism*. New York: Guilford Press.

L. Panitch, & C. Leys (Eds.), *Necessary and unnecessary utopias: Socialist Register 2000* (pp. 1–29). Rendlesham, Suffolk: Merlin Press.

Pepper, D. (1993). *Eco-socialism: From deep ecology to social justice*. London: Routledge.

Prugh, T., Constanza, R., & Daley, H. (2000). *The local politics of global sustainability*. Washington, DC: Island Press.

Sargisson, L. (2000). *Utopian bodies and the politics of transgression*. London: Routledge.

Swyngedouw, E. (1997). Neither global nor local: 'globalisation' and the politics of scale. In K. Cox (Ed.), *Spaces of globalisation: Reasserting the power of the local*. New York: Guilford Press.

Taylor, K. (1982). *The political ideas of the utopian socialists*. London: Frank Cass.

Thompson, E. P. (1977). *William Morris: Romantic to revolutionary*. London: Merlin Press.

Trainer, T. (1998). Where are we, where do we want to be, how do we get there? *Democracy and Nature, 6*(2), 267–286.

Chapter 4
Socialism and Technology: A Sectoral Overview[1]

Victor Wallis

Abstract This chapter aims to demonstrate that both for the economy as a whole and for each of its sectors, it is possible to outline the main features of current capitalist practice, the implicit requirements for a socialist alternative, and the degree to which the conditions for satisfying these requirements are already present. In short, a society-wide shift to cleaner and more sustainable technologies is already conceivable. The distinctive contribution of socialism lies not in any particular inventions that might emerge but rather in the reorganisation of society in such a way that technological choices are no longer made on the basis of marketability and profit-potential, but rather on the basis of compatibility with the overall requirements of humanity and the natural world. There is nothing 'inevitable' about such a socialist transformation; nonetheless, what works in favour of this constructive response is the emerging recognition that doing nothing – letting current trends run their course – spells disaster.

Keywords Agricultural technology • Industrial technology • Information technology • Socialism • Technology

Introduction

The discussion of socialism as a historical project – that is, as a project for which it can be argued that the necessary practical conditions exist – has from the beginning been closely linked to issues of technology. Earlier advocates of social justice

V. Wallis (✉)
Liberal Arts Department, Berklee College of Music, Boston
14, Park Avenue, Somerville, MA 02144, USA
e-mail: zendive@aol.com

[1] This is an updated version of an article which was originally written for *Toward a New Socialism*, eds. Anatole Anton and Richard Schmitt (Lanham, MD: Lexington Books, 2007), and which appeared with minor revisions in *Capitalism Nature Socialism*, 17, 2 (June 2006). The present version is published with the permission of Lexington Books and of Routledge Journals – Taylor & Francis (the publishers of CNS). I wish to thank Karen Charman, Milton Fisk, Joel Kovel, Ronald Price, Richard Schmitt, and David Schwartzman for their comments.

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_4, © Springer Science+Business Media B.V. 2010

(before Marx's day) had spoken in terms of timeless moral principles. Thus, leaders of millenarian movements would deliver apocalyptic religious pronouncements to peasant followers, while utopian writers, for their part, addressed all 'men of good will' (though in practice this most often meant educated people who took for granted the continuation of their personal preeminence). Marx, on the other hand, linked communism – and therefore also socialism, which would be its precursor – to the rise and eventual political organisation of the proletariat (wage-workers), whose existence as a social class reflected the technology of what he called 'large-scale industry'.

The shift from handicraft to large-scale industry entailed: (a) development of the labour market (i.e., of labour-power as a commodity); (b) reduction of the work-process to regimented repetitive motions; and (c) the bringing together of large numbers of workers under a single roof. It was this combination of traits which gave capitalism – in the form it took during Marx's time – both its destructive character and, simultaneously, the potential to generate its positive replacement.

Jumping ahead to our own time, we see that capitalism, having beaten down its challengers almost everywhere for more than a century (longer, no doubt, than Marx and his immediate successors could have thought possible), confronts us with a daunting paradox. On the one hand, we see that capital, viewed globally, has acted out the whole rapacious script that Marx projected for it: it has concentrated wealth at one pole and misery at another; it has tightened more than ever the mechanisms of political control, including resort to military aggression backed by the 'ultimate weapon'; it has created a largely hegemonic culture in its own (commercial) image; it has severely weakened public-sector services; and, with its readiness to sacrifice both soil and worker to continued unlimited growth, it has brought on an ecological crisis which puts in doubt the continuation of our species-life. All this makes more urgent than ever the task of supplanting such a system. But – and here lies the paradox – the very factors that make the rule of capital so destructive also operate to shield it against any effective effort to go beyond it.

This represents something of a change since Marx's time. For him, the concentration of capitalist power had as its byproduct the bringing together of workers and their eventual consolidation into a class that could end the rule of capital. For us, capital's even further concentration (on a global scale), together with the concomitant technological changes, has had several consequences which make this outcome appear, at least initially, much more remote. First, big capital has radically dispersed its labour force, with the result that it can undercut the potential power of the workers by shifting its operations at will. Second, mass media technology has been used to shrink the public sphere in favour of direct one-way communication from the centers of power (public or private) to the isolated household or individual. Third, so much environmental damage has already been done, and the infrastructure for ecologically harmful patterns of energy-consumption has become so deeply entrenched, that any reversal is bound to be both slow and disruptive (This effect is amplified with the rise of genetic engineering, which by its very nature – since no biological organism exists in isolation – introduces uncontrollable and irreversible changes into the environment) (Bowring 2003: 27–57). Finally, in terms of political discourse, the notion

that a radical alternative to capitalism has already been tried and found wanting may discourage many who might otherwise be receptive to socialism.

One possible conclusion to draw from all this, is that a transformation that was conceivable in Marx's time is no longer conceivable now. Within the dominant culture, this conclusion has already attained the status of an axiom. But human beings are not automatons, and obstacles that seem insuperable may bring defections in unexpected places, with the result that what first appeared as a reinforcement to the status quo may end up being a sign of its weakness. In terms of our present focus, it is the very extremity of the current situation that could provoke people to move much further, faster, and more purposefully than they had ever thought possible. There is, of course, nothing 'inevitable' about such a response, and it is a lamentable fact that certain types of environmental damage (e.g., extinctions of particular species) cannot be undone. Nonetheless, what works in favour of a constructive response is the emerging recognition that doing nothing – letting current trends run their course – spells disaster.

The struggle to survive is indeed a powerful motivator, but it depends in turn on confidence that survival is possible. Such confidence draws partly on the solidarity that can be inspired by a vast social movement. If a movement of this kind is to grow, however, it must have theoretical underpinnings. People need to understand the potential alternative as being already implicit in conditions we can now see. Speaking of technology, it is not enough to advance a notion of 'what might be'. Any such vision must flow in a recognisable way from 'what is', granting that this encompasses not just the physical and institutional reality but also people's subjective capacity to respond.

The sphere of technology is crucial to this process, for at least two reasons. On the one hand, the capitalistic cult of innovation (Mandel 1975: 192) promises to overcome all obstacles, including those posed by the absolute exhaustion of the world's resource-base. On the other hand, we know that long-term species-survival is contingent upon a reduction on the order of 80% in the burning of fossil fuels (Monbiot 2007), and that the conditions for carrying out such a reduction are to a large extent already present. These conditions, consisting partly of *devices*, partly of *scientific knowledge*, and partly of *organisational experience*, are what I propose to remind us of here. As we examine them, it will become evident that the framework required for directing them toward ecological restoration is one which breaks sharply with capitalist priorities and which therefore will link up in the short run with demands reflecting working-class (or, more broadly, non-capitalist) interests, and in the long run with socialism (Wallis 2004a, 2008).

Both for the economy as a whole and for each of its sectors, it is possible to outline the main features of current capitalist practice, the implicit requirements for a socialist alternative, and the degree to which the conditions for satisfying these requirements are already present. Whatever the specificities of the various sectors, a socialist approach will be understood to rest on the underlying principles of (a) social ownership and control of large-scale property, with the option of reconfiguration (including subdivision and dispersion) of production units; (b) economic decisions beyond the household seen as matters of public policy (at whatever level), to

be based on criteria of physical health and social well-being rather than of profit and the market; and (c) a revised concept of efficiency which takes into account *all* inputs and outputs of a particular productive activity (and not just those that are measured in the profit-margins of particular enterprises).

We may now consider the application of these principles to the major sectors of economic activity. The discussion here will be purely illustrative; actual implementation would require organised debate and planning on the part of all those affected.

Agriculture/Forests/Fisheries

The traditional practices of agriculture, forestry, and fishing – clearly the sectors most vital to our physical survival – are increasingly giving way to agribusiness, industrial tree plantations, factory fishing, and aquaculture. Agribusiness, with its vast expanses of single crops and with its factory-like regimentation of landless (often migrant) labourers, is heavily committed to fuel-intensive cultivation based on chemical fertilizer and highly toxic pesticides. Scorning age-old practices of mixed growth, it depletes both the topsoil and, through over-irrigation, the aquifers (Haila and Levins 1992: 157). Livestock-raising, in its industrial form, is marked by even more wasteful and increasingly toxic practices. Beef production, in particular, requires ten times as much acreage as does grain to feed a given number of humans, and the water pollution from stockyards is prodigious (Rifkin 1992: 221; Cook 2004). Animals bred for meat and dairy products are typically subjected to extreme crowding and highly unhealthy conditions, including the use of growth hormones and antibiotics, which help create antibiotic-resistant strains of microbes that then threaten human health (Akre 2002: 40). Despite these damaging ecological and public health consequences, all such practices are carried out for the sake of guaranteeing the owners of these operations the highest possible output at the lowest possible cost.

The same precepts are applied to forests and fisheries. Forests are viewed not for their roles in producing oxygen, protecting against soil erosion and floods, or sheltering many species of wildlife (including pest-predators), but exclusively as either sources of lumber or impediments to cash crops and grazing. The destructiveness of this approach is incalculable, perhaps most dramatically shown in the mudslides that beset clear-cut hillsides (frequently taking, in poor countries, hundreds of lives at a time). In terms of the capitalist bottom-line, however, all this is simply disregarded. So it is with fishing, where natural stocks are relentlessly depleted. Farm-raised fish are then bred under conditions comparable to livestock, with excessive crowding and consequent adverse health effects, which again are passed on to humans (Hood 2004: A274).

Cutting across all forms of food production is the use of genetic engineering (GE). In the midst of all the controversy on this topic, a few points deserve emphasis (Anderson 1999; Bowring 2003; the 2004 film *The Future of Food*): (a) The impetus for GE comes entirely from big corporations. (b) The initial motivation for genetically modifying crops was to create captive markets for certain herbicides, to

which the crops in question would be immune. (c) GE is by no means guaranteed to increase productivity; in some instances it has the opposite effect. Productivity, however, is not the goal; the goal is to replace independent community-based agriculture with a form of production that maximises dependence on commercial inputs. (d) It is impossible to guarantee that genetically modified plants (or fish) will not interbreed with their wild counterparts, with unknown consequences. (e) GE was introduced into U.S. food supplies by stealth (companies blocked efforts to require labeling of GE produce); in countries where there was open discussion, GE technology has been severely restricted. (f) The attempt to impose GE has also entailed high-pressure tactics on the part of the U.S. government, including blocking worldwide adoption of the precautionary principle[2] and winning a World Trade Organization ruling that declares the European Union's 6-year ban on GE foods an unfair trade barrier (*Washington Post*, February 8, 2006, D1).

In envisaging a socialist response to all these practices, it is important in the first instance to see the practices themselves as aberrational. Far from building on the accumulated experience of food producers who understand and respect the natural setting in which they operate, capitalist agriculture – of which GE is only the most extreme expression – fixates on reaching its narrowly defined targets 'by any means necessary', in total disregard of impact on the eco-system (Shiva 1997, especially Chapter 4). The most urgent priority for socialism, then, is to rescue agricultural practice from the imbalances and the ravages perpetrated by capital. This implies a comprehensive approach, not limited to intervening at any single level. Above all, nature's infrastructure (land, water, trees, wildlife) must no longer be treated as a vast heap of potential commodities ready to be seized and put on the market. The challenge is not so much one of innovation as one of retrieval. Precisely how the production process will be organised – in particular, the exact mix of different scales of operations – must be determined in accordance with both the natural and the cultural traits of each locality. Specific decisions on matters such as water-use, pest-management, crop-combinations, and working conditions can then be taken on the basis of public discussion, with free flow of essential knowledge and a common commitment to long-term viability.

Nature does not recognise property boundaries. What is done in one space affects other terrains as well. Long-term viability means, on the one hand, avoiding toxins, and on the other, protecting soil quality, water availability, and species-diversity. All these objectives require a degree of mixing and complexity of plant-life. This might in turn entail, on the one hand, higher levels of labor input, and on the other, smaller outputs of any single product within a given region. Such changes can be seen as positive, however, from several angles: (a) the severe rural unemployment that exists in most of the world's poor countries could be absorbed; (b) although the output of a region's leading product might decline, this could be offset by the output of secondary products, some of which could be locally consumed;

[2] Under this principle, products have to be proven safe before they are marketed. See *Multinational Monitor* 2004.

(c) agricultural work would become – as it often used to be – more varied, more creative, more dignified, and healthier (Haila & Levins 1992, Chapter 5).

Steps in the direction of such an outcome can be discerned in a number of settings around the globe. Cuba, with what is left of its socialist framework, in some respects leads the way, as it responded to the cutoff of its external inputs (following the Soviet breakup) by carrying out an exemplary switch to organic agriculture, including large-scale promotion of urban food-gardens (Rosset 1998: 144; Pinderhughes 2004: 212). India has been the setting for major organising efforts within farming communities as they have sought to defend their livelihoods against the incursion of dam-building projects and water-guzzling softdrink manufacturers. And in the advanced capitalist countries, consumer groups have established food coops and mounted educational campaigns while farmers' markets have reestablished direct links between city-dwellers and nearby small-scale food producers. However limited might be the immediate scope of such developments, they offer substantial networks on which more ambitious projects can build.[3]

Industry/Transport/Energy

In industry, unlike agriculture, the capitalist organisation of production appears at first glance not as a possibly arbitrary superimposition upon age-old practices but rather as a structure inherent in the tasks to be performed. Large-scale industry originated under capitalist sponsorship; no earlier epoch offers an alternative model for it. Twentieth-century socialist regimes may have strengthened rather than weakened the perceived link between industrial success and the rule of capital. The reason for this is straightforward. Socialist revolutions occurred in relatively backward countries. In terms of industrial competition, therefore, the resulting regimes always appeared as laggards. It became impossible for them to shake off a fixation on overcoming this circumstance, whether the concern was to showcase what they proclaimed to be a new social order or whether it was to build up, in a more practical sense, the means to defend themselves against the real and continuous threat of hostile intervention. Ironically, then (as Lenin was the first to insist), they were able to contend with the capitalist powers only by largely succumbing to the rules of the capitalist game.[4] Once this pattern had become routinised, it suffused the ambitions of the Soviet ruling strata, making them easy prey for cooptation.

But the mere fact that large-scale industry was founded and propagated by capital does not in itself make capitalism the only possible framework for its existence. For reasons put forward initially by Marx, the historical evolution of the rule of capital

[3] An expression of this is the International Federation of Organic Agriculture Movements founded in 1972, which held its 15th World Congress in 2005. See www.ifoam.org.

[4] In 'On the immediate tasks of the Soviet government' (1918), Lenin regretfully but firmly calls for emulating the industrial discipline of what he terms 'state capitalism' as then practiced in Germany.

brings problems of a new kind which capital is incapable of addressing. Capitalism's core anomaly, in comparison with earlier systems, has always been the phenomenon of overproduction. In Marx's time, overproduction came into play essentially with reference to the size of the market (in any given region) relative to the quantity of available commodities: if more was produced than could be sold, the market would collapse and the economy would go into recession. Nowadays, however, the limiting factor is not just the size of any regional market; it is also the total quantity of available resources, on a global scale. The classic capitalist desideratum of perpetual growth is thus no longer viable even in the short run, let alone as the basic measure of economic success (Douthwaite 1999). Both *what* is produced and *how much* is produced must be decided upon in terms of an entirely new set of considerations – and hence also through a largely new set of institutions and processes.

We should note immediately that although this is formulated as a prescriptive statement, it derives its impetus from the economy's clash with objective limits, whether in the form of a peak in oil production,[5] a catastrophic increase in atmospheric carbon, a shortage of clean water, or (as now in the case of China) an absolute shrinkage of agricultural terrain in the face of expanded reliance on private motor vehicles. What these trends imply is that an alternative set of production-parameters is a matter not just of taste or preference, but of survival.

The response of capital to this crisis is ambivalent. On the one hand, it cannot fail to recognise the threats to 'business as usual', and so devotes a certain portion of its capacity to exploring, in particular, new sources of energy, most notably, the promise of 'hydrogen power' (Rifkin 2003: Chapter 8). On the other hand, however, both in its direct corporate practices and through its political clout, it aggressively clings to an agenda of controlling and exploiting oil reserves down to the last profitable drop. While the sponsored research into devices like hydrogen cells is there to be picked up and carried further, the will to organise a timely conversion away from hazardous and unsustainable technologies is lacking. The proliferation of toxic practices continues unabated, under the assumption that the residues can always be dumped on 'expendable' populations,[6] while the implementation of cleaner approaches awaits the moment – put off for as long as possible – when the market for existing practices dries up.

A socialist approach would not limit itself to inserting new energy sources into established patterns of consumption. It would seek to change those patterns both by putting an end to the power of a privileged class – with the opportunity for massive reorganisation of priorities that such a power-shift would bring – and by making use of those already available approaches to production and transport that entail less human and environmental cost than do the ones favoured by capital.

[5] Although precise dating of the peak remains controversial, the trend toward exploiting more marginal (and hence more costly) deposits is not in doubt. See Heinberg 2003, 103–104, and Dan Box et al. 2005 and 2006.

[6] See, e.g., Joffe-Walt 2005. Prisoners within the U.S. are also used for computer recycling.

More specifically, socialism can first of all limit the pressure on energy resources by reducing, in an organised way, the total production of goods and services. In order to minimise adverse effects, such reduction will require (a) reconfiguring economic space (taking more advantage of geographic proximity), (b) promoting collective consumption (e.g., mass transit), (c) relying less on possible new inventions and more on making fuller use of existing devices (e.g., bicycles), (d) encouraging society-wide redefinition of what constitutes a 'good life' (esp., reducing emphasis on possessions and discrediting exploitative lifestyles), (e) bringing immediate improvements to those who are least well off, and (f) most generally [building upon (d)], identifying the many currently accepted social practices (e.g., commercial, financial, bureaucratic, repressive, profligate, destructive) that can be curtailed and establishing the necessary coordination to help move people from within the affected sectors into more socially useful and fulfilling activities (Wallis 2001: 135–140).

Second, the production process itself will need to be redesigned, with top priority given to its effects on those whom it directly engages. This means not only protecting workers from accidents and illnesses but also enhancing their opportunities for social interaction, diffusing control over the work process, democratising decisions about common goals (including *what* is produced as well as how it is produced), and generally considering the mental health of the workforce (in particular, the level of well-being felt by each worker at day's end) to be as important an output of the enterprise as whatever products it sells.[7]

It is within the context of these kinds of changes that a society-wide shift to cleaner and more sustainable technologies becomes immediately conceivable. Until large numbers of people are well organised and thoroughly aware of their long-term interests, the idea of reducing carbon emissions by 80% will appear totally unreal. Only with the social transformation well underway will everyone be able to see through the false dilemma –'either' protect the economy, 'or' preserve the environment – propounded by those who resist even the most minimal international accords on global warming.

Information/Communication/Education

Information technology and its offshoots need to be considered from two angles. On the one hand, all the talk about a presumed shift to a 'weightless economy' needs to be brought up short against recognition of the physical or material underpinnings to the supposedly 'non-material' transactions that are carried out (Huws 2003). On the other hand, we must consider how the new technologies in question affect the substance of what is communicated and how this substantive dimension in turn inserts itself into either a capitalist or a socialist framework.

[7] This goal is in part suggested by Chinese practice in the 1960s, when the enterprise was a site for general cultural development of its workers (Richman 1969: 723).

The common application of the adjective 'virtual' to computer-transmitted images and exchanges feeds the illusion that in switching into this relatively new medium, we are somehow leaving behind the messy world of tangible objects and factory labour. This is a further extension of the rhetoric of mid-twentieth-century sociologists and economists who, noting the swelling of service-sector employment, popularised the term 'post-industrial society' as a descriptor for contemporary capitalism. In so doing, they celebrated a supposed improvement in status of a large portion of the workforce, when in fact most of the new service workers were economically weaker than their earlier factory-employed counterparts, while the latter then saw their situation undercut by the transfer of much production work to Third World countries. The point is that the grimy/repetitive manual operations were not eliminated but were only shifted to less favourable settings and conditions – and to more vulnerable populations (Panitch and Leys 2000; Zweig 2000).

A similar process has occurred with computerisation. Both the manufacture and operation of computers and also the uses to which they are put have heightened, rather than easing, the assault on the environment. The toxic toll of computer-manufacture is itself prodigious. As Wolfgang Sachs – director of the Wuppertal Institute for Climate, Energy and Environment in Germany – reports, 'no less than 15–19 tons of energy and materials – calculated over the entire life-cycle – are consumed by the fabrication of one computer' (Sachs 1997: 8).[8] The manufacture of a computer chip generates 'about *thirteen hundred times its weight* [in] waste, some of it highly toxic – and this amount doesn't include air emissions'.[9] As if these basic costs were not enough, there is the further phenomenon of perpetually accelerating obsolescence. With the intense competition over the speed, capacity, and versatility of computers, ever-new refinements are devised, and big institutions scrap and replace entire functioning systems almost without warning. Whatever the calculations that might be embodied in the first such step, the ultimate effect is to multiply real pressures to 'upgrade' upon every other system that interacts with the original one. Similarly, a perfectly serviceable component of an office-complex may be rendered useless by upgrades in some other component to which it is linked.

Over and above such self-generated pressures from within the computer industry, we must take note of the frequent resort to high-tech 'solutions' for problems that in themselves could be addressed more directly and effectively (and at less environmental cost) by rethinking either the infrastructure or the habits that give rise to them. The need for such rethinking tends to be overwhelmed by the mentality of the technological 'quick fix', which resists disruption of existing personal habits and is positively averse to collective or structural approaches. Thus, confronted by the at-least twice-daily traffic tie-ups of major cities, instead of reducing the number

[8] See also the detailed study by Eric Williams of the United Nations University of Japan (Williams 2004) and the ongoing monitoring done by the Silicon Valley Toxics Coalition (www.svtc.org).

[9] Grossman 2007: 60; my italics. Williams notes (2004: 6166) that the ratio of fossil fuel use to product weight is approximately ten times as great for computers as for 'many other manufactured goods'.

of vehicles (and thereby saving not only energy but also space, materials, clean air, and sociality), one devises a computer program to detect where, at a given moment, there might be a slightly smoother flow – forgetting, of course, that if everyone does the same thing, the problem will be back at square one.

A similar sort of irrationality is manifested in the educational and cultural applications of computer technology. This is not to dispute the impressive advantages conferred by such technology in matters of research and in the diffusion and filing of information. There are, however, serious concerns in terms of proportion. These have to do not only with the direct and indirect costs of computer systems (compared to other possible allocations, such as hiring more teachers or providing more public support for the arts), but also with the degree to which *what can be done via the computer becomes a determinant of whatever tasks might be undertaken*. This latter consideration is so pervasive that its limits are hard to identify. Especially when one thinks of the addictive behavior that has developed around certain types of computer pastimes, it becomes apparent that the technology can affect human experience in a way that may shut out more than it opens up (if not quantitatively, then at least qualitatively).

The addictive dimension takes two principal forms, both of which provide a kind of shortcut to gratification. The first is computer video games, many of which involve maneuvers dangerously akin to military targeting, in which the reward is an exploding screen-image (typically, a human body). Such games isolate the direct mouse-guided act both from the human surroundings of the player and from any meaningful sense of what the image signifies. The second – and more likely long-term – form of addiction is the Internet phenomenon of Multi-User Domains (MUDs), which 'provide worlds for anonymous social interaction in which you can play a role as close to or as far away from your real self as you choose' (Turkle 1997: 183). Individuals readily take on multiple personae, spending up to 12 hours a day at the screen and losing any sense of their actual place in the world (Meyrowitz 1985: 317ff). As Turkle puts it, 'the self spins off in all directions' (Turkle 1997: 258). The alienation that Marx first recognised in capitalist production relations has thus taken on an added dimension, as the individual now seeks escape not (or not only) from the workplace but from the whole sphere of face-to-face interactions.[10]

More generally, the instant accessibility of a vast universe of facts and ideas, combined with the awareness of this accessibility, carries the danger of obscuring the painstaking creative process that underlies authentic mastery, in whatever domain. The further phenomenon of incessant upgrading diminishes the apparent worth of any intellectual product whose physical form (e.g., that of a book) can be seen as fixing it at a moment that has already been superseded. In relating to bodies of knowledge that are cumulative, it becomes difficult to recognise the underpinnings of whatever stage has currently been reached. The extreme though not uncommon

[10]Marx wrote that the worker 'only feels himself [i.e., feels human] outside his work' (Marx 1964: 110); we can now similarly say that the MUD addict only feels fully human outside real life, in the 'virtual' world.

expression of this difficulty is the practice of plagiarism. This is of course physically facilitated by word-processing technology, but more importantly, it is made to appear ethically unproblematic by its congruence with the awareness that one can 'access' any desired item of information at a moment's notice. The official condemnations of plagiarism ring hollow in view of the enormous pressures and inducements which make it attractive, and which are not called into question. But this is a familiar contradiction of capitalist culture, much like the promotion of an 'abstinence only' approach to sex education in the context of commercial media that trumpet sexual conquest at every turn. In all such examples, the supposedly 'moral' stance has long ago lost whatever grounding it might once have had in a genuine regard for the quality of human interaction – the latter having been scornfully displaced in favour of market priorities.

The all-purpose target of market-appeal is the demand for instant gratification. Nowhere does this appear more sharply than in the technology of the cell phone. Leaving aside the applications for which the mobile dimension is totally unnecessary (i.e., long conversations that could be held anytime and from anywhere), we are left with a number of distinctive applications whose desirability or necessity has to be seen in the context of alternative approaches and then weighed against the possible adverse public health consequences of blanketing the globe with the microwave fields that are required in order for cell phones to function (Brodeur 1993, especially Chapter 19; Firstenberg 2004; Cribb and Hamilton 2005)[11]. It is emblematic of capitalist hegemony (especially in its U.S. guise) that, as with the imposition of the automobile-centered transportation system or of genetically modified food, the question of whether or not to build the global infrastructure for cell phone use has never been viewed as a public-policy issue – let alone as a question meriting society-wide debate grounded in full disclosure of the relevant scientific information. The purpose of such debate would be not only to bring out the risks of the proposed technology, but also to work out in great detail the alternative possible ways of meeting whatever legitimate needs the technology in question might be thought to address.

Underlying all such questions is the issue of control. Should technology be democratically controlled, or can its development be safely left in the hands of capital (and/or of governments constituted by capital)? In view of the costs and dangers of the new technologies (as well as their complexity), choices on their adoption have implications far beyond what can be perceived or contemplated by the prospective individual consumer. If this is true of already known technologies, it will apply with even greater force to the new nanotechnology, which involves particles so tiny and capable of so many permutations that the means to contain them have not yet been devised (Montague 2004). The protection of human beings, not just as 'consumers' (i.e., buyers), but as involuntary recipients of particles with

[11] Rippin, H. (2005). The mobile phone in everyday life. *Fast Capitalism* 1,1, from www.fastcapitalism.com.

unknown properties, has become very much a collective responsibility. Hence, the need for social control over production. Only within such a framework can public debate be made a precondition for major production decisions. In the case of information technologies, the task will be to avoid harmful or wasteful applications while at the same time exploring what positive role these technologies can play in democratising all aspects of society and politics. Here their contributions could range from breaking down knowledge-barriers to addressing the more intractable problems of coordination that arise in any society-wide planning process.

Surveillance/Repression/Military

The non-neutrality of technology deserves particular emphasis when we look at technologies of repression. In the sectors we have examined so far, the task has been to identify and preserve the components that can serve human needs (consistent with ecological concerns), while at the same time recognising and curbing the components that are wasteful and/or dangerous. With the technologies of repression, however, and in particular with those of military destruction, we confront a set of applications that is inherently negative and whose adoption can at best claim only the most transient and circumscribed justification, in contexts of territorial self-defense.

It is important to begin by noting the military dimension of capitalism itself. Like the growing of food, the fighting of wars pre-dated capitalism, but capitalism added its own distinctive stamp which, evolving through history, has created a whole new level of high-tech mass killing. In the military sphere, the concentration of capitalist power has reached a previously unimagined level, where the agenda of global domination has become an article of consensus within the ruling class of the world's most powerful country. The specific expression of this agenda is the self-proclaimed prerogative of the U.S. government to intervene militarily, at its own discretion, in any country at any time. A long record of such interventions makes clear that what motivates them has no necessary connection with any threat of physical attack against U.S. territory or, despite invocations about 'expanding liberty', with whether or not the targeted regimes or movements have the support of their people (Blum 2003). What unites the interventions, rather, is a pair of preoccupations central to the rule of capital, namely, (a) maximising the sphere of corporate economic operations (now focusing especially on oil) and (b) blocking, punishing, and ultimately destroying any attempt to chart an independent – especially if socialist – course of development.

The technology that has evolved in carrying out this agenda goes far beyond any device that could conceivably be needed for territorial protection. It now extends to the domination of space, as the U.S. claims exclusive sway over the shield from which one can exercise surveillance – backed by the threat of instant attack from above – anywhere on the planet (Mowthorpe 2004: 200). On the ground, the goal of intervening with impunity while minimising the risk of U.S. casualties has given

rise to a highly technology- and energy-intensive approach to warfare. In terms of energy, the U.S. military 'is the largest single consumer of petroleum in the world, using enough oil in one year to run all the transit systems in the United States for the next fourteen to twenty-two years' (Sanders 2009: 50). The technological thrust, meanwhile, has been toward replacing infantry soldiers with robots (Weiner 2005; Singer 2009). There could hardly be more striking proof than this, that one is sending one's forces where they are not welcome. In order for the shielding effect to be complete, however, the robots must acquire an increasing capacity to make life-and-death decisions on their own, without nearby humans to type in the computer-commands. The dominion of machines over humans, described by Marx (1976: 342) as the control of living labour by dead labour, would thus reach a new level of impregnability.

On the domestic front, the mission of crime-control blends almost seamlessly into that of political repression. Criminal activity can of course itself take on a high-tech character, especially in information-related matters that shade over into routine financial practices like currency trading. The targets of surveillance and of high-tech weaponry, however, are more likely to be officially marginalised populations of one kind or another, ranging from prisoners to radical activists. There are now monitoring mechanisms of every description, from barcode/credit-card links to surgically implanted computer chips (O'Harrow 2005). Stun guns and other allegedly 'non-lethal' weapons have been used by law enforcement personnel with reckless indifference to their effects. 'Crowd control' at demonstrations has often become a pretext for police assaults, especially against people carrying video equipment.[12] In the prison system, stun guns serve as backup to the increasingly vindictive official regimen that has been imposed under the pretext of fighting terrorism (Cusac 1996, 1997).

It is clear that the disposition to use these technologies – along with the more traditional 'quick fix' of relying on bullets – will tend to increase as the policies of the sponsoring regime become more oblivious to mass needs, rendering it less capable of gaining acceptance on the basis of any real services it might provide. At a more mundane level, the same indifference to popular needs has fed into the elite's growing propensity to circumvent the electoral process by, among other things, techniques that rely on the manipulability (and potential impenetrability) of computerised voting.[13] Whether by violence or by subterfuge (along with quiet complicity on the part of those who are not the direct perpetrators), the ruling class thus routinely shields itself from any priorities but its own. Ultimately, this may heighten people's awareness of the need for radical change. At the same time,

[12] Eyewitness accounts of the November 2003 demonstration in Miami against the Free Trade Association of the Americas; see Manski 2004: 250.

[13] See especially Miller 2007. The manipulation of the decisive Ohio vote in 2004 was taken to an even higher level in November 2005, when referendum proposals to reform that state's electoral procedures were defeated by margins that diverged from pre-election surveys by as much as 28 percentage-points. See Fitrakis and Wasserman 2005.

however, any such repudiation of the status quo will only magnify the insecurity and consequent repressiveness of the regime. This raises, among other things, severe tactical problems for advocates of an alternative order.

The issues go beyond anything that can be fully resolved here, but they have to be mentioned because the core issue for socialism is the extent to which it can dismantle the structures and practices that have discredited its predecessor. Nowhere do these appear more intractable than in the domain of repression. What gives the repressive machinery added tenacity – an added appearance of inevitability – is the fact that it is directly used (whether internally or internationally) against any socialist movement that even approaches the possibility of taking power. How then can a socialist movement break free of this kind of defining circumstance?

It should not be expected that such a break can be instantaneous. Capital has made, and will continue to make, war on any regime (or movement) that defies it, no matter how legal or democratic the challenger might be.[14] Indeed, such grounds for legitimacy could make the defiance even more sharply felt (because ultimately more embarrassing) than would be the case with a regime lacking in these qualities. For defensive arms to become outdated, therefore (on the part of regimes moving toward socialism), an international popular movement of enormous scope, especially within the imperial center, will have to act as a restraining force against intervention. In that process, and as its outcome, a number of restraints on military technology will have to evolve. Given that the imperial power is the one that exercises military initiative (and also has the more advanced military technology), it is on *its* part that restraint will first need to be felt. Once such restraint has become manifest, then the leadership of a country in revolution will have the space to reduce its own military orientation – a step that it would welcome insofar as it is committed to making social improvements.

The ultimate goal would be a society in which the armed forces dissolve into a reserve of citizens whose primary orientation is no longer combat but rather social/ecological reconstruction projects of various kinds. As for the high-tech forms of surveillance that have developed under late capitalism, they would become increasingly superfluous as private financial transactions shrank in scope, as international economic polarisation declined (reducing pressure at border-crossings), and as secretive practices of accumulation (including criminal activity) gave way to a revival of face-to-face collaboration on a wide scale. The point of immediate concern, however, is that in the military/repressive sector more than in any other single domain, what can be done in a socialist framework is severely limited by the degree of external threat that is present.

[14] Witness U.S. efforts to undermine the Venezuelan government of Hugo Chávez, whose victory in the 2004 recall vote was both more decisive and less tainted by fraud than was the victory of George W. Bush in U.S. elections the same year. See www.cartercenter.org/documents/2020.pdf and www.venezuelanalysis.com

Public Health and Healthcare Services

Capitalist medical technology, like its counterparts in the communications and military spheres, can boast extraordinary achievements. At the same time, both the disorders it has to address and the selection of its beneficiaries reflect a failure to achieve its purported objective – public health – in more direct, effective, and universal ways. It is widely accepted, except in mainstream U.S. political discourse, that the costs of healthcare can only be reasonably and universally met if they are averaged out over the entire population, as is done in many national health plans even in otherwise capitalist countries. What is less commonly recognised is the role of capitalist priorities in creating health problems which should never arise in the first place, and to which high-tech treatments are applied selectively and (often) only when it is too late (Navarro 1976: 82ff; Epstein 2003). The greatest of these problems are those associated with *poverty*. Hunger, like war, is older than capitalism, but many of the present-day manifestations of poverty reflect market-based priorities. These include the disproportionate exposure of poor people to unhealthy working conditions, bad air, tobacco culture, and factory-processed food, combined with insufficient access to relaxation, exercise, and simply the knowledge of what is beneficial. More specific burdens on the healthcare system arise from various forms of *systemic violence*, ranging from car crashes (which, viewed in the aggregate, are predictable and therefore not accidental) to individual acts of violence and, beyond this, to war casualties. Finally, healthcare resources (including high-tech) are also diverted to *cosmetic surgery*, the demand for which arises from the quick-fix mentality applied either to physical problems (like obesity) or to psychological problems (reflecting internalisation of degrading stereotypes associated with age, sex, or ethnicity) (Elliott 2004).

A socialist approach would not do away with high-tech treatments but would reduce the need for them by raising the general level of public health (mental as well as physical). This approach – based on ending the poverty, violence, unhealthy habits, environmental toxins, and stereotyping culture that account for excess healthcare demands[15] – would be both cheaper for the healthcare system and more beneficial for the people. It would signify, however, a radical reconfiguration of social priorities. All the sectors we have discussed would evolve along lines such as those here suggested. With regard to healthcare services in particular, we can go beyond sketching imaginary systems, because current Cuban arrangements already embody a thoroughgoing preventive approach – based on an ambitious level of training, an ethic of service, and routine housecalls by family doctors – resulting in public health indicators on a level with those of much richer countries (Ubell 1989). The mental or psychological dimension is of course more complicated, but there can be no doubt that a society in which everyone's basic needs are acknowledged – both at the community level and in public policy – will free its people from the stresses associated with the pervasive capitalist stereotype of 'the loser'.

[15] See Wilkinson 2005 and also the medical research papers of Nancy Krieger online at www.hsph.harvard.edu/faculty/NancyKrieger.html.

A Socialist Technology?

While some devices may be more compatible than others with socialist principles, the devices required for life under socialism pre-exist any socialist formation (Wallis 2000, 2004b). The distinctive contribution of socialism lies not in any particular inventions that might emerge but rather in the reorganisation of society in such a way that technological choices are no longer made (as we noted at the outset) on the basis of marketability and profit-potential, but rather on the basis of compatibility with the overall requirements of humanity and the natural world. The process of identifying those requirements will of course be a matter for debate, but the guiding principles for any decisions will be, on the one hand, the concern for long-term species-survival, and on the other, the assumption that no portion of the human race is entitled to deny any other portion of it, on any pretext, the conditions for a decent life.

References

Akre, J. (2002). The fox, the hounds, and the sacred cows. In K. Borjesson (Ed.), *Into the buzzsaw: Leading journalists expose the myth of a free press* (pp. 37–63). Amherst, NY: Prometheus Books.

Anderson, L. (1999). *Genetic engineering, food, and our environment*. White River Junction, VT: Chelsea Green Publishing Co.

Blum, W. (2003). *Killing hope: U.S. military and CIA interventions since World War II.* Monroe, ME: Common Courage Press.

Bowring, F. (2003). *Science, seeds and cyborgs: Biotechnology and the appropriation of life*. London: Verso.

Box, D., et al. (2005). The end of cheap oil. *The Ecologist,* 35(8)(October), 36–53.

Box, D., et al. (2006). Peak oil forum. *World Watch, 19*(1)(Jan/Feb), 9–24.

Brodeur, P. (1993). *The great power-line cover-up: How the utilities and the government are trying to hide the cancer hazard posed by electromagnetic fields*. Boston: Little, Brown & Co.

Cook, C. D. (2004). *Diet for a dead planet: How the food industry is killing us*. New York: New Press.

Cribb, R., & Hamilton, T. (2005). Is her cellphone safe? Some scientists trying to find the answer say they've been pressured to soften controversial findings. *Toronto Star*, July 10.

Cusac, A. (1996). Stunning technology. *The Progressive*, July.

Cusac, A. (1997). Shock value. *The Progressive*. September.

Douthwaite, R. (1999). *The growth illusion: How economic growth has enriched the few, impoverished the many, and endangered the planet* (2nd ed.). Gabriola, BC, Canada: New Society.

Elliott, C. (2004). Enhancement technology. In D. M. Kaplan (Ed.), *Readings in the philosophy of technology* (pp. 373–379). Lanham, MD: Rowman & Littlefield.

Epstein, S. (2003). Cancer: It's a growth industry (interview). *Z Magazine*. October.

Firstenberg, A. (2004). Killing fields. *The Ecologist, 34*(5), 22–27.

Fitrakis, B., & Wasserman, H. (2005). Has American democracy died an electronic death in Ohio's 2005 referenda defeats? *The Free Press* [Columbus], November 12.

Grossman, E. (2007). *High tech trash: Digital devices, hidden toxics, and human health* (Revised ed.). Washington, DC: Island Press.

Haila, Y., & Levins, R. (1992). *Humanity and nature: Ecology, science and society*. London: Pluto Press.

Heinberg, R. (2003). *The party's over: Oil, war and the fate of industrial societies.* Gabriola, BC: New Society, 2003.

Hood, E. (2004). Are farmed salmon fit fare? *Environmental Health Perspectives, 112*(5)(April), A274.
Huws, U. (2003). Material world: The myth of the weightless economy. In U. Huws (Ed.), *The making of a cybertariat: Virtual work in a real world*. New York: Monthly Review Press.
Joffe-Walt, B. (2005). China's computer wasteland. *The Progressive*. January.
Lenin, V. I. (1918). On the immediate tasks of the Soviet government [many editions].
Mandel, E. (1975). *Late capitalism*. London: New Left Books.
Manski, B. (2004). Massacre in Miami. *Socialism and Democracy, 18*(1), 249–251.
Marx, K. (1964). *The economic and philosophic manuscripts of 1844*. Ed. D. J. Struik. New York: International Publishers.
Marx, K. (1976). *Capital*, Vol. I (trans., B. Fowkes). New York: Vintage Books.
Meyrowitz, J. (1985). *No sense of place: The impact of electronic media on social behavior*. New York: Oxford University Press.
Miller, M. C. (2007). *Fooled again: The real case for electoral reform*. New York: Basic Books.
Monbiot, G. (2007). *Heat: How to stop the planet from burning*. Cambridge, MA: South End Press.
Montague, P. (2004). Welcome to the nanoWorld: Nanotechnology and the precautionary principle imperative. *Multinational Monitor, 2004*, 16–19.
Mowthorpe, M. (2004). *The militarisation and weaponisation of space*. Lanham, MD: Lexington Books.
Multinational Monitor (2004). Special issue*, 25*(9). *The Precautionary Principle*.
Navarro, V. (1976). *Medicine under capitalism*. New York: Neale Watson Academic Publications.
O'Harrow, R. (2005). *No place to hide: Behind the scenes of our emerging surveillance society*. New York: Free Press.
Panitch, L., & Leys, C. (Eds.) (2000). *Working classes: Global realities [Socialist Register 2001].* London: Merlin Press.
Pinderhughes, R. (2004). *Alternative urban futures*. Lanham, MD: Rowman & Littlefield.
Richman, B. M. (1969). *Industrial society in communist China*. New York: Random House.
Rifkin, J. (1992). *Beyond beef: The rise and fall of the cattle culture*. New York: Penguin Books.
Rifkin, J. (2003). *The hydrogen economy*. New York: Penguin Books.
Rosset, P. M. (1998). Alternative agriculture works: The case of Cuba. *Monthly Review, 50*, 3.
Sachs, W. (1997). Wasting time is an ecological virtue. *New Perspectives Quarterly, 14*, 1.
Sanders, B. (2009). *The green zone: The environmental costs of militarism*. Oakland, CA: AK Press.
Shiva, V. (1997). *Biopiracy: The plunder of nature and knowledge*. Boston: South End Press.
Singer, P. W. (2009). *Wired for war: The robotics revolution and conflict in the twenty-first century*. New York: Penguin Books.
Turkle, S. (1997). *Life on the screen: Identity in the age of the internet*. New York: Simon & Schuster.
Ubell, R. N. (1989). Twenty-five years of Cuban health care. In P. Brenner, et al. (Eds.), *The Cuba reader: The making of a revolutionary society* (pp. 435–445). New York: Grove Press.
Wallis, V. (2000). 'Progress' or progress? Defining a socialist technology. *Socialism and Democracy, 14*(1), 45–61.
Wallis, V. (2001). Toward ecological socialism. *Capitalism Nature Socialism, 12*(1), 127–145.
Wallis, V. (2004a). Technology, ecology, and socialist renewal. *Capitalism Nature Socialism, 15*(2), 35–46.
Wallis, V. (2004b). Innovation. In W. F. Haug (Ed.), *Historisch-kritisches Wörterbuch des Marxismus*, Vol. 6/II (pp. 1188–1196). Hamburg: Argument [English original in *Historical Materialism 16*(3) (2008), 227–232].
Wallis, V. (2008). Capitalist and socialist responses to the ecological crisis. *Monthly Review, 60*(6), 25–40.
Weiner, T. (2005). A new model army soldier rolls closer to the battlefield. *New York Times*, February 16, A1.
Wilkinson, R. (2005). *The impact of inequality*. New York: New Press.
Williams, E. (2004). Energy intensity of computer manufacturing: Hybrid assessment combining process and input-output methods. *Environmental Science and Technology, 38*(22), 6166–6174.
Zweig, M. (2000). *The working class majority: America's best kept secret*. Ithaca: Cornell University Press.

Chapter 5
Local Community of Eco-politics: Its Potentials and Limitations

Yitian Li

Abstract Any kind of systematic analysis on ecological issues should be both 'diagnostic' and 'prescriptible', that is to say, it has to accomplish two interrelated main tasks: to find out the causes of environmental destructions and then write out its prescription for them. This chapter will investigate such a flagship viewpoint of eco-politics from the perspective of political philosophy, arguing that 'local community approach', though with some theoretical potentials, can not be really workable in reality. Because, the fundamental feature of modern ecological crisis is that it is no longer a problem at the local community level but a global one. Furthermore, it is the dominant political idea as well as the resulting political structure of emphasising the priority of 'community' in a broad sense that makes it difficult to find solutions to ecological problems at the global level. Only from this point of view, can we identify the unique value of eco-Marxism as an integral part of eco-politics in addressing ecological crisis in the contemporary world.

Keywords Eco-Marxism • Eco-politics • Limitations • Local community • Potentials

In China, ecological issues have been attracting dramatically increasing attention of the scholars of humanities and social sciences over the past decade, for the various environmental damages are ever worsening and their negative influences can be ever strongly felt in daily life. Generally speaking, any kind of systematic analysis on these issues should be both 'dianostic' and 'prescriptible', that is to say, it has to accomplish two interrelated main tasks: to find out the causes of environmental destructions and then write out its prescription for them, which can be used to solve the problems by eliminating the underlying or hidden causes.

Y. Li (✉)
Institute of Contemporary Marxism, Central Compilation and Translation Bureau, Xixiejie 36, Xidan 100032, Beijing, China
e-mail: Skylee1021@126.com

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_5, © Springer Science+Business Media B.V. 2010

From different perspective of subjects, of course, one can arrive at very different diagnoses and corresponding prescriptions. While ecological ethics concentrate upon the moral relationship between human beings and nature, trying to provide a moral exposition as well as a practical strategy regarding how to better protect the environment, eco-politics focus on the sociopolitical aspects of ecological damage, trying to offer a sociopolitical solution to restore or build a harmonious relation between mankind and the environment. Thus, what underlies eco-politics is such a presumption: the current ecological problems are resulted from the problems or drawbacks in political structures as well as our political idea of modern society. And accordingly, the major mission for eco-politics is to reveal the political causes of environmental problems, so as to alleviate or eventually eliminate them through creating a new political structure of respecting our surrounding environments.

In eco-politics, fighting against the dominant social relations of modern society and restoring or rebuilding local communities are commonly accepted by many scholars as the most desirable or effective way of dealing with environmental problems and constructing an ecological society. This chapter will investigate such a flagship viewpoint of eco-politics from the perspective of political philosophy, arguing that 'local community approach' as a comprehensive prescription to contemporary environmental problem, though with some theoretical validity, can not be really workable in reality. Because, the fundamental feature of modern ecological crisis is that it is no longer a problem at the local community level but a global one. Furthermore, it is the dominant political idea as well as political structure of emphasising the priority of 'community' in a broad sense that make it difficult to find solutions to ecological problems at the global level. Only from this point of view, can we identify the unique value of eco-Marxism as an integral part of eco-politics in addressing ecological crisis in the contemporary world.

Hierarchical Structure of Socio political Relationship: The Diagnosis of Eco-politics

Among the explanations to sociopolitical causes of ecological crisis, Murray Bookchin's social ecology and the theories of environmental justice which is getting influential since 1980s are most noteworthy in the eco-politics. Both of them have made great efforts to bring to light the sociopolitical dimension of ecological issues – the underlying causes and the real solutions, establishing one of the most influential eco-political approaches, namely, to analyse the actual ecological damage through the hierarchical structure of sociopolitical relationship. As a result, they have contributed a lot to make people gradually aware of the sociopolitical connotations of ecological problems.

'*All ecological problems are social problems*' (Bookchin 1989: 24), is one of Bookchin's famous claims. As a leading thinker of social ecology, he repeatedly emphasised that, 'present ecological problems cannot be clearly understood, much

less resolved, without resolutely dealing with problems within society' (Bookchin 1993: 354). Then what are the social problems bringing about ecological damage? Bookchin's answer is the 'hierarchy' in sociopolitical structure. Within such a sociopolitical structure there are always some types of hierarchical distinctions among different social classes and groups in the possession and distribution of social resources, and thus some people are the dominators while others are the dominated. According to Bookchin, although it is labeled with 'equality', modern society has actually made inequalities even stronger and deeper than ever. The rationalisation of modern society, accompanying with the establishment of modern state as the most powerful administrative authority, played an important role.

Such an unequal sociopolitical relationship will bring about at least two negative effects in ecological sense: (1) living in the dominanting sociopolitical structure, people are accustomed to treating others in an oppressive and mandatory way, such as with orders and commands. So once it becomes the routine style of human behaviour, people will treat any 'others' in this way, not only to other individuals but also to nature. Just as Bookchin apprehensively pointed out, the dominance in human society would be refracted into the relationship between human beings and nature. And what is worse, the dominators in the latter relationship are no longer some members in human society, but all the members. That implies that the dominant forces of the sociopolitical structure will be fully displayed in the relationship between humanity and nature.

Of course, it is imaginable that those people who are located at the bottom of society will not utilise natural resources as crudely as what those dominators do, for they are living closer to and more dependent on nature. However, it is not very helpful. Because, (2) in the hierarchical sociopolitical structure, the dominators can enjoy the benefits of exploitation of ecology without bearing too many costs of ecological damage. Obviously, this is an unjust distribution of resources. And what is more, it will stimulate the dominators to put further demands for development of economy without consideration of ecological costs, for they can consolidate their domination over nature by strengthening their domination over the dominated in society.

As long as the sociopolitical structure of hierarchy exists, the asymmetry of rights and responsibilities among the social members will be unavoidable – some people can enjoy more rights without undertaking the corresponding responsibilities. As far as the ecological issues are concerned, the dominators will enjoy more ecological benefits while transferring their ecological obligations to the dominated. With the hierarchy strengthened by modern states, the dominators now hold much more powerful and authoritative capabilities in social mobilisation than the dominated. Therefore, it is expectable that natural environments of today have to be burdened with more heavy pressures than ever.

One of Bookchin's major ends why he revealed the sociopolitical causes of ecological problems is to criticise the abstractness of modern ecological ethics. According to him, attributing ecological damage to 'Person', as ecological ethics does, is inaccurate and much too abstract. In Bookchin's point of view, it is not all but some individuals, not 'Moral Agent' as a whole but many distinct moral agents,

who bring about the ecological damage. Thus, the focus of social ecology is not the relationship between 'Humanity' and 'Ecology', but that among the people who are living socially in an ecological environment. Such a conversion of thinking provides some bases for the theories of environmental justice.

Theories of environmental justice are one of consequences of the environmental justice movements against toxic wastes and environmental racism in the United States in twentieth century (Szasz 1994: 151; Hartley 1995: 277–278). These movements highlight the seriousness of unjust distribution on both environment goods and environmental bads. The actions which seem to clean the whole environments actually only benefit the environment of a small group, while sacrificing or even destroying others' at the same time. In this sense, environmental problems were not resolved but just diverted to the low-incomed or the colored communities. So from the very beginning, the theories of environmental justice paid more attention to the diversity and inequality among 'moral agents' (some are richer and some are poorer) than any other thoughts. On the one hand, the rich with higher social status can obtain more benefits than the poor with lower status during the exploitation of ecology; and on the other hand, the former can keep away from or even transfer environmental burden to the latter. Both the unjust distribution of resources and that of pollution therefore benefit partially to the rich (Edwards 1995: 36).

In fact, what role the rich plays in the theories of environmental justice is quite similar to the 'dominators' in social ecology – they can impact on nature and other social members without undertaking corresponding responsibilities or obligations. Since the rich can stand outside of pollution by transferring environmental bads, there are no sufficient motivations for them to take ecological problems seriously. Just like social ecology, the theories of environmental justice emphasised the differences and oppressions inside human society, and attribute ecological damage to an unjust sociopolitical relationship, in which people's rights and obligations do not match with each other.

Furthermore, in such a hierarchical society, the inequality of political status leads to the difference in their capabilities and authorities of decision-making. Any public policies including ecological ones are mainly determined by the dominators, while the dominated at the bottom of society have no voice to be heard. Even if the latter can express their ideas to some extent, there is no power in their hands to transfer their ideas into public and legal decisions. So we can see a strange dilemma: those who can exert impacts on environment are not so sensitive to it (maybe they have many reasons, for example, keeping the growth of national economy or maintaining their own vested interests); on the contrary, those who are at the bottom of society and more sensitive to nature are hard to exert any impact on environment. In this sense, when we consider the relationship between hierarchical sociopolitical structure and ecological crisis, the crucial points are not only the difference between the dominators and the dominated, but that the former holds almost all authorities while caring less about the environment, and the latter takes more care of ecology while having no power to make substantial decisions.

Local Community: The Prescription of Eco-politics

Now we can understand why numerous eco-political scholars, including Bookchin, insist that, the precondition for solving ecological problems is to deconstruct the current hierarchical politics and create a new sociopolitical system of local communities with autonomy, democracy and equality. 'Local community' as a distinct political unit refers to a group of people in which the members have shared interests and values and cooperate with each other equally. It is said that there is no vested interest in a local community itself and therefore all public affairs, including the ecological ones, are handled in the hands of the common people. It is said that they can decide the ecological protection and social development issues together, and accordingly they are inclined to choose a life style of making environment and society sustainable (Coleman 1994: Chapter 7). The major arguments for this eco-political prescription are as follows:

Firstly, through equally decentralising the political powers among all members, democracy within a local community will be fully developed and direct. And for ecological issues are clearly related to the interests of everybody, such a sociopolitical framework is very necessary and suitable for permitting all (at least the majority) of the members to take part in the discussions and decision-makings. To this point, Brain Baxter has expounded that one of the goals of environmental protection is to promote the self-prosperity of mankind, achieving the full development of human society by enriching autonomy, dignity and values of humanity, in which democratic political life is an absolutely necessary precondition. Moreover, only fully developed democracy can open and maintain free discussions for common people to clarify what compose the real meanings of self-prosperity as well as its possible changes under new or different conditions. People in such a political structure are not only allowed to participate in discussion on all of important public issues fairly, but also are encouraged to take part in reexamining the political framework itself in a democratic way (Baxter 1999: 127). Therefore, a more democratic local community is helpful for the people living in it to make more accurate judgments and decisions on ecological issues.

Secondly, the decision-makers in local communities are also those influenced directly by their decisions. Since ecological issues will be vital for the residents in a local community, they will take ecological policies more seriously. Kirkpatrick Sale has argued that eco-consciousness can be most possibly developed at the local level (Sale 1985: 54). Moreover, the equal and close relationship among the members in a local community will be helpful to build a homelike circumstance which can transfer public affairs into private ones. As a result, decision-makers would be more concerned about the health of environments than those in a hierarchical society. For this reason, Daniel Coleman repeats this point again and again: who live most closely to nature and understand it best should hold the powers and authorities so that the society can be sensitive to nature (Coleman 1994: Chapter 7).

Thirdly, public participation of the citizens as the key feature of a local community is considered as an effective mechanism to restrain factors harmful to ecology and create conditions or programs for environmental protection. Ecological sustainability need to establish certain kinds of rules to constrain people's behaviours, and public participation of the citizens is an important channel or mechanism to make those rules workable (Dobson 2007: 13). For nothing but public participation and communication can have people clearly realise what are the beneficial for ecological protections and sustainable developments. Coleman optimistically claimed that a community-based economy will come along with an ecological society. Local community provides a context for an ecological society (Coleman 1994: Chapter 7).

On the other hand, unless they can participate in the process of decision-making, the citizens are not able to challenge the ecological non-sustainability, or fight against the factors harmful to the environment (Barry 2007: 33). It means that any political approach aimed for solving ecological problems must cultivate 'active citizenship'. In other words, it requires all the members of society see public affairs (including ecological ones) as their own duties and take public interests (also including ecological ones) as their own interests. Many thinkers in eco-politics, such as Andrew Dobson, believe that local community is very suitable to develop, cultivate and advance such an active citizenship, for it is the place where the interactions among the members are close, frequent and equal. Just like Dobson said, a political solution to ecological problems cannot be carried out without public participation of the citizens.

To sum up, many eco-political thinkers believe that once political powers and rights of decision-making about ecological issues are enjoyed equally by all the members of society (local community), it will create a new public space in which the citizens can play substantial decision-making roles in politics, economics and public affairs. In other words, the core of 'local community approach' of eco-politics is, by decentralising the powers of ecological decision-making, to foster all the people's ecological consciousness and understanding to ecological problems, and at the same time, to inspire them gradually to increase their practical capabilities in dealing with ecological and other problems in a systemic and democratic way.

Irresponsible and Partial Groups: The Dilemma of Local Community

There are two theoretical presumptions for the prescription of 'local community': (1) people care more about their own interests and (2) they are more competent to deal with such concrete things. Taking these as a basis, the advocators of 'local community approach' insist that decision-making of ecological issues should be put in the hands of those who are not only concerned about but also capable to resolve the problems. But, can we take all this for granted and optimistically believe

that 'local community approach' is the due prescription for the ecological crisis of our time? We will make a closer investigation of 'local community' both as a theoretical concept and as a model of practical politics.

It is no doubt that a certain local community can increase or realise its internal equality and accordingly will to some extent resolve the problem that the minorities in hierarchical society are not so responsible for the environment. However, another question is that even if the decisions are determined by all members of the community, there is no guarantee that all the policies will be ecologically friendly. As long as the members can agree on some projects of excessive exploitation, ecological damage is still unavoidable. In other words, the politics of local community might be able to resolve the problem of 'irresponsible minority' but it can not resolve the problem of 'irresponsible majority or whole'.

Such a scenario is not just an imagination. In China of today, for instance, especially in the underdeveloped areas, the primary problem is the pressure from survival rather than from ecology. People living there have to consider firstly how to stimulate the economy and promote the welfares of residents. For them, these goals are legitimate in politics and proper in morality. Even if they choose a local and/or small community as their living place, it will make no substantial difference as long as the members in it are so short of ecological knowledges that they cannot find effective approaches to develop the economy in accordance with ecology. As David Pepper has pointed out correctly, most imaginations of eco-utopias assume that democratic local communities are essentially beneficial to environment – because they are small-scaled and concern more about the human's interaction with environment, however this is questionable (Pepper 2007). That it just ensures democracy cannot avoid its inherent defect: a relatively fair process of decision-making rather than its outcomes. Therefore a democratic polity, even though it is at the local community level, cannot guarantee the policies are with ecological wisdom as long as the agents in it make their decisions only or mainly following the idea of economism (Coleman 1994: Chapter 7).

As for the relationship between the inside and the outside, it seems inevitable that the idea of local community will, at least to some extent, imply or lead to a territorialism or communalism. This is not just because local community must be located in a certain location geographically, but because it will intentionally or unintentionally create a homelike feeling in the members' minds. And it is such a feeling that shapes the identity of citizens and make their own interests combined with community more closely and strongly. However it brings another problem, that is, it will distinguish themselves from the 'others' of outside. Then it is expectable and understandable that a member of a local community will pay more attention to the interests of his own community. Although the distinction between one local community and the others is not necessarily turned into a hierarchical relationship among different communities, it will be still detrimental to the ecological protection at least in the following two senses.

Firstly, although members in a local community are more concerned about ecological environments and thereby try their best to maintain ecological sustainability, those actions only take place within the scope of community. If a public

decision is closely related to ecological interests of their community, the community members will take active measures; However once the ecological consequences of the decision can be transferred elsewhere and thus are relatively remote to their community, they probably calm down their enthusiasm quickly. In this sense, the approach of local community are not so useful to eliminate environmental problems, except to divert them from one community to another. The distinction between 'we' and the 'others' implies that the' idea of local community will draw a boundary between 'our environment' and the 'others'' environment' in the ecopolitics. And this tendency is so obvious in the conflicts of contemporary global ecological crisis.

Secondly, local community is based on the common interests of the members inside as well as the differences with the outside, so the competitions for a better status – not only in an ecological sense – among the communities seems to be unavoidable. And as long as every community pursues its own vested interests from its own standpoint, such competitions will last. Consequently, it would be hardly possible that all people in the world have common criterions and norms to regulate their ecological behaviours (Fotopoulos 2007). The advocators of 'local community' pay too much attention to the advantages of a close relationship among members, while ignoring the disadvantages brought about by this relationship.

Actually, it is in the name of 'interests of community' that modern nation-states – a larger 'local community' in size – compete with each other in exploiting natural resources and shifting their own responsibilities to the others. As we all know, ecological problems which are more difficult to deal with are those international ones. Because people in modern societies recognise nation-state as the most important community upon which they construct their identities. In the eyes of them, common goods are defined by the boundaries of nation-states. In modern societies, nation-state as one typical community has been a fundamental framework or bottom-line with the highest legitimacy in political affairs. And up to today, any national interests are still regarded as uncompromising ones. There is no exception to ecological issues (Wan and Li 2008). When president George H. W. Bush refused to sign the agreements at the Earth Summit in 1992, his reason was straightforward: we would not allow the radical actions in environmental movement to shut the United States. Thus, unless the idea of 'community' does not function any longer, we cannot go further in responding the global ecological problems.

Ecosystem does not respect any national or regional borders. It implies that the ecological problems will not stop in the boundary of one country without affecting the other ones, and ecological crisis must be an international and eventually global one (if the current dominant economic and political systems remain unchanged). From the perspective of ecology, human beings as a whole is an integral part of the nature system; only from the perspective of politics can human's world be understood in terms of territorial/local communities or nation states. In modern societies, however, people usually pay more attention to his/her community or fellowmen while keeping cautious or alert to the outside and unfamiliar persons. What 'we' consider is thereby how to make our lives more secure and flourishing in the process of competing with the 'others'. Accordingly, what we see is that exploitation and possession

of ecological resources on many occasions are not out of necessity, but to enhance the' subjective feelings of security of a community by attaining an economic and military superiority over the others. Therefore, a real predicament confronting us is that while ecological crisis has been clearly a global character, human societies are by and large still restricted in the various interests-entrenched and divided communities, including the geographically and politically unbeatable nation-state. With the theoretical and practical difficulties, we should keep a cautious attitude and a reasonable expectation to the idea of local community. It is not the most correct and effective way of resolving the current ecological crisis.

Conclusion: Towards Eco-Marxism as a Globalist Project

Brain Baxter has emphasised that the shortages of political structure would weaken people's ability of dealing with the serious ecological problems. If there is no appropriate political organisation which can control human behaviours, ecological resources will be exhausted sooner or later (Baxter 1999: 139). Thus, a following step logically from the analysis above – especially the limitations of 'local community approach' of eco-politics – is that we should go ahead to envisage a new method of institutional innovation, which will not only care for the sociopolitical reasons of current ecological problems, but also show its full respect for the integrity of the whole ecosystem.

Among many things, the major feature of this new vision will be the transcendence or overcoming of the 'local community approach', that is to say, advocating a globalist ecological governance. Whether we urgently need a 'global government' for ecological issues, such as World Environmental Council or International Court of Environment under the leadership of United Nations (Low and Gleeson 1998: 190), is a question for debate, however, there seems no doubt that we need to reshape the politically anarchical world immediately in order to create a socially just and ecologically sustainable human life.

There have been a lot of discussions – academically and politically – on the issue of global environmental government or governance. But, what characterises these discussions is their questionabe feasibility. Of course, holding such a suspicious perspective is very natural, since the divided political structures of modern societies not only impede any efforts to resolve our ecological problems, but also try to block any attempts to reshape our political framework with the ecological principles. However, the point is, we can still have an alternative: since the community-based politics will not disappear completely in a foreseeable future, what we should consider is not how to deconstruct the current political communities directly and set up a global government, but how to adapt the existing institutions to the ecological principles and thereby play a leading role in a green social and economic systems of the world.

All of these point to eco-Marxism as a globalist project. Because the diagnosis of eco-Marxism for ecological problems does not aim at the political structure of

contemporary societies directly, but focuses on the economic interactions and social communications underlying the politics. According to eco-Marxism, ecological crisis in modern society is not just because the hierarchical sociopolitical structure or communities such as nation-states, but also because such political structures are driven by the endless capitalist pursuit for profits. As John B. Foster has stressed that capitalism will never stop unless there is no investment or profit (Foster, 2002: Chapter 5).

And accordingly, the eco-Marxist prescription for ecological problems is how to destroy the capitalist economic foundations in the contemporary world. Since the capitalist system of economy has been spreading around the whole world, eco-Marxism, like any other radical left wing theories, is gradually evolving into a cosmopolitan or globalist version – it is inclined to think all the social and ecological issues transnationally or globally. It does not mean that eco-Marxism intends to eliminate all kind of 'community' (especially nation-state) and set up a global government immediately; rather, it will put great efforts to make nation-states and other political communities adopt a more ecological way of governance both in economies and politics. It should not be considered just as a political compromise of eco-Marxism, but as a meaningful way to drive the green enterprises forward. Because only by weakening/destroying the basis of capitalist economic system is it possible for us to break down the current ecological predicaments and build up a socially just and ecologically sustainable society eventually.

References

Barry, J. (2007). Resistance is fertile: From environmental to sustainable citizenship. In Q. Huan (Ed.), *Environmental politics: Theory and practice* (pp. 22–47). Jinan: Shandong University Press.

Baxter, B. (1999). *Eologism: An introduction*. Edinburgh: Edinburgh University Press.

Bookchin, M. (1989). *Remaking society: Pathways to a green future*. Montreal, Quebec: Black Rose Books.

Bookchin, M. (1993). What is social ecology. In M. E. Zimmerman (Ed.), *Environmental philosophy: From animal rights to radical ecology* (pp. 354–374). Englewood Cliffs, NJ: Prentice-Hall.

Coleman, D. A. (1994). *Ecopolitics: Building a green society*. Camden, NJ: Rutgers University Press.

Dobson, A. (2007). Political ecology and the environmental citizenship theory. In Q. Huan (Ed.), *Environmental politics: Theory and practice* (pp. 3–21). Jinan: Shandong University Press.

Edwards, B. (1995). With liberty and environmental justice for all: The emergence and challenge of grassroots environmentalism in the United States. In B. Taylor (Ed.), *Ecological resistance movements*. Albany: SUNY Press.

Foster, J. B. (2002). *Ecology against capitalism*. New York: Monthly Review Press.

Fotopoulos, T. (2007). Ecological crisis and inclusive democracy. In Q. Huan (Ed.), *Environmental politics: Theory and practice* (pp. 129–145). Jinan: Shandong University Press.

Hartley, T. W. (1995). Environmental justice: An environmental civil rights value acceptable to all world views. *Environmental Ethics, 17*(Fall), 277–289.

Low, N., & Gleeson, B. (1998). *Justice, society and nature*. London: Routledge.

Pepper, D. (2007). On eco-socialism. In Q. Huan (Ed.), *Environmental politics: Theory and practice* (pp. 101–118). Jinan: Shandong University Press.

Sale, K. (1985). *Dwellers in the land: The bioregional vision*. San Francisco: Sierra Club Books.

Szasz, A. (1994). *Eco-populism: Toxic waste and the movement for environmental justice*. Minneapolis: University of Minnesota Press.

Wan, J., & Li, Y. (2008). Studies on political philosophy: Its past, today and future. *Marxism and the Reality, 1*, 8–16.

Part III

Chapter 6
On Consumerism and the 'Logic of Capital'

Feng Lu

Abstract In the West, consumerism and the 'logic of capital' gradually become the dominant common ideology and the 'key logic' for institution construction and social life, and accordingly, people with money-making as their main pursuit of life turn into the backbone of society. China has also been experiencing such a process of transition since the initiation of 'reform and opening-up policy' in 1978, targeting at building a modern property right system and accepting a materialist/consumerist views of value, which took a few centuries in the West. When entering the twenty-first century, it seems clear that people with money-making as their main pursuit of life have finally become the backbone of society, and capital has become the motive power driving all the causes forward. However, the ever worsening global ecological crises caution us that the lifestyle of 'massive production – massive consumption – massive waste' stimulated by consumerism have to be changed through a 'progressive revolution', if we want to survive on the globe in security. The key for such a revolution lies in the popularisation and wide acceptance of ecological values, which originates not only from the promotion and education by the minor elites, but also from the warning and punishment repeatedly exerted by environmental pollution and ecological degradation.

Keywords Consumerism • Contemporary China • Economism • Logic of capital • Materialism

Consumerism is the dominant ideology in consumption society of today. It bases on the belief that the meaning of life consists in consumption, possessing goods (commodity) with high-tech and fine packaging (upholstering) or enjoying commercial service of top grade and good taste as much as possible. Given that people are all trying to realise their self-value, then consumerists would label one's self-value with the brand of goods he/she possesses or the grade of service he/she enjoys.

F. Lu (✉)
Department of Philosophy, School of Humanities and Social Sciences,
Tsinghua University, 100084 Beijing, China
e-mail: lufeng@mail.tsinghua.edu.cn

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_6, © Springer Science+Business Media B.V. 2010

Therefore, the degree of self-value realisation would be higher for owners of BMW than those of Xiali, or for travelers who always live in the five-star hotels than those who live in the low grade inns. Given that everyone hopes to be recognised (or identified) by others, then consumerists would say that you can't be recognised unless you upgrade your consumption. For example, a poor migrant worker probably cannot be identified as a native in the city until he drives BMW and lives in the villa. Given that happiness is what we have always been pursuing for, then consumerists would say happiness can only be felt with consumption's upgrade, and if you replace your Xiali with BMW one day, you must be very happy that day.

In modern society, we generally label one's rank, identity, status and realisation of self-value with goods and services of different grades. The goods and services of different grades certainly correspond with different prices, while they also constitute the value symbol system of modern culture. This system corresponds with a pyramidal social structure, on top of which is the richest people, such as the yearly richest man appraised through comparison. People with different wealth will stay on different levels of the 'pyramid'. Consumerists caution us that the basic meaning of life is to climb this 'pyramid', and the higher you climb, the higher the degree to which you realise your self-value will be, and then you will feel happier and more successful.

Different people have different attitudes towards consumerist views of value. Some are enthusiastic about it while some are not. But in modern times, too many people are being influenced by it. Such as the professors in university, though they have decent jobs and rich income, they still speculate in the stock market or buy corporate funds. It's unnecessary for them to do this. You may ask, 'what for to have so much money?' And most of the answers would be: that's a stupid question! Is there anyone in the world who does not want to earn more money? Fashion has great influence on us indeed. Intellectuals should be the people in society who have most of their independence on value-pursuing, however, most of them cannot resist the fashion of consumerism.

Consumerism is an ideology subject to the 'logic of capital', whose essence is materialism. Consumerist view of value could be easily found vulgar from the perspective of philosophy and ethics. Human beings are animals of culture. They are always in pursuing the meaning of life, on which there are various understandings, such as the Confucian, the Taoist, the Mohammedan, the Buddhist and the Communist, etc. Consumerism only represents **one** understanding of life, and it can only be justified in the discourse system which is strongly influenced by the 'logic of capital'. And beyond that discourse, its lowness and absurdness will be unveiled.

The Logic of Capital and the Evolution of Modern Society

Let us analyse the 'logic of capital' first. What is capital? According to Peruvian economist Hernando de Soto,[1] in the mediaeval Latin language 'capital' refers to the number of cows or other live stocks, because the domestic animals are the main resource of wealth.

[1] According to *Time* and *Forbes*, Hernando de Soto is one of the most appealing reformers in the world.

They can not only provide meet to eat, but also have manifold usages. Besides, the number (or head) of them is easy to count. And what is most significant is that livestock has a 'feature of value' – they have the ability of reproduction. Therefore, the term 'capital' has its double meanings: it indicates the amount of assets (livestock) as material, but also shows their potentiality of producing surplus value. Thus there's only one-step distance from the stock barn to the desk from which economics originated. The founders of economics usually define 'capital' as the national assets which can produce surplus value and increase national productivity. Adam Smith especially emphasised the importance of specialisation and exchange for the increase of wealth, and it is capital that makes specialisation and exchange possible. Thus he defined capital as 'the stock of assets accumulated for productive purposes' (see de Soto, 2001). Inspired by Smith's discussion on capital, Soto pointed out that, 'capital is not the accumulated stock of assets but the *potential* it holds to deploy new production' (de Soto, 2001: 40). In other words, the most important value of capital is proliferation.

Then what is the 'logic of capital'? From the perspective of formal logic, the 'logic of capital' is just the definition of capital. It's only a tautology, which can be simplified as: capital is the assets which can be proliferated in the process of investment. Soto is against the idea that capital simply equals to money, and argues that money is only one form of assets in the process of its transition (de Soto, 2001: 41). But in modern times when capital circulates all over the globe, the money which can proliferate in the process of investment is undoubtedly the most important form of capital. In the world of experience, capital is substance (assets). However, Soto reminds us not to set eyes on capital's form of substance only, but see its abstract essence which is the '*potential* it holds to deploy new production' (de Soto, 2001: 40). But in the world of experience, capital can only be embodied in the form of substance, having no agency at all. The 'logic of capital' can't have any influence in real life (or world of experience) unless it is anthropomorphised, or in other words, only through human social activities can proliferation of capital be realised. And neither can money, machine, plant, technique nor scientific knowledge bring wealth increment without human social activities (esp. economic activities). Only with the following two social conditions can the 'logic of capital' become the logic dominating social life:[2]

1. To construct gradually a complete system of clarifying property rights and guaranteeing money credit
2. To make those, by degrees, who take money-making as their main or even the highest pursuit of life stand out as the backbone of society

There are generally two meanings when we consider a group of people (a class or a social status) as the backbone of society. For one thing, rulers are generated

[2] When we say that "the 'logic of capital' is a definition, a tautology", the word "logic" was used in a logic sense, while in other context it has its extended meaning, such as the principle which restraining people's activities. 'And here it means it has become the instructions for many persons' activities that "let your money keep proliferating continuously".

(or selected) from this group of people, so people belonging to this group are recognised as honorable and reputable; besides, the lifestyle of this group is considered as the most legitimate, thus the dominant ideology and social system will together defend this group's way of life.

The **secret** mystified by Soto to some extent, which can enable the capital's potentiality of proliferation to be realised, is just about these two social conditions. In human history, it has taken a long time for these two conditions to come into being. All the pre-capitalist countries were not able to have them two at the same time. The process from generation to maturity of capitalism symbolises the final formation of these two conditions.

Institutional economists tend to describe human history as a transition history of property rights system. For instance, the famous institutional economist Douglass C. North wrote:

> The forms of cooperation and competition that human beings develop and the systems of enforcement of these rules of organising human activities are at the very heart of economic history. Not only do these rules spell out the system of incentives and disincentives that guide and shape economic activity, but they also determine the underlying distribution of wealth and income of a society. The two essential blocks to understanding the structure are a theory of the state and a theory of property rights. (North 1981: 17)

But, 'one cannot develop a useful analysis of the state divorced from property rights' (North 1981: 21). Therefore, the key point of understanding history is to describe the structure and transition of property rights system. Trying to avoid the mistake of oversimplifying the social reality by neoclassic economics, North emphasised that 'an individualistic calculus of costs and benefits would suggest that cheating, shirking, stealing, assault, and murder should be everywhere evident' (North 1981: 11). North once criticised neoclassic economics by saying that: 'a neoclassic world would be a jungle and no society would be viable' (North 1981: 11). By this he means that when we explain or describe the activities of human being, we can't only see the trend of pursuing self-interests to the utmost extent. He wrote:

> Something more than an individualistic calculus of costs and benefits is needed in order to account for change and stability. Individuals may ignore such a calculus, in an attempt to change the structure, because of deep-seated ideological convictions that the system is unjust. Individuals may also obey customs, rules, and laws because of an equally deep-seated ideological conviction that they are legitimate. (North 1981: 12)

To explain the stability and change of social structure, we should pay more attention to the role of ideology. Therefore, when we do research on human history, 'a theory of the structure of (and change in) political and economic institutions must incorporate a theory of ideology' (North 1981: 19).

From Marx's historical materialism and North's institutional transition theory, we could see the extreme importance of increment of population, and the change of science and technology, property rights system and ideology to historical development. For Marxism, it tends to consider productivity as the essential motive force for the progress of history. However, the development of productivity depends directly both on development of science and technology and change of property rights system (determining the specialisation of labor and its form of organisation),

which have close relation to the change of ideology. So the development of productivity also relates closely to the change of ideology. Therefore, 'development of productivity' cannot be taken as the ultimate cause for historical evolution; rather, in certain historical context, it can also be explained from the change of property rights system and ideology. North tends to regard institutional change as the fundamental reason for historical evolution. Though he has also noticed the importance of population, science and technology and change of ideology to historical evolution, the understanding of institutional change is the key point. He criticises the neoclassic school using cost-income approach of analysis to explain everything, but when he analysed institutional change, he insisted that 'adjustments will occur only as long as the private returns exceed private costs' (North 1981: 31). From his point of view, 'institutional innovation will come from rulers rather than constituents' (North 1981: 32), and the rulers' purpose of promoting institutional innovation is to 'maximise the utility of the rulers by specifying the underlying structure of property rights and of control over coercion' (North 1981: 205). In the final analysis, all the important institutional changes in history serve for the maximum of rulers' personal utility. Hence, North's thought doesn't go beyond the neoclassic school indeed.

In fact, in the evolution of human history, increment of population and the change of science and technology, property rights and ideology have always been in a complex relation with each other. To take anyone of them as the ultimate reason for the evolution of history will definitely oversimplify the complexity of history evolution. Just as what American historian Robert B. Marks has reviewed on the origin of modern world: monism is too simple to explain the complex national, social and historical change. For example, you can't find out any 'unitary reason' for the industrial revolution in Europe, because such a reason doesn't exist at all. Thus, history should try to find out the complex reasons which will do much good to the understanding of industrial revolution (Marks 2006: 21–22). Indeed, the reason for momentous historical change is always complex. The 'logic of capital' gradually becomes the logic that dominates modern social life after a long process of historical transition, and the reason for it is especially complex.

That capital could show its magic power to the full is essentially attributable to the money which could fully show its magic power. 'The degree to which money can be used to a large extent depends on the system that limits money supply' (Ke and Shi 2000: 21). In capitalist society capital's magic power was revealed to the full. Because, 'the capitalist system is based on various institutions that can guarantee the respectable and safe property rights and the freedom of using property on one's own'. 'Property rights are not material objects but some rights and obligations widely respected in society' (Ke and Shi 2000: 212). Or as North has pointed out that, 'the essence of property rights is the right to exclude' (North 1981: 21). If private property rights are not respected widely, it'll be impossible for capital to give full play to its role in promoting the development of various social causes.

> In most periods of human history, private properties were not respected strictly. Thieves as well as the violence-use rulers and other groups usually arbitrarily impose on citizens with property and confiscate any of their property available to them. (Ke and Shi 2000: 248)

And in such a society, capital doesn't have any magic power as it does in modern society.

Soto has once compared capital's releasing its potentiality of proliferation with material's releasing nuclear energy. According to Einstein's theory, every brick contains enormous nuclear energy (potential energy), which can't be released until it is conversed. Once it is released, the power could raze several cities to the ground. However, without conversion, a brick is just a brick. So does asset's potentiality of proliferation, which must be conversed before it is released. And assets will be just dead assets when lack of proper process of conversion. In the West, the conversion of capital creation (i.e. to converse assets into capital) is a secret process hidden deeply in the complex property rights system (de Soto, 2001: 44–45). In Soto's point of view, assets does exist in many third world countries, but because of the lack of conversion of assets into capital, the wealth there should be just stale and dead. For instance, since it doesn't have the property rights system as the Western world does, the whole city of Cairo is almost a city of the dead, where all the assets are not used to the full and the capital is consequently dead too (de Soto, 2001: 15).

It's incorrect to describe capitalist country as completely immoral. It is just the whole set of system that enables capital to play its tremendous role, which consists of both internal and external systems, and moral system is just one kind of the internal systems (Ke and Shi 2000: 119–139). North has pointed out that, the ethics of activities compose an important part of institutional constraints (North 1981: 204–205). The basic moral condition for money or capital to play their tremendous role is the credibility among traders. The appearance of paper money symbolises the progress of human civilisation. Paper money in nature is **credit** money, and in the future it might be replaced by electronic money which will be more abstract and undoubtedly credit money too. The validity of credit money depends completely on institution whose stability and constraining force rely on the respect and obedience from people, and such self-conscious respect and obedience are just what we call morality. When we say that capital's ability of putting its magic power to good use relies on the institution in which personal property rights are widely respected, we mean it depends upon the self-conscious activities of respecting other's private property rights. If one can respect other's property rights self-consciously and habitually, then he/she has the morality of respecting other's property rights. And a capitalist system will be stable if there are enough people (citizens) with such morality in it. On the contrary, if there are lots of people unwilling to pay the debt, counterfeiting wantonly or even cheating and doing hard sell, the capitalist society won't be efficient and mature, and money in such a society can't turnover sufficiently. Consequently asset which can't be changed into capital freely can only be dead.

As a matter of fact, in Western world the process of private property right's maturity is just the process in which people with money-making as their main pursuit of life become the backbone of society. In other words, they are the two sides of the same historical process. And the latter will certainly symbolise that the values of materialism and economism have become the mainstream. People's views of value determine not only what kind of system they are faithful or subordinated to, but also their pursuit of life and value, and the stimulating role of system in the end

needs to be realised through people's views of value. And it is just the support from the mainstream views of value that enables the market system to play its long-lasting stimulating role. In modern society, people are subordinated to the arrangement by market system, and willingly take the assigned jobs as meaningful and do them with great passion.

Despite that the saying of 'money can work miracles' existed long ago, only in modern society can the 'logic of capital' dominate social life. The influence of commerce on social life is larger in modern society than in any of the traditional societies, so does the social status and reputation of business man. A good example here is the case in ancient China: a large portion of goods consumed by the biggest 'group' – the royal family – is not bought from market but tribute presented by districts. The royal family and officials of every level were the highest social classes, so they could enjoy all kinds of consumption privileges with their status and identity only. No matter in the West or in the East, it has taken a long time for those who take money-making as their main object to enter into the upper society.

In the West,

> A distinguishing feature of the ancient world was that war often paid off for the victors. The Roman Triumphs were a dizzying display of the spoils of victory in the form of slaves and gold; the land acquired by these conquests also was distributed among the victors. In the latter period of the Roman Empire, the barbarians could extract huge sums of gold from the Romans simply by threatening invasion. (North 1981: 114)

In such a world, businessman (the typical person who takes money-making as their main pursuit of life) can't be the backbone of society; neither will the commerce-stimulating property right system emerge. At that time, some businessmen who were good at business management and assets proliferation did exist, but they were only rich rather than honorable. And until the end of middle ages, they hadn't become the backbone of society. According to Jesus Christ's words that 'it is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God', we could see clearly the contempt on wealth or even scorn for business man. It is impossible for either a religion showing contempt for wealth or a society taking that religion as unified ideology to regard businessman honorable. In the middle ages of Western world, it was the church and clergy together with emperor who represented regime: the empire undertook the responsibility of economic and social development, while the function of diffusing old culture through mission school, monastery, Bible and library goes to the church and clergy (Gatto 2000: 39). In other words, it is the clergy and worldly ruler represented by emperor that controls the dominant ideology and the establishment and amendment of law. In such a world of life, it's impossible for the 'logic of capital' to become the logic that dominates the establishment and amendment of system.

Modernisation in Western world started from the Renaissance in fourteenth century, but until the early nineteenth century, businessman's social status in the West wasn't high yet. For instance, the Rothschild family in Europe has already accumulated huge amount of wealth, and James Rothschild was an important member of that family. Though in Paris James was deep-pocketed, living in great mansion and dressing magnificently, his social status was not that high; with self-assurance

about their high status and noble ancestry, the French noblemen regarded the Rothschild family nothing more than some yokels and vulgarians (Song 2007: 15). In the west, after a long time of struggle people with money-making as their main pursuit of life were able to become the backbone of society. Up to the twentieth century when democracy is getting maturer day by day and the influence of market on social life is ever greater than before, nearly nobody dared to look down upon the money men. Till now, the 'logic of capital' has absolutely become the logic that dominates social 'development'.

In ancient China, there's no context for the 'logic of capital' to become the dominant 'logic' either, for people with money-making as their main pursuit of life have always been depreciated. We don't need to date back to the remote antiquity of China. After Emperor Che Liu in Han dynasty 'abolish all schools of thought except the respected Confucianism', the Confucian thought has always been the dominant ideology. Since Tang dynasty, Buddhism has had great influence on Chinese politics, thoughts as well as the civil society, and it has always interacted with Confucianism (they criticise and penetrate with each other). Thus we can say that the dominant ideology guiding the institutional construction in ancient China is no other than Confucianism. Among the three schools of Confucianism, Buddhism and Taoism, Confucianism pays the most attention to worldly life and politics, and consequently to wealth and economics. Even so, Confucianism is still quite far from modern consumerism.

In modern times, the consumerists with money-making as their main pursuit of life regard money-making as a matter of primary importance, and consumption as the way of life. Their happiness relies on the process of money-making and consumption, without which happiness is unavailable. While Confucianism is quite different! Confucius has once said: "though I only have simple food to eat and my arms as pillow to sleep, I still feel happy" (*Analects of Confucius-Shu Er*). Zigong once asked Confucius, 'what do you think about the poor who is not flattering or the rich who is not arrogant or overbearing?' Confucius answered: 'that's all right; while no better than those who are poor but happy or rich but behave politely' (*Analects of Confucius-Xue Er*). Yanhui has been praised by Confucius that 'Yanhui is of strong moral fiber, what a man of great wisdom he is! Both his food and habitation are simple, which might be beyond one's endurance, but Yanhui still feel happy about that. He's indeed a virtuous man' (*Analects of Confucius-Yong Ye*)! That is the 'happiness of Confucius and Yanhui': as long as they follow their principles strictly, and pursue the supreme spiritual state, poverty would not stop them from feeling happy. Their happiness is quite different from today's happiness which is brought by the satisfied desire. There must be some special reasons to explain why they could feel happy in poverty. Generally speaking, happiness comes from acquirement, so there must be some special acquirements for Confucians to feel happy in poverty.

'I would not regret dying in the evening provided I would have got to know the truth in the morning', said Confucius. From the master's point of view, truth is much more valuable than human life. People in the secular world are all in pursuit of wealth, while according to Confucianism the truth is more important than secular

wealth and the former is more worthy of pursuing. Dunyi Zhou in Song dynasty valued the 'happiness of Confucius and Yanhui' a lot. When talking about Yanhui's satisfaction with poverty, he commented:

> Wealth is what everyone is looking for. But Yanhui is an exception, showing no interest in wealth while feeling satisfied with poverty, so what kind of state of mind does he have? There exists the supreme wealth worthy of pursuing in the world, which is quite different from what the secular people are looking for. And Yanhui distinguished the real wealth from the secular satisfaction of material desire, which enables him to feel peaceful inside. While the peaceful state of mind brought him satisfaction, and consequently there's no difference between rich and poor in his inner world … On the earth, the truth and morality are the most respected and valued. (Zhou 2002: 42–43)

It shows clearly that truth and morality are the supreme value worthy of pursuing by everyone (especially by the Gentleman). Contrast to the attitude towards truth and morality, the Gentlemen even show contempt for authority and money, just as what Dunyi Zhou has said: 'the Gentlemen regard the truth as dignity and peace and health as the real wealth, that's why they feel peaceful inside and satisfied with everything. Besides, they look down upon authority and treat money as dirt…' (Zhou 2002: 52)

Zhou's attitude towards wealth might go against the tenet of Confucianism, for Confucianism has always cared about politics and economics and consequently wealth is acceptable. In *Analects of Confucius* (known in Chinese as *Lun Yu*), there's a dialogue as follows:

> When Confucius went to Wei (a city-state in ancient China) with attendant Ranyou, he sighed: 'how large the population is!' Ranyou asked: 'then what should we do?' The master answered: 'enrich them.' 'And then what?' Ranyou went on asking. Confucius gave the answer: 'teach them'. (*Analects of Confucius-Zi Lu*)

It is thus clear that from the point of Confucius, the populace should be first 'enriched' and then 'taught', for economy is the base of education. Wealth itself is not bad, it all depends on how we get, use and treat them. The rich can also feel 'peaceful without unsatisfaction' if they were able to respect and value truth and morality or in other words rich but not greedy (unlike some people, for whom the richer they are the greedier they will be). Without certain material conditions, it's impossible to have other pursuits, such as pursuing the meaning of life. It's obvious that Confucianism only regards wealth as the necessary condition for life and never takes economic development as the supreme value of society. Just because of this, Confucianism would by no means allow the 'logic of capital' to guide institutional construction, nor allow people with money-making as their main pursuit of life to become the backbone of society.

In ancient China, there are mainly 'four patterns of people' which are 'intellectuals, peasants, handicraftsmen and merchants'. On the top level are the intellectuals who are of the ruler class while merchants are on the bottom level, rich but not respected. So people of the intellectual class are shamed of talking about business. Most of the rulers come from the intellectual class who manipulate the system of law and etiquette. Since the merchants are of the bottom class, they barely have influence on the establishment and amendment of system. In that case, it'll be much

impossible for people with money-making as their pursuit of life to benefit from the social system in China.

Until Song dynasty, commerce has become rather developed, and sometimes intellectuals and merchants can't be distinguished from each other too strictly (Yu 1987: 514). However, the system of 'stressing agriculture and restraining commerce' in the past dynasties has not changed radically. In *Complete Treatise on Agriculture* (known in Chinese as *Nongzheng Quanshu*) by Guangqi Xu, there's such a paragraph in vol. III:

> In the 14th year of Hongwu in Ming dynasty (1381 A.D.), the emperor Yuanzhang Zhu intended to stress the basic position of agriculture and restrain the development of commerce. He declared that peasant family could wear fine silk but merchant family were only allowed to wear common cloth, and once one member of peasant family go to do business, all of them would not be permitted to wear fine silk anymore. (see Yu 1987: 540)

Thus we could see the discrimination against merchants in Ming dynasty was still an institutional one.

With the development of commerce the attitude towards merchants has to be changed. In Ming dynasty, the great Confucian Yangming Wang had once written the memorial tablet of merchant Lin Fang's grave, which symbolised the significant change of intellectuals' attitudes towards merchants. According to Wang, 'despite of the different ways of addressing, the four patterns of people in nature have the same pursuit.' If a merchant behaves according to the principle of benevolence and righteousness, 'his business won't stop him from being the Saint' (see Yu 1987: 526). However, we should never take it for granted that Confucians in Ming dynasty had taken economic development as a matter of primary importance. Wang wrote epitaph for Lin Fang not because he is a rich merchant, but because he is 'the same as those who are pursuing truth and morality', in other words, he was quite alike those of benevolence and righteousness. And his praise on such righteous merchant as Lin Fang also resulted from the fact that the corruption or degradation of intellectual class depressed him a lot. He wrote:

> Since people no more pursue truth or morality as before and the attitude towards learning become flaunty and flippancy, the good moral character is disappearing gradually. People begin to go for fame and fortune, look down upon peasants and admire intellectuals. The officialdom would be where they feel honored to stay, while the handicraft and business would be what they feel ashamed to do. However, as I have observed in reality, those intellectuals' lust for fame and fortune is no less than the others', they are almost the same except for their names. (see Yu 1987: 526)

That is to say, at that time the intellectuals showed more interest in profits than the merchants, so compared with those hypocritical and arrogant intellectuals who are lust for fame and fortune, those merchants of benevolence and righteousness are naturally worthy of more compliments. Therefore, Wang has realised the importance of social division of labor, and that one's social status and moral character can't be decided by his/her profession. But it by no means implies that Wang was for the merchants standing on the highest level of society. And what he most cared about is still one's moral character. In Ming and Qing dynasties, there existed a popular percept that 'in the list of social status, merchants are higher than peasants

and handicrafts, intellectuals are higher than merchants, and the Saints are higher than intellectuals' (Yu 1987: 531). With the social transition, merchants' social status enhanced gradually and even higher than peasants and handicrafts, but until Ming and Qing dynasties, their status were still lower than intellectuals'. That's why in ancient China the system of law and etiquette can't be controlled by merchants and the 'logic of capital' was not permitted to dominate that system.

In the West, after the Renaissance, Reformation and Enlightenment, people's views of world, value and life changed gradually, and individualism, liberalism, scientism, economism and materialism were slowly filtering into people's minds. In this process, people with money-making as their main pursuit of life were turning into the backbone of society gradually, along with which the influence of 'logic of capital' on the transition of social system would be more and more obvious. Up to now, the private property rights system in the West has developed completely, and then the conversion process through which proliferation potentiality of all the assets could be released as said by Soto has already existed. In such a society, 'everything is commercialised' (a phase of Immanuel Wallerstein), commerce covers every field of social life and consequently money has the magic to make the world go around.

When analysing the historical evolution of property rights system, North has acknowledged the importance of ideology, which implies that he has also acknowledged the importance of values. One's views of value decide not only what kind of system he/she is loyal to, but also what kind of value and life he/she is in pursuit of. And the stimulating role of a system should be in the end realised through people's views of value. As contemporary humanistic economists Mark Lutz and Kenneth Lux have stressed: There is a close relation between views of value and needs, and they two can transform to each other easily. We can even regard them as two synonyms. If one person considers certain article or experience necessary, we can say that they are valuable to that person, who at the same time has made a judgment of value … Basically speaking, the core of history is the struggle of personal values (Lutz and Lux 2003: 16, 43). The change of system has close relation to the change of people's need and values, without which the issue of institutional change won't be raised. It is true especially in the modern democratic society. It's obvious that system is not an active agency, for it is established and changed by people (those who are the backbone of society) who are influenced by certain views of value (or ideology).

Views of value determine one's visual field which is the summation of all the values within one's consciousness scope. If the pursuit of value stimulated by system goes much 'beyond' most of the people's value vision, then the stimulating role of a system would decrease dramatically. Such cases are quite rare in history. However, the planned economy system in China from 1949 to 1978 showed us a typical example of that. During that period, system was designed according to the official ideology which is not the one embraced by most of the people and consequently not understandable to the majority. The economic system – planned economy – designed according to that ideology was rather demanding in morality for people, so it could not stimulate production and innovation at all. In that planned economy

system, there was no difference in payment despite of the quality or quantity of work. So people worked to rule passively and the whole economic system lacked of viability and efficiency. In China, the history from 1949 to now found that institutional reform (transition) is closely related to people's views of value. Since the reform and opening-up in 1978, the relation between institutional reform and value change can be explained by the relation between reform and 'mind-emancipating', which are in the relation of mutual promotion. During the Zedong Mao era, Communist Party of China focused on fostering new socialists who should 'utterly devote to others with self-interests aside', 'serve the people whole-heartedly' and 'love factory as home, love community as home.' At that time, the system and ideology together restrained people's pursuit of maximum self-interests. It is proved by history that that kind of system is not efficient because the ideology in defense of that system is not accepted by people from the bottom of their hearts. But that ideology and system after all had been imposed by force for nearly 30 years, which distorted the views of value of Chinese people, though some of them were indeed tamed. This thus brought a hard mission of 'emancipating minds' to the institutional reform led by Xiaoping Deng. The essence of 'emancipating minds' is to promote the change of people's views of value, i.e., a change from the uncertainty about the views of value of planned economy to the wholehearted support for that of market economy. The facts both in history and in reality show that the 'minds-emancipating movement' initiated by Deng is more popular than 'culture revolution' led by Mao. And that's all because it is more natural for people to support the views of value of market economy than that of the planned economy.

Obviously, the reform process in China since 1978 is a process in which great changes have taken place both in the property rights system and people's views of value. Till 2008, 30 years have passed since the reform initiated in China. And during this period, China has experienced almost all the historical changes that took a few centuries in the West. In the period of 'culture revolution', it was absolutely evil to have self-desires and people's pursuit of self-interests would be dispraised as they were 'moving towards capitalism'. According to Jesus Christ, wealth would be the stumbling block to saving the soul and people with money as their primary value would not be able to enter the 'kingdom of God'. Accordingly in the era of 'culture revolution', the official ideology preached at people that the heaven on earth – communism – couldn't be established unless they change themselves into new socialists, and in order to become a new socialist, one must 'stifle the selfishness in the cradle with a firm hand'. And if one let his/her selfishness swelled and took the capitalist road, he/she would be allocated into the group of 'class enemy', and people of that class would absolutely be regarded as the doggeries of Red China, whose basic human dignity could even not get guaranteed. In the beginning of reform and opening-up, people taking the road towards richness were those who either got no protection from planned economy system or had the strongest desire to become rich, in short, they were not the backbone of socialist construction under the planned economy system. And during the process of 'reform and opening-up', what they have done played an exemplary role. However, they had little social prestige in 1980s. Until Deng made his Southern Tour in early 1990s, great changes began to

take place in Chinese society and social status of the people with money-making as their main pursuit of life were raised to a large extent. At that time, in the eyes of postgraduate students it was sensible to do business after graduation rather than do research in universities or research institutes. After 1991, the reform of Chinese property rights system was deepened, and people's views of value began to change rapidly as well. Then once entering into the twenty-first century, the momentum towards market economy in China was almost irreversible. In the famous speech on 1 July 2001, Zemin Jiang understated that private entrepreneurs were also admitted to the Party. It was a great event in the history of Red China! For it implied that people with money-making as their main pursuit of life have finally become the backbone of society. In today's China, we can see that capital has become the motive power driving all the causes forward while the 'logic of capital' has become the most powerful 'logic' restricting institutional construction.

In the twenty-first century, when talking about 'people with money-making as their main pursuit of life', we should not simply define them as capitalists or financiers. A university student without a penny on him temporarily could possibly become a person who takes money-making as his/her main pursuit of life. Therefore, one's amount of assets or vocation are not decisive in judging whether he/she is a person of that kind, instead we should make judgment according to one's views of value and lifestyle. If a person who always takes money-making as a matter of primary importance and consumption as the identifier of his own values, he will definitely be a person aiming to make money in his/her life. And among this group of people, capitalists are the most influential. They can control the establishment and amendment of law and public policy to certain degree through their direct influence on politicians. For many non-capitalists who aim to make money all their lives, they can support the 'logic of capital' through market and democratic institutions, for instance, to stimulate mass production through mass consumption, to vote for an economism-believing president or an economically favorable but environment-unfriendly project. According to the liberalists, everyone is provided with equal opportunity in the occidental world of freedom, so people without a penny today might become millionaires tomorrow. Bill Gates is just the example, though not everyone is Bill Gates, a person who could have such a fortune among the very few.

In today's China, the situation is quite complex. Compared with that in the West, the system of democracy and laws in China are not mature yet, neither does the private property rights system. However, all the Chinese feel a strong urgent to become rich and there is a consensus from the top leaders to the plain citizens: 'development is of overriding importance' and the resolution of economic development should never be unsettled! Since the reform and opening-up in 1978, the magic of market economy in promoting economic prosperity has been obvious to all, so market economy system and its corresponding views of value are popular among most of the people. Under such circumstance, the reform of economic system is comparatively smooth (compared with that of political system). The people with money-making as their main pursuit of life have become the backbone of Chinese society, and consequently they will benefit much more from the institutional construction in China. Political leadership represents the interests of people

with money-making as the main pursuit of life, and the latter supports all the decisions for stimulating economic growth made by the former. Since economic development is of primary importance in China, the best way of assuring rapid economic development is to establish the property rights system which can enable all the assets to release their potentiality of proliferation.[3] Institutional construction since the reform has enabled the economic system in China to play its tremendous stimulating role. For instance, with the development of financial market and the state-controlled bank rates, everyone is inspired to make investment, and those who just deposit their money in banks would be regarded ignorant by those of commercial minds. Such a system together with the every-minute instigation by modern media is inspiring people's enthusiasm for wealth and richness. However, as for the property rights system, China is still far behind the developed countries in the West. Though the construction of 'external system' is rather fast, the 'internal system' can't be built in a day. The mismatch of official ideology and value orientation of market economy as well as the interaction between power corruption and social corruption has resulted in severe crisis of credibility in China, which is the absolute stumbling block for capital to demonstrate its magic power.

We can't take it for granted that everyone in capitalist society is of absolute honesty and faith, or in other words, scrupulously abides by the principle of credibility when doing business. But the precondition for capital to demonstrate its magic power is that most of the people can abide by the principle of credibility as a rule. Most of the merchants are unlikely to take credibility as the inner value, but as a strategy for business. Therefore, fraudulent businesses still exist in mature capitalist countries every now and then. But the 'logic of capital' requires people to abide by the principle of credibility roughly. Moreover, the Western religion and political ideology do cultivate some people who regard credibility as the basic virtue, making credibility the inherent requirements of system in mature capitalist countries. By contrast, the problem of today's China is that the proportion of people with credibility is rather small, and as a result fickleness and high cost of trading stop capital demonstrating its magic power. But given the Chinese people's strong desire for wealth and the exemplary instruction of international market, the 'internal system' of Chinese society will be improved gradually with the maturity of its 'external system' day by day.

All in all, in the Western society after the Renaissance, Reformation and Enlightenment, the mature system of private property rights and money credit took shape gradually, and people with money-making as their main pursuit of life also stood out as the backbone of society. By twenty-first century this social transition was accomplished completely, and consequently the 'logic of capital' finally becomes the logic that dominates everything. For China, after the 'Opium War' the efforts of exploring the way of becoming prosperous and powerful have never been stopped. Though it was a historical opportunity when Communist Party of China

[3]The enactment of *Property Law* in 2007 should be regarded as the milestone of constructing modern property rights system in China.

started its rein of government in 1949, the 'logic of capital' was quite rejected by the planned economy system and the political line of 'taking class struggle as the key link', and the result of which was the near collapse of national economy. Since the reform and opening-up in 1978, we've made a miracle of economy leap which derives from the release of people's desire for wealth and the introduction of 'logic of capital'. From 1978 to now, the reform of economic system obviously concentrated on establishing modern property rights system while 'minds-emancipating' without any doubt targeting upon identifying with economism. When Communist Party of China declared that private entrepreneurs were also admitted to the Party, people with money-making as their main pursuit of life have undoubtedly become the backbone of society. Today the 'logic of capital' has almost turned into the guide for the construction of social system in China.

The Capitalist Triplicity of Consumerism, Economism and Materialism and Its Criticism

The living ability of human beings far outweighs other species since it came to be civilised. In terms of civilisation development, however, the problem of insufficient production had existed in the pre-capitalist civilisations for a long time. Since the population was in the fluctuant growth, it had been very difficult to ensure every person the right to life in pre-capitalist societies. As a result, those dying from hunger could be seen everywhere in the disastrous years. In other words, when the population was in over increase, the pre-capitalist societies would suffer from the insufficiency of material production. It's been almost resolved that large number of people starved and froze to death owing to the insufficiency in Western capitalist world by the early twentieth century. This is a great achievement in human history, which has been achieved partly because that the system of private property rights have gradually been perfect and people aiming to earn money in their lives become the backbone of society (of course, the contribution of modern science and technology should never be underestimated). Affirming such a great achievement doesn't mean to say that capitalism is the most suitable system for humanity.

When people with money-making as their main pursuit of life are differentiated as the backbone of society, the establishment and amendment of legal system will ever increasingly yield to the 'logic of capital', granting this logic with more and more normative and stimulatory power. In such a society, economism will become the mainstream ideology. As an ideology, economism will directly justify for the 'logic of capital'. Instead of telling a lie that people desperately make money just to respond to 'the appeal of the God', it asserts that economy is able to grow in an unlimited way and economic growth is the sole source of personal happiness and social welfare (Davison 1977: 174). With the stimulation of economism and modern system, the vast majority devote most of their energy and time to economic activities, with the result that the amount of material wealth grows larger and larger. In a condition that the needs of people have been met in one society, it is bound to spur

and encourage ‘mass consumption’, luxury consumption and ‘symbol consumption’ for the continuous proliferation of capital (i.e., continuous economic growth) and the sale of massive production. The reason why people purchase commodities is not only the use value of goods but also their symbolic worth – the function of self-labeling mentioned earlier. People of high status will definitely purchase new clothes before the old one was worn out, for their dresses must be in the fashion and match their status or they would be regarded indecent. Therefore, their clothes must be in the renewable process. An eighty-percent new suit may be discarded only for the sake of out of style. So does the car consumption. When the majority of society highlight the symbolic value of commodities over the use value, it’s already been a consumption society, in which consumerism emerges as the times require. Obviously, consumerism is the replica of economism in the consumption society.

People’s mass consumption driven by the consumption society in nature is stimulated by the capital owners of society. Media offers emotional words and luring pictures to inspire us to consume every day. The capital owners give the media payments, and the media serves them sincerely in turn. The biggest beneficiaries from our consumption are those capital owners. The more we buy, the more they profit. The accumulation of capital in the hands of its owners undoubtedly signifies the expansion of their power. The more capital they can control, the more freely they are able to realise the self-value. The implications for them are not only purchase of luxury yachts and houses, the pursuit and possession of young and beautiful female actress (or handsome man), but also the probability to buy social reputation through certain means such as donating to philanthropic courses. We should notice that as people targeting at making money in their lives become the backbone, the lifestyle of capital owners is the most proper and admiring one. The outcome in this regard is that the more we spend in purchasing, the stronger those capital owners’ sense of self-realisation and pride will be.

The Gospel preached by consumerism is that the more you gain and consume, the happier you are. Is that so? Obviously not! It is certain that only with a quantity of living materials can people survive, or even chase the meaning of life (or happiness). Nevertheless, modern consumerism conceals the boundary between basic material needs and pursuit of meaning, encouraging people to go after the meaning of life as they were in pursuit of material wealth without contentment. The stereotype of scorning consumerism and acting off the wall is David Thoreau, an American in nineteenth century, who experimented in all his life to fully enjoy himself with the least material expense. He went his way of life with a means that couldn’t be plainer, in the contrast, his workings showed an amazingly rich inner world of the unusually acting. Those having no idea about the situation may regard his life as unfortunate, but he claimed that he was happy all over and never complained about others. He said, ‘I’ve never heard any bad news.’ He had a faith in himself that he was a happy person among the few in the world and had no regret at all (Thoreau 1981). The ‘life experiment’ of Thoreau eloquently demonstrates that consumerism is not the correct view of life and value. The Thoreau-like men also can be found in contemporary China. A professor in Arts College of Hunan Normal University has been conducting such an experiment. Where he lives is an

extremely crude cottage far from the central urban, and what he eats and wears is utmost simple, similar to Yanhui's 'with only a single dish of rice, single gourd container of drink, and living in slums'. I have taken several visits to him, aware of his abundant thought, adherent pursuit and strong sense of social responsibility. Compared with the rich listed on the top, without power and valuable cars and houses, his life is of enrichment, tranquility and meaningfulness.

It is not necessary for us to lead a life as David Thoreau does, instead, appropriate consumption is allowed. Then how to define the 'degree'? The minimum seems to be sufficient food to insure health, clothing to protect against the frost and keep warm and decent, plus a moderately comfortable living space to shelter from wind and rain. But people are living in some kind of culture which operates to expand human instinct infinitely. Among the three items listed above, only food can set the threshold through modern biology and nutrition, the other two are bound to change historically. Human's pursuit of garments won't stop at the level of keeping warm, once decent considered, it will turn to the direction of extravagance. Human's requirement for a living space won't be met by the need of sheltering wind and rain either, once comfortable, it will develop into luxury. Thus, what we can set for the measurement is an absolute minimum consumption: to consume the food adequate to secure the health rather than being particular about the taste, let alone labeling himself by food consumption; to consume the clothes enough to resist against frost rather than making them the self-identity of status; and to have a location sizable to protect from wind and rain – Thoreau's cottage beside the Walden lake represents the limit – rather than identifying himself via the locality. Such a minimum consumption can be defined scientifically, even though there are rare in the reality like Thoreau and Yanhui to abide by strictly.

To a person genuinely and independently pursuing the meaning of life, it is crucial to have a clear consciousness of the minimum. It is not difficult for one with the healthy body and mental to gain the consumer goods to meet the absolute minimum through study and work. Just as Adam Smith said, only 'the salary of most common labor' was enough for 'the necessity for living' (Smith 1999: 50). If the goal of material wealth pursuit is set only a little higher than this limit rather than being regarded as the keynote of life, one will have enough time and energy to seek the goal of life which he/she really cares about. And consequently, it'll be unnecessary for them to be kept constantly on the run for as much money as possible. Then life for them would very possibly be much happier. It's true that modern institution and job competition put tremendous threat to individuals, forcing them to achieve the excellence and success required by the 'logic of capital' (such as marketing the products, giving birth to research outcomes as soon as possible), and the losers will be eliminated. Nevertheless, the individuals do have freedom to make their own choices. Not to speak of the extraordinary Thoreau and Yanhui, dozens of people in contemporary society are attempting to throw off the shackle of 'logic of capital'. They are well educated and capable of working, such is their way of life: earn money within years and quit it later to have fun for some time; once the money runs out, to restart the process as before … Their life quality is differentiated from those tiring themselves for money and making prompt consumption.

If people aiming to earn money in the society are not the majority, lots of meaningful activities could be launched even without capital. For example, many people would join the poets' club and/or opera association without asking for reward.

Most of the mainstream contemporary economists perceive that consumerism and materialism, though crude, are applicable to humanity. From their point of view, it is the society totally dominated by the 'logic of capital' that constitutes the perfect one. Up to now, the mainstream economics is defending for the 'logic of capital', whose basic assumption on humanity is that men are the rational existence after maximum self-interests. It's the natural preference of human beings to seek material wealth as much as possible and of human society to pursue economic growth ceaselessly. If that's what the essence of human beings looks like, then capitalism is unchangeable and the 'logic of capital' is beyond limitation.

Is the essence of human beings to pursue the ceaseless material wealth? After the baptism by philosophers such as Marx, Nietzsche, and Sartre, we have no reason to interpret humanity in the manners of essentialism. Marx is agreeable to argue that the essence of human beings is the sum of various social relations rather than perpetual abstraction. Or citing Sartre's words, 'existence precedes essence' – it is in throwing himself into the world, suffering there, struggling there, that he gradually defines himself. And this definition always remains open-ended. Thus, 'man is merely his own plan; he only exists to the extent of realising himself; so he is no more than the sum of his activities or his life' (Sartre 1993: 47). Man is thoroughly in the historical process of interplaying and mutually shaping with the social and natural environment he is involved in. Social system consists of the basic element of social environment, whereas social institution and mainstream ideology are in the historical process of interaction. As a result, so is man with social system and mainstream ideology. When born, one is unable to opt for social system and must be affected by mainstream ideology in the course of growing-up. A specific social system and the mainstream ideology forcibly mold the generations. People born in Chinese cities after the 1980s, who are immersed in the commercial society from the cradle, naturally tend to be consumerists. On the contrary, the generation brought up and receiving education in Mao's time was soaked in the utopian atmosphere of revolutionary idealism and the environment of class struggle from their childhood, many of whom have still retained the idealist temperament so far. Undoubtedly, one with mature thought possibly gives rise to the tendency and capability to criticise the social system and mainstream ideology. If one is lucky enough to become a political leader, he/she might intensely influence the social movement endeavoring to alter the social system and mainstream ideology. And current Western society dominated by the 'logic of capital' is no other than the consequence of criticisms and reforms by philosophers, revolutionists and politicians for generations since the fourteenth century.

Contemporary humanistic economists strongly criticise the mainstream economics with the help of humanistic psychology proposed by Maslow. Their criticism of materialism and egocentrism deserves special consideration. The mainstream economists frequently boast economics to be a kind of science which is confined to the study (or description) of facts rather than the judgment of value.

Actually, such a kind of science in the name of value neutrality contributes the very orientation to value, especially materialism, economism and consumerism. It is the basic belief of humanistic economists that economics cannot go without vision, and the purpose of bringing in humanism to economics is to create an economics with an uplifting and constructive vision (Lutz and Lux 2003: 3).

The mainstream economics confuses needs with wants in the way that sees all the man's needs as wants (or desires). Humanistic economists argue that there are distinctions between needs and wants proposed by the mainstream economists. As to Abraham Maslow, the need in psychology can be divided into several levels, including physics, safety, belonging, respect and self-actualisation. To meet the needs is not a quantitative but qualitative phenomenon. Meeting the need in one level differs from that in another, which means needs in various levels can't be measured with one scale. Nonetheless, to scale the varying needs with the identical ruler of sense of satisfaction is suggested in the mainstream economics theory on the basis of utilitarianism. It is of sure convenience of calculation, and both the mainstream economics and modern life tend to convert everything to the number. For that reason, our era is one predominated by the number (Lutz and Lux 2003: 24). The 'logic of capital' results in the 'domination of number', and measuring the value pursuit with a unified standard. One of the advantages of currency is apt to calculation. The 'logic of capital' requires that all the human activities should be attributed to economic ones, which can best be measured by currency.

According to Maslow's theory, man's prior orders for meeting the needs vary in different phases of growth. Mainstream economics argue that, man makes the choice complying with the calculation of cost and return, of which the opportunity cost is a key indicator. On the contrary, humanistic economics believe, as men fulfill their prior needs, there never exists the object so apparent and prone to calculate like opportunity cost, 'men lose nothing on that occasion'. Utility computing constitutes the basic method of mainstream economics with the setting that the essence of human beings is to maximise personal utility, and the concept of utility 'flattens all the options onto the coplanar desires' (Lutz and Lux 2003: 26). According to the utility theory, certain satisfaction of a need could be obtained through the sacrifice of another – the so-called opportunity cost. Nevertheless, it's not destined to occur from the perspective of humanistic economists. While the prior needs are met, the needs in higher levels are not abandoned due to their dormant state, and neither are those in lower levels in that they are supposed to be sub-prior … Indeed we are faced with choices from time to time. But they are choices on various needs and values rather than on the comparative sense of satisfaction (Lutz and Lux 2003: 25).

Here again we encounter the collision between pluralism and monism. Mainstream economics insists on monism, holding the view that value pursuit can be attributed to the satisfaction of personal desire and preference, and research on value to the utility computing, and hence, the analysis on cost-return can be used to explain all the human behaviors. By contrast, humanistic economics believes in pluralism, arguing that different kinds of value are not able to measure commonly, and all the human activities can not come down to the measurable satisfaction of preference.

Mankind is the finite existence seeking after the infinite, their pursuits for the infinite is equal to that of meaning which covers all the needs beyond the physical ones. We can define the physical needs and safety needs, as Maslow did, to be the basic human needs, and those on belonging, respect and self-actualisation to be the needs of meaning pursuit. To meet the former without any doubt depends on the material, yet it is not the same with the latter. But in the contemporary living world constructed by the 'logic of capital', people believe that the pursuit of meaning is equivalent to that of money and wealth, which is the most serious misguidance provided by the 'logic of capital' and consumerism.

By virtue of the insufficient material production in pre-capitalist societies, a large amount of people have been toiling the rocks for their basic needs all life long, regardless of the needs on the higher levels. Or in other words, they make it in the plainest approach. For instance, it's the meaning at root for the traditional Chinese farmers to carry on the family line. Those like Thoreau and Yanhui unexpectedly transcended the lower needs with the target of self-actualisation, while more others can't generate the higher needs until they've fulfilled their lower needs according to Maslow. Capitalism has met the basic needs of the majority, yet inhibiting them from seeking for the higher needs diversely and creatively. If a society is not able to create the conditions for meeting people's higher needs continuously, but just to persist in stimulating their endless satisfaction of needs on the lower levels, people's development will be deformed, so will be the development of society itself. Once blocked on the road of growth, the behaviour of man will be limited to one dimension – the lower needs. Accordingly, in the sense of growth, man can only get 'fat' rather than 'tall', either literally or figuratively, the consequence being 'a stack of verruca (Lutz and Lux 2003: 26). A society overwhelmed by the 'logic of capital' is no other than such a society which tends to inspire people to gain money and consumption, rather than invigorate them to pursue the spiritual and diverse cultural initiatives, let alone the cultivation of virtue to the utmost realm. Consequently, the champions, award winners or celebrities selected are as often as not the genuinely brilliant. In current China, the winners shining yesterday might well be put into prison the other day. From the perspective of civilisation development, a society manipulated by the 'logic of capital' is in its extremely abnormal development, of which the material aspect expands like cancer, and the mental part shrinks sharply (Lu 2003: 347–387).

Dominated by the 'logic of capital' and influenced by the value-orientation of mainstream economics, modern society places emphasis on the innovation of science and technology, institution, management and human desire, rather than encourages the real innovation of the views of value and lifestyle. The powerful views of value implied in the 'logic of capital' and mainstream economics are economism, consumerism and materialism. The innovation of science and technology, institution and management launched in contemporary society only offers the means to realise the values of economism, consumerism and materialism other than the genuine innovation of value. If it's the huge achievement of capitalism to meet everybody's basic needs, then it is the tremendous fault of capitalism to prompt them to pursue the meaning of life through material wealth. Prior to the absolute

settlement of lack of material, a healthy society ought to spur the free innovation of value and spirit which is just the innovation of the meaning of life. The real freedom falls out of people in such a modern developed society alleged to be a free world: Freedom is an existing state, but not enjoyed, which means that freedom lies in our lifestyle in place of the level of life (Lutz and Lux 2003: 168). Rather, it is the prevailing views in consumer society that the more money they earn, the freer they are, so is to the consumption. People ask for the improvement only in level of life, excluding the innovation of lifestyle.

The global ecological crisis alarms that the lifestyle of 'massive production – massive consumption – massive waste' stimulated by economism and consumerism is unsustainable. Only by changing this lifestyle, can we survive on the globe in security. It is indeed difficult for us to refute materialism, consumerism and economism scientifically were there no global ecological crisis. Even though you can certainly blame them of crude ideology, and consider materialists and consumerists to be vulgar,[4] considerable materialists and consumerists would pay you back: please go ahead as you wish to seek the abundance in spirit and simplicity in material! Don't intervene us as we are willing to live the luxury life of 'massive consumption – massive waste', which is our natural right! Though modern culture constructed according to the 'logic of capital' admittedly perceives that as man's natural right, it goes against nature's will. While consumerism is indicated in philosophy and ethics to be crude, ecology clearly shows that it's awfully hazardous for the billions to live under the guidance of consumerism. The 'massive production – massive consumption – massive waste' for the billions goes far beyond the capacity of the eco-system on earth, and the collective way of life stimulated by consumerism equals to suicide indeed. Were this lifestyle not renounced, the entire human beings would be faced with the catastrophe!

Transcending the Logic of Capital: A Progressive Revolution

Liberalism is the mainstream political thought in modern and contemporary society, arguing that modern democratic constitutionalism and market system provide a neutral framework for the faith-varying people (state-monopolised violence agencies maintain the basic system, and coerce anyone disobedient). As for the individual belief, it matters to the private or specific ethnic groups. In fact, economism, consumerism and materialism place the very influence on the enacting of modern system. I'm not to blindly oppose the neutrality of basic system, which is a progress in political civilisation instead. Furthermore, the peaceful co-existence and mutual collaboration among a variety of believers basically rely on the construction of a

[4]Actually materialist and consumerist culture has also prescribed the criteria of refinement in life and art, and the shallow materialists and consumerists are imperative to contempt about those like Thoreau, just as the high-end car owners probably look down upon the bicycle riders in today's China.

neutral system in the circumstances of pluralistic religions and cultures. For one thing, it is impossible to keep neutral in political and economic institution. It's another to make efforts to. Supposing that the system publicly takes sides with a religion and put down the rest, the dictation in thought will be inevitable. In this regard, neutrality is the ideal goal for building up the system. As is stated above, while attempting to stay at the center of all sorts of religion, the basic system in Western society is under the excessive affection of economism and consumerism, and forcefully constrained by the 'logic of capital' in the final sense. The system, regarded as the basic condition for social life, is supposed to guarantee the fair distribution of resources and wealth, so as to meet the basic needs of vast majority, but unnecessary to stimulate and coerce them to desperately earn money and timely consume, or especially partial with the economist and consumerist. I'm not to suggest giving up the ideal of neutralising the basic social system compared to religion and faith, however, it troubles us that modern system inter-supports the faith in economism and consumerism, subsequently, yielding the enormous pressure on those believes of 'enough is as good as a feast'. It is likely for the institution to be neutral among various religions, but rather hard in thoughts or value, for the sake that any 'external system' is established in the guidance of certain thought and value. So are the relationships between modern system and the views of value of materialism, consumerism and economism.[5]

Someone tends to view economism, consumerism and materialism being neutral, which are both contradictory and silly. Economism and consumerism have become the ideology penetrating into the basic system, the basic faith held by lots of people, and the views of value leading the fashion on life and social trend. Both these views and the religions seem to be carried on without coming into conflict, which resulted from the compromise in the process of religions' secularisation. In current Western world, quite a lot of people still believe in Christianity, however, they take on a completely different picture from that in the medieval period, which has been weakened to a large extent by economism, consumerism and materialism. And the Christian belief is no longer pure as mixed up with the belief in economism, consumerism and materialism. They endeavour to earn money and spend it promptly on weekdays, while go to church for the comfort from the God on weekends. Endorsing the neutrality of economism, consumerism and materialism out of all kinds of religion and ideology corresponds to the calling for everyone to observe them as the truth (just like everyone has to breathe), regardless of the Christians, the Buddhists, the Islamics or the communists, which is an utterly fallacy. Obviously the ancients didn't worship economism and consumerism. The term 'materialism' has always been negative, even contemporarily is it able to prevail by the disguise of

[5]The views of value of economism, consumerism and materialism mold the modern system in an exclusively secrete fashion. In a democratic society, those aiming to earn money in their lives have become the backbone of the society and can exert their will on the system through democratic procedures, while the giants in business can accomplish the mission in a more underground way.

economism and consumerism. If it is taken as a truth that everyone has to comply with, then people like Thoreau and Yanhui will be naturally recognised as 'odd' and 'inhumane'. Since it's the invariable humanity to seek wealth and material in terms of such 'isms', that Thoreau and Yanhui despise them surely signifies their losing of humanity. As a matter of fact, they have been creating humanity all the time in contrast to the consumerists living by following the convention.

As mentioned above, the basic hypothesis of mainstream economics is that all people are chasing to maximise their self-interests. If interpreting the 'interests' to be the satisfaction of material desire, we have to acknowledge that the 'logic of capital' best suits humanity and consumerism is the most humanistic views of value and life. The firm performance of 'logic of capital' in modern society, actually benefits from the 'success' of value-orientation made by economism, consumerism and materialism. However, this doesn't manifest the necessity for 'logic of capital' to be the guideline in establishing social system at all, nor the conformity of economism, consumerism and materialism to humanity.

Indeed everyone will endeavour to chase the value recognised in his/her heart. And one's best regarded value can be seen as his/her highest value, on the pursuit of which everyone spends the most energy and time until the end of life. What comprises his/her highest value relates closely to his/her faith. The religious Christians make the faith, hope and love their highest values (ultimate care), the real Confucius stick to the human life highly harmonious with nature, and the pure communists insist on cosmopolitanism, while as for the modern consumerists, high income and spending are their persistence.[6]

The society restrained by the 'logic of capital' appears to supply the freedom of understanding the highest value, namely the freedom of faith and thought. Due to the over-oppression of 'logic of capital' to democracy, however, they have been discounted. Because the whole political and economic systems have been inter-supporting the people aiming to earn money in their lives and the system is sustained by the state-controlled violence agencies, those without the purpose of money in their lives suffer the immense threat from them, which is the essential reason why all the religions (including the Buddhism previously counteracting the materialism fiercely) yield to economism and consumerism.

Objecting the domination of 'logic of capital' needn't go to extremes, such as the regression to the planned economy in 'cultural revolution' of China. Society can't go further without a vigorous economy. Admittedly, it is a great achievement that capitalism has satisfied the basic needs of all. After that, it's a sheer fool to push the economic growth as much as possible in the circumstance that global eco-crisis ever-increasingly comes to the ground. The only way out of the crisis is to build up the eco-civilisation and restrict the 'logic of capital' (rather than to abolish it).

[6] If a consumerist proclaims to believe in Christianity, he probably looks forward to wealth as well as the heaven, which are not contradictory to each other in the protestant ethics expounded by Max Weber.

How to restrict the 'logic of capital', and by whom? In the author's point of view, it can only be a 'progressive revolution'. An immediate response might be that 'progressive revolution' is a contradictory conception. Not really. The transformation from industrial civilisation to ecological civilisation is no doubt a revolution, distinct from those in history, for it arises in a historical period with the notions of democracy and human rights deepening into the people's heart. This revolution won't take on a violent action of one class overthrowing another, but a gradual shift of social system and lifestyle deriving from the slight change of value. It will last for a considerably long time, and come true step by step in the basic framework of democracy and the rule of law.[7] The revolution may be out of sight in any historical episode, whereas after a long-term progress the evolution of civilisation will be revealed.

The key for such a revolution lies in the popularisation and wide acceptance of ecological values, which originates not only from the promotion and education by the minor elites, but also from the warning and punishment repeatedly exerted by environmental pollution and ecological degradation. With the worsening of global warming, species extinction and contaminations, a growing number of people will understand the necessity to remodel the lifestyle of 'massive production – massive consumption – massive waste', and thus adopt ecological values. It's the ecological value holders who will turn up to restrict the 'logic of capital'.

Ecological values clash with economism, consumerism and materialism. The increase in the number of people believing in ecological values signifies the decrease of those aiming to earn money in their lives. We are anticipating the historical moment that enabling those adhering to ecological values to be the backbone of society instead of those preferring money-making. At that time, the modification and formulation of institution won't be under the over-control of 'logic of capital'. Thoreau and Yanhui won't be regarded as the odd without humanity but the model to follow, and the owners of big-sized houses, yacht and cars won't be admired widely but criticised by the society, since that more and more people are aware of the destructive consequence of following them. By then, more people with ecological values enter into the political leadership, getting the state and governments out of executive agencies serving the 'logic of capital', rather, being organisations enhancing the smooth development of culture. When it comes, the state and governments will take some measures to restrain the 'logic of capital', such as carrying out the welfare tax system through democratic procedures, retreating medical care and primary education systems from the market, inspiring the charity, improving the non-profit undertaking, giving favorable policies to the eco-industry (tax free or reduction to the eco-industry during its competition with traditional industries), investing in the research of ecology, eco-technology, clean production and energy, prompting science and technology more ecological, and so on (Lu 2006: 421–449).

When people believing in ecological values grow to be the backbone of society over those making money earning as the keynote in their lives, the state and governments

[7]Democracy can certainly not be separated from economic freedom, however, it might not be the case for its relation with capitalism.

will maintain their roles more neutral, not only neutral to religions, but also neutral to ideologies such as economism and consumerism. So does the political and economic institutions in society. The eco-civilised social system and mainstream ideology will encourage more free innovation, not only in the fields of science and technology, institution, management but also in the views of value and lifestyle.

The construction of eco-civilisation on one hand poses demand on the ordinary to see through 'the trick of capital', shake off the constraint by the 'logic of capital', take the meaning of life into account independently, and invent the most comfortable lifestyle, on the other hand, calls for the state to enact the laws, regulations and public policies to limit the consumption within certain degree. For example, based on the bearing capacity of eco-system in a region, the affordable number of cars and living space can be calculated and the proportion for each person is as a result prescribed. For example, each citizen in China may be only allowed to have one tenth of a car and a 40-m^2 house. Such a scientifically measurable eco-limit is the 'degree' within which public consumption must stay. According to this principle, the more the rich want to consume, the heavier tax they have to pay.

Probably, there will forever be a number of materialists, whose basic rights ought to be respected always, and market economy might not be totally abolished in human civilization. However, together with democracy and the rule of law, market system in the condition of eco-civilisation can stimulate the change of industrial structure and people's consumption preference. When more and more people have ecological consciousness, preference to clean environment and natural beauty, the voice for eco-industry and clean production will be louder. Correspondingly, the need for green products will increase, and a market for eco-products and green consumption will be progressively bred, which would in turn bring in the call, support and motivation for an eco-economic system.

In sum, eco-civilisation is not a Utopia, but the only way for human beings to move forwards seeking for a sustainable survival.

References

Davison, I. (1977). *Value, end and society*. Brisbane: University of Queensland Press.

de Soto, H. (2001). *The mystery of capital: Why capitalism triumphs in the West and fails everywhere else*. New York: Black Swan.

Gatto, L. (2000). *Age of empires: Medieval* (F. Xia, Trans.). Chengdu: Sichuan People's Publishing House.

Ke, W., & Shi, M. (2000). *Institutional economics: Social order and public policy*. Beijing: The Commercial Press.

Lu, F. (2003). *After enlightenment*. Changsha, China: Hunan University Press.

Lu, F. (2006). Science and technology turning to ecology. *Tsinghua Philosophical Almanac 2004*. Baoding: Hebei University Press.

Lutz, M. A., & Lux, K. (2003). *The challenge of humanistic economics* (L. Wang, et al., Trans.). Chongqing: Southwestern University of Finance and Economics Press.

Marks, R. B. (2006). *The origins of the modem world: A global and ecological narrative* (J. Xia, Trans.). Beijing: The Commercial Press.

North, D. C. (1981). *Structure and change in economic history*. New York: W.W. Norton.
Sartre, J.-P. (1993). *Essays in existentialism* (edited with a foreword by W. Baskin). Kensington: Citadel Press.
Smith, A. (1999). *The theory of moral sentiments*. Beijing: China Social Sciences Publishing House.
Song, H. (ed). (2007). *War of money*. Beijing: China Citic Press.
Thoreau, H. D. (1981). *Walden and other writings*. New York: Bantam Books.
Yu, Y. (1987). *Intellectuals and Chinese culture*. Shanghai: Shanghai People's Publishing House.
Zhou, D. (2002). *Collection of Zhou Dunyi*. Changsha: Yuelu Publishing House.

Chapter 7
The De-growth Utopia: The Incompatibility of De-growth within an Internationalised Market Economy[1]

Takis Fotopoulos

Abstract A significant development within ecological thought and activism during the last 10 years or so is the emergence of the de-growth project, arguing for transcending the contemporary world economy through a 'radical' reform within the market economy institutional framework, which involves reframing the present institutions according to different principles with the aim of downscaling the economy. However, as this chapter tries to demonstrate, such a seemingly desirable plan is simply non-feasible within a system of market economy and particularly so within the system of internationalised market economy, whose fundamental element, the open and liberalised markets, is crucially incompatible with de-growth. Growth is not simply an imaginary signification but an integral element of the dynamics of the market economy. Therefore, the realisation of ecological balance is not just a matter of changes in imaginary significations, i.e. of a cultural revolution, but of a new kind system of economy and society beyond the internationalised market economy, for which the Inclusive Democracy project has been proposing.

Keywords De-growth project • Ecological crisis • Growth economy • Inclusive democracy • Internationalised market economy

The Emergence of the De-growth Project

A significant development within ecological thought and activism during the last 10 years or so has been the emergence of the de-growth project developed by Serge Latouche and others (Latouche 2007). Particularly so, as this new green movement emerged

T. Fotopoulos (✉)
International Journal of Inclusive Democracy, London, UK
e-mail: editors@inclusivedemocracy.org

[1] This contribution is based on an article published in *the International Journal of Inclusive Democracy*, 4(4) 2008 (http://www.inclusivedemocracy.org/journal).

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_7, © Springer Science+Business Media B.V. 2010

at a time when the greenhouse effect and climate change have become front page news, following the IPCC's (Intergovernmental Panel on Climate Change) Fourth Assessment Report, which definitely linked the clear signs of global climate change with increases in man-made emissions of CO_2 and other greenhouse gases since the start of Industrial Revolution. Its significance arose out of the fact that this project clearly showed that the Green movement, after its rise as an anti-systemic movement in Germany in the 1970s and its subsequent integration into mainstream politics as a kind of reformist Left party or lobby (taking part in the process – or supporting in various degrees – the criminal wars of transnational elite in the 1990s and the 2000s on the pretext of 'war against terrorism'), could still play a role at the boundaries between a reformist and an anti-systemic movement.

To my mind, as I will try to show below, the de-growth project could be said to represent a dialectical synthesis between, on the one hand, the anti-systemic Green approaches of the German 'fundos', which have nowadays almost eclipsed and, on the other, the reformist approaches of the mainstream Green parties, which have by now proven bankrupt. At the same time, the de-growth project shows significant similarities, both at the theoretical and the strategic levels, with the 'Simpler Way' approach suggested by Trainer (2006, 2007), which, like the de-growth approach, involves 'mostly small, highly self-sufficient local economies; economic systems under social control and not driven by market forces or the profit motive and highly cooperative and participatory systems', as well as with the associated 'eco-village movement'. However, the de-growth project, unlike the eco-village movement, stresses that the transition process involves not just the creation of 'eco-villages', mainly outside the main society, but, instead, the creation of 'urban villages' (Homs 2007), which involve the development of a high degree of decentralisation within the main society itself. In other words, whereas supporters of eco-villages, even when their aim was the creation of a new social movement and not just a life style change, aspired mainly to a movement based on communities outside the main society, supporters of the de-growth project explicitly aim at creating a new social movement within the main society – as the traditional Green parties have always attempted to do.

The rationale of the de-growth project is the familiar Green argument. Growth for growth's sake is unsustainable as it pushes the limits of biosphere. Although in the recent past there have been some improvements in ecological efficiency, they have been offset by growth. As a result, the ecological crisis, particularly as far as the greenhouse effect is concerned that threatens with a catastrophic climatic change, has been worsening all the time. It is now well established that continuous expansion has been at the expense of the quality of life – in terms of clean water, air and the environment in general – if not of life itself, first of animals, and then increasingly of human beings themselves. Therefore, de-growth, in terms of downscaling our economy, seems necessary and desirable. In fact, Latouche points out that, a downscaling policy could be put into effect almost immediately in areas like the following which 'are crying out for downscaling': reducing or removing the environmental impact of activities that bring no satisfaction; reviewing the need for excessive movement of people and commodities across the planet; re-localising our

economies; drastically reducing pollution and other negative effects of long-distance transport; questioning the need for so much invasive, often corrosive, advertising (Latouche 2003).

The aim should therefore be a non-growth society to replace the present growth society. This implies going beyond the economy by challenging its domination of present life, in theory and in practice, and above all in our minds. In practice, this means the imposition of a massive reduction in working hours to guarantee everyone a satisfying job. Furthermore, de-growth must apply to the South as much as to the North if there is to be any chance to stop Southern societies from rushing up the blind alley of growth economics. Therefore, 'where there is still time, they should aim not for development but for disentanglement – removing the obstacles that prevent them from developing differently ... As long as hungry Ethiopia and Somalia still have to export feedstuffs destined for pet animals in the North, and the meat we eat is raised on soya from the razed Amazon rainforest, our excessive consumption smothers any chance of real self-sufficiency in the South' (Latouche 2004). However, although Latouche rightly points out – adopting indirectly the analysis of dependent development – that Africa was self-sufficient in food until the 1960s, when the great wave of development began which led to dependence, it is not equally clear whether he adopts also the conclusions of this analysis for a break with the capitalist market economy. Still, as I attempted to show elsewhere, such a break with capitalist neo-liberal globalisation is a necessary step towards a self–reliant development in the South (Fotopoulos 2005, 1985).

Furthermore, as Latouche stresses, de-growth does not also imply any move towards abolishing the market economy system but only reducing its scope:

> Drastically reducing environmental damage does mean losing the monetary value in material goods. But it does not necessarily mean ceasing to create value through non-material products. In part, these could keep their market forms. Though the market and profit can still be incentives, the system must no longer revolve around them. (Latouche 2003)

Thus, Latouche still believes that an eco-compatible capitalism, though unrealistic in practice, is 'conceivable in theory' – something that clearly ignores the dynamics of the market economy system which, at the end, is incompatible with effective state controls for the protection of environment. This is because, the same author argues, the power of TNC's (Transnational Corporations), in combination with the breaking down of class struggle, does not allow anymore the required level of regulation as existed under the Keynes-Fordist regulations of the Social Democratic era. He therefore concludes that:

> A society based on economic contraction cannot exist under capitalism. But capitalism is a deceptively simple word for a long, complex history. Getting rid of the capitalists and banning wage labour, currency and private ownership of the means of production would plunge society into chaos. It would bring large-scale terrorism. It would still not be enough to destroy the market mentality. We need to find another way out of development, economism (a belief in the primacy of economic causes or factors) and growth: one that does not mean forsaking the social institutions that have been annexed by the economy (currency, markets, even wages) but reframes them according to different principles. (Latouche 2006)

Finally, the de-growth project adopts a similar stand of a not outright rejection of the market economy's political complement: representative 'democracy'. In his valuable contribution to the debate on the Inclusive Democracy (ID) project Latouche was clear about his stand on the matter:

> In this context, radical rejection of representative 'democracy' is somewhat excessive. It is now part of our tradition, whether we like it or not. And it isn't necessarily the embodiment of evil … Improved representation, with recallable officers and direct participation in some cases (e.g. the participative budget in Porto Alegre), may constitute a satisfactory compromise. The key issue of the equal distribution of economic power will indeed remain unsolved, but it is somewhat illusory to envision solving it at a stroke with the magic wand of direct democracy. (Latouche 2005)

However, leaving for the next section the issue whether the market economy system is (even in theory) compatible with an economy which is not geared by economic growth, as far as representative 'democracy' is concerned, the 'tradition' of this kind of democracy is, in fact, only two centuries old or so (Fotopoulos 2003). Namely, since the last quarter of the eighteenth century when the 'Founding Fathers' of the US Constitution introduced representative 'democracy' as the political complement of the *system* of the market economy that was introduced at about the same time. The conception of democracy which was dominant up to then was the one that had been practiced in classical Athens in fifth century BC. It is well known that representative 'democracy' deprives the vast majority of the population of exercising their political will – something that can only be done directly by the people itself. Therefore, the improvements suggested by Latouche implicitly see democracy as a procedure and not as a regime (Castoriadis 1996: 221–241), as they do not seem to take into account that a representative 'democracy' is a completely different system from a political or direct democracy. When, for instance, Latouche argues that 'improved representation, with recallable officers and direct participation in some cases, may constitute a satisfactory compromise', in effect, he adopts the approach of many in the reformist Left who try to improve the present bankrupt system through direct democracy 'injections', forgetting that such injections function in the end as inoculations against direct democracy, since they do not help in the re-creation of a genuine democratic consciousness. A representation may indeed be improved, but surely this does not constitute democracy, which clearly is not a system that can be exercised *a-la carte*, as is, for instance, the Porto Alegre case in which some decisions are delegated to democratic assemblies whilst others – which happen to condition the former – are left for representatives to take!

De-growth and Inclusive Democracy

Although, therefore, the project of de-growth is seen by its supporters as 'a political project, in the strongest sense of the term, that of the construction, in the North as well as in the South, of convivial, autonomous and economical societies (and) does not come within the area of professional politicians' politicking' (Latouche 2007), it is clear that it mainly aims at only one aspect of the present multi-dimensional

crisis: the ecological aspect. However, even though this is a very important aspect of the crisis, equally important are the other aspects of this crisis and, particularly, the economic one.

Thus, first, the economic crisis does not receive any mentioning in the de-growth project, but only to the extent that inequality is related to economic growth. However, as I'll try to show below, inequality is not simply related to the growth economy; it is related to the very system of market economy – which the de-growth project also adopts with some amendments – that gave rise to the growth economy. In fact, as I tried to show elsewhere (Fotopoulos 2008a), the ultimate cause of the present deep world economic crisis which was initiated by the financial 'bubbles' created by US and UK financial and banking institutions, is the dynamics of market economy and representative 'democracy' that have led to the present concentration of power at all levels – which is, also, the ultimate cause of every other dimension of the present crisis.

Second, the political crisis, which is manifested by the total degradation of the meaning of citizenship and the growing passivity of citizens towards what passes today as 'politics', can be shown to be the outcome of the concentration of political power at the hands of political elites (and economic elites through their control of mass media). But, it is the dynamics of the system of representative 'democracy', which has led over time to the present huge concentration of political power at the hands of political elites that allows them to carry out, for instance, their criminal wars in Iraq and Afghanistan, despite the repeatedly expressed opposition of citizens in their own countries. Still, despite the growing political crisis, which has led to almost bankruptcy the present system of representative 'democracy' – even in Britain, the 'mother of parliamentarianism', the talk nowadays is about representative democracy in crisis (Richards 2009). This system is implicitly or explicitly adopted by the de-growth project, subject to some improvements.

Third, there is no mentioning of the parallel social crisis, as a result of the creation of a superclass and an underclass following the spreading of neo-liberal globalisation (Fotopoulos 2007). The social crisis, once more, is mentioned in this project only to the extent that it is related to economic growth, through consumerism.

Finally, the ecological crisis itself is mentioned in terms of a common problem that 'humanity' faces because of the degradation of environment, with no mention at all of the differentiated class implications of this crisis, i.e., of the fact that the economic and social implications of ecological crisis are primarily paid in terms of the destruction of lives and livelihood of the lower social groups – either in Bangladesh or in New Orleans – and much less in terms of those of the elites and the middle classes, which have various ways at their disposal to minimise these consequences. It is not therefore surprising that supporters of the de-growth project end up adopting measures for the downscaling of economy which, as we shall see below, are mainly going to affect the weaker social groups.

In other words, the de-growth project, unlike the ID project, is not a universalist project for human liberation but a one-issue project. This is not surprising, given the de-growth supporters' distrust for universalist projects. Latouche, for instance, stresses that:

> Lastly, I distrust any universalist project, even a radical or subversive one: I am prone to detect in it some residual smell of Western ethnocentrism. I already disagreed with

> Castoriadis about this. Reading Takis Fotopoulos strengthens my doubts. As Louis Dumont perfectly showed, the holistic imaginary of most human societies, if not unacquainted with some requirement of due consideration for dignity of individuals and attention to their will, is largely irrelevant to our egalitarian imaginary. (Latouche 2005)

However, as I tried to show elsewhere (Fotopoulos 2003), to my mind, this is motivated by the postmodernist aversion to any kind of universalist project – the same aversion which has led to the abandonment, by most of the Left, of any problematique for a radical social change, and to what Castoriadis rightly called 'generalised conformism' (Castoriadis 1997: 32–45). But, as I put it in my critique of postmodernism, the post-modern emphasis on plurality and 'difference', in combination with the simultaneous rejection of every idea to develop a universal project for human emancipation, in effect, serves as an alibi for abandoning liberatory analysis and politics and conforming to the status quo and, inevitably, ends up with a reformist politics (which does not challenge in any way the system of market economy and representative 'democracy') (Fotopoulos 2001). Furthermore, I think it constitutes a sweeping generalisation to identify any universalist project that originated in the West with 'Western ethnocentrism', just because it originated in the West, even if such a project is founded on the demand for autonomy and freedom – like the ID project – as if such demands are not universal human demands but only those of Westerners!

Apart, however, from this basic difference as regards the essence of the degrowth and ID projects, there are significant theoretical and strategic differences between them, which of course do not diminish their significant similarities as regards one of the aims they share, i.e. the need to move away from the present growth economy and society and, also, concerning their common means of achieving this aim, through radical decentralisation and localism.

The Imaginary of Development and the Two Types of Growth Economy

As far as the theoretical differences is concerned, from the ID's perspective, the growth economy is not just the outcome of domination of specific imaginary significations, but the outcome of social struggle on the one hand and technological (including organisational) and socio-economic developments on the other. In other words, the rise of the growth economy and society, let alone the rise of bourgeois society itself, cannot simply be reduced to the emergence of the Enlightenment idea of Progress and the consequent rise of the imaginary of development. In fact, it would even be wrong to assume, as Castoriadis does, that modernity is the outcome of two parallel currents:

> We must consider the emergence of the bourgeoisie, its expansion and final victory in parallel with the emergence, propagation, and final victory of a new 'idea', the idea that the unlimited growth of production and of the productive forces is *in fact* the central objective

> of human existence. This 'idea' is what I call a *social imaginary signification*. To it corresponds new attitudes, values, and norms, a new social definition of reality and of being, of what *counts* and what does *not* count … The marriage – probably incestuous – of these two currents gives birth, in diverse ways, to the modern world. (Castoriadis 1991: 184)

However, far from 'parallel', the two currents (the rise of the market/growth economy and the bourgeoisie on the one hand and the emergence of the growth ideology on the other) were integral elements of the same process, the latter playing the role of 'objectively' justifying the former.

As I attempted to show elsewhere (Fotopoulos 1997: Chapter 2, 2005: Chapter 5), both the capitalist and the 'socialist' economies – the Eastern bloc of 'actually existing socialist' (AES) countries were types of growth economy, i.e. systems of economic organisation geared, either 'objectively' (as in the case of market economies) or deliberately (as in the case of planned economies), toward maximising economic growth. The rise of these growth economies however cannot be explained solely by 'objective' economic and technological factors (as Marxists do) or by 'subjective' factors alone, i.e. imaginary significations and corresponding values and ideas (as some Greens attempted to do). Instead, to fully account for the rise of the growth economy, we have to refer to the interaction between the 'objective' and 'subjective' factors. Thus, the objective factors refer to the grow-or-die dynamic of market economy, whereas the subjective factors refer to the role of growth ideology. Contrary, therefore, to the claims made by most currents in the Green movement, it is not the growth ideology that is the exclusive, or even the main, cause of the emergence of growth economy. The growth ideology has simply been used to justify the market economy and its dynamics – which inevitably led to the capitalist growth economy. The implication is that the main issue today cannot be reduced to just a matter of changing our values, as some radical Greens naively argue, or even condemning economic growth per se, as de-growth supporters do. The crucial issue today is how we may create a new society where institutionalised domination of human being over human being and the consequent idea of dominating nature are ruled out. The search for such a system will lead us to the conclusion that it is not just growth ideology, which has to be abandoned, but market economy itself.

Furthermore, objective and subjective factors did not contribute equally to the emergence of the two types of growth economy. Objective factors were particularly important with respect to the rise and reproduction of the capitalist growth economy, but did not play any significant role in the emergence of the 'socialist' growth economy – although they were important with respect to its reproduction. Vice versa, subjective factors, the growth 'values', merely played an ideological role, as far as the capitalist growth economy is concerned, whilst played a crucial role with respect to the rise and reproduction of the 'socialist' growth economy, given the Enlightenment's identification of Progress with the development of productive forces and the influence that the Enlightenment ideas had on the rising socialist movement.

Thus, marketisation and growth, fuelled by competition, constituted, historically, the two fundamental components of the system of market economy. Marketisation has always been the outcome of the effort of those controlling the market economy

to minimise social controls on the markets, whereas economic growth has been the outcome of a process, which, at the micro-economic level, involves the pursuit of profit through the continuous improvement of efficiency. Both marketisation and growth were not the result of changes in 'imaginary significations', or values, but were, instead, the inevitable outcome of the fact that the advent of industrialism (mechanised production) took place under conditions of private ownership and control of the means of production. Under such conditions, as it could be shown by both orthodox and Marxist economic theory, maximisation of economic efficiency crucially depends on further division of labour, specialisation and expansion of the size of market. This is why modern technology has always been designed to maximise economic efficiency, something that implies further expansion of the division of labour and the degree of specialisation, irrespective of the broader economic and social implications.

Therefore, economic growth, extension of division of labour and exploitation of comparative advantages imply a departure from the principle of self-reliance. But, this departure has considerable repercussions at the economic level (unemployment, poverty, economic crises in market economy, and economic irrationalism in socialism), the cultural level (disintegration of social ties and values), the general social level (drastic restriction of individual and social autonomy) and, as we shall see, the ecological level. The inevitable consequence of the pursuit of profit, through maximisation of efficiency and the size of market, has been the concentration of economic power in the hands of the elites that control the economic process. A similar concentration took place in the socialist growth economy. So, the difference between the two types of growth economy with respect to concentration is simply reduced to who owns the means of production and how they are allocated among different uses.

However, the above distinction is necessary because, although ownership – and particularly control of the means of production – was only formally social in the 'socialist' growth economy, the fact that the allocation of resources was achieved mainly through the central planning mechanism, rather than the price mechanism constitutes an important qualitative difference. Thus, whereas in the capitalist growth economy (and the 'socialist market economy') the economic growth objective, as well as the intermediate objectives (efficiency, competitiveness), are derived 'from within' the logic and dynamics of the system itself, in the 'socialist' growth economy, the same objectives are imposed 'from without', by the political decisions of the party bureaucrats who control the planning mechanism. In other words, it is conceivable that a planned economy may pursue different objectives than those adopted by a market economy. But, although a certain amount of development of productive forces will always be needed so that, at least, the basic needs of all citizens are satisfied, still, this does not imply a struggle to maximise growth in competition with the capitalist growth economy ('to catch up and overtake America' was the Soviet slogan) and everything this struggle involves in terms of the need to improve efficiency. So, whereas in the capitalist case, the growth economy is the inevitable outcome of the workings of market economy at the micro-economic level, in the socialist case, it is simply the selected objective at the macro-economic level.

But, why the same growth ideology was shared by two different socio-economic systems? As I attempted to show elsewhere (Fotopoulos 2005: Chapters 1 and 5), the first component of market economy system, the marketisation process, had divided the intelligentsia of the industrial era and led to the two major theoretical and political movements of modernity: liberalism and socialism. However, no similar divide had arisen with respect to the second component, that is, economic growth. Economic growth became a central element of the dominant social paradigm (i.e. the system of beliefs, ideas and the corresponding values, which is associated with the political, economic and social institutions) in both the capitalist and the 'socialist' versions of growth economy. Thus, economic growth became a liberal and a socialist objective, although it is intrinsically linked to market economy alone, and despite the commitment of ruling elites in the AES countries to substitute central planning for market economy.

Therefore, despite the fact that the dominant ideology in the West has been that of liberalism and in the East of socialism, still, both the market economy in the former case and the planned economy in the latter shared the same growth ideology that has been established for over 200 years, in the wake of industrial revolution and the 'grow-or-die' dynamic, which was set in motion by market economy. It was therefore the shift from markets to a market economy system, which marked the move to new forms of social organisation that embodied a new 'social imaginary signification' (i.e., the boundless spreading of 'rational domination' identifying progress with the development of productive forces and the idea of dominating Nature) and not the other way round, as some Greens imply, often influenced by Castoriadis' vague thesis about the two 'parallel' processes we saw above.

For both liberals and socialists, from Adam Smith to Karl Marx, the fundamental problem was how humankind could, with the help of science and its technological applications, maximise economic growth. In fact, Marx was even more emphatic about the importance of rapid economic growth. So, the growth ideology has complemented the liberal ideology of capitalist growth economy and the socialist ideology of socialist growth economy. In this sense, the growth ideology has been the ultimate ideological foundation for both the capitalist and the socialist growth economy, despite the different ways in which the hierarchical patterns of power concentration are structured in the two types of growth economy. Furthermore, the growth ideology has, in a sense, functioned as the 'ideology in the last instance', since it has determined which ideology would be dominant at the end. This is why the economic failure of socialist growth economy (namely, the failure to create a Western-type consumer society) was the main reason that led to the collapse of this type of growth economy and to the present universal predominance of capitalist growth economy and its own ideology (liberalism/neoliberalism) (Fotopoulos 2005: Chapter 6).

This common growth ideology can also account for the fact that both types of growth economy share a similar environmental degradation – in fact, a bigger degradation in the AES countries due to the less efficient technologies used in these economies and the fact that the pollution effects were intensified by their price structures, which undervalued energy and raw material resources, leading to their overuse.

Thus, to the extent that the present concentration of power cannot be simply reduced to capitalist production relations, as Marxists contend, to a similar extent, the ecological crisis itself cannot be merely reduced to capitalist relations and conditions of production, as eco-Marxists maintain (O'Connor, 1992). It is, anyway, evident that an analysis of ecological crisis on the basis of capitalist production relations fails to explain the presence of an even more serious ecological crisis in the AES countries, despite the absence of capitalist production relations in the sense of privately owned means of production. Thus, just as it would be wrong to attribute ecological crisis merely to the growth ideology, as environmentalists and various 'realos' within the Green movement do, disregarding the institutional framework of market economy and the consequent power relations, it would be equally wrong to impute this crisis mainly to capitalist production conditions, as eco-Marxists are trying to do, disregarding the significance of growth ideology on the theory and practice of socialist statism.

In fact, in order to provide an adequate interpretation of the ecological crisis, we should refer not just to the interplay of capitalist production relations with conditions of production (as eco-Marxists do), but to the interplay of ideology with the power relations, which result from the concentration of power in the institutional framework of a hierarchical society. At this point, however, it should be pointed out that although the idea of dominating nature is as old as social domination within hierarchical society, the first historical attempt to dominate nature en masse emerged with the rise of market economy system and the consequent development of growth economy. Therefore, to explain the present ecological crisis we have to begin with the historical factors which led to the emergence of hierarchical society in general, and continue with an examination of the contemporary form of hierarchical society in which the elite draws its power mainly from the concentration of economic power.

Still, despite the fact that the growth ideology underpinned both liberal and socialist ideology, one should not ignore the intrinsic relationship between means and ends. Therefore, in spite of the fact that both types of growth economies aim at the same goal (maximisation of economic growth), the differences in the means used are very important. Planning is a means that is primarily consistent with a system of social ownership of the means of production, whereas the market is primarily consistent with private ownership. Although, therefore, various combinations of planning/market and social/private ownership of productive resources have been proposed and implemented in the past, the fact remains that it is the combination of planning (combined perhaps with forms of artificial 'markets' like the ones proposed by the ID economic model) with forms of social ownership, which only can secure the satisfaction of all citizens' needs. So, any combination of real markets with private ownership of productive resources (as in market economies) is bound to distribute the benefits from economic growth in a very uneven way that does not meet the needs of all citizens. In fact, even a combination of social ownership of the means of production with real markets is bound to lead again (because of the dynamics of market mechanism itself) to significant unevenness and inequality, as is the case in 'socialist-market' economies of today and particularly the 'economic

miracle' of China, which is notorious for its 'phenomenal' growth rates and the parallel huge and growing inequality, as well as the severe damage to environment (Fotopoulos 2008b).

However, apart from this basic difference, the two types of growth economy share many common features and, in particular, two very important characteristics: concentration of economic power and ecological damage. These characteristics, in turn, follow from the fact that both versions share the intermediate objective of *efficiency*. Efficiency is defined in both systems on the basis of narrow techno-economic criteria of input minimisation/output maximisation and not on the basis of the degree of satisfaction of human needs, which is supposed to be the aim of an economic system.[2] Therefore, although concentration of economic power in socialist growth economy was mainly the outcome of the concentration of political power in the hands of party elites, and not the outcome of the 'automatic' functioning of economic system, still, the adopted objective to maximise economic growth and efficiency imposed the need to use the same methods of production in both East and West. Furthermore, given that the concept of economic efficiency, which both systems share, does not take into account the 'externalities' of economic process and particularly the negative consequences of economic growth on environment, the outcome is today's widespread environmental damage all over the planet.

Is De-growth a Matter of Ideology, Values and Imaginary Significations?

Modern hierarchical society relies for its reproduction on the maximisation of economic growth. This is true on three accounts: production, consumption and concentration of income and wealth.

As far as production is concerned, it was shown above why the dynamics of market economy lead to a constant expansion of production for efficiency and profits to be maximised. A non-growth system of market economy is therefore a contradiction in terms. Not simply because the present main actors in the internationalised market economy, the TNCs, will never accept in practice the downscaling of economy and would simply move to other areas in case some countries in the North attempt to adopt a de-growth policy, but also, because the system of market economy is simply incompatible with zero economic growth. Even if we assume the ultimate science fiction scenario that, somehow, a non-growth economy was imposed globally, the outcome would have probably been a Depression much worse than the Great

[2] The usual definition of economic efficiency in terms of technical efficiency, production efficiency and exchange efficiency, although supposedly 'neutral', in fact, assumes away distributional aspects, so that it is perfectly possible for a particular allocation of resources to be 'efficient' and at the same time not capable to meeting adequately (or not at all) even the basic needs of many citizens.

Depression of the pre-war period, with the resulting social chaos possibly leading to various forms of eco-fascism. Of course, this does not mean that a de-growth society is impossible. It simply means that a de-growth society cannot be based on the market system, since economic growth is the very motor that energises it.

On the consumption side, it is well known that for most people the rationale of market and growth economy is their offspring: the consumer society. Middle classes in the North work today under conditions not much different from those of the nineteenth century in terms of actual (not formal) hours of work, and even worse in terms of stress, in order to 'enjoy' the benefits of consumerism – the only reason to suffer a boring and stressful job and, for many, their only meaning of life. On the other hand, lower social groups suffer similar, if not worse, conditions of work, not only in order to cover their basic needs, but also to enjoy – usually through continuous borrowing – as many of the benefits of consumer society as possible, imitating the life style promoted by mass media. Even worse is the position of people in the ex-AES countries and China, India, etc., who either emigrate to the North and work under slavery conditions with the same consumerist 'dream', or simply suffer similar conditions at home with the same aim. It is, therefore, obvious that a de-growth market-based economy and society is non-feasible not only because de-growth deprives it from its basic dynamics on the production side, but also because it deprives it from its justification in the eyes of citizens, who, today, have been transformed into consumers.

Finally, as far as concentration of income and wealth is concerned, this constitutes the fundamental contradiction of growth economy. This is not because, as it is usually argued, the continuation of growth economy has serious environmental implications, but because the necessary condition for the reproduction of growth economy is the concentration of its benefits to a small section of the world population, i.e. the huge inequality in the distribution of world income. This is both because it is simply not *physically* possible for the wasteful consumption standards, which are today enjoyed by the 'two-thirds societies' in the North and the elites in the South, to be universalised and enjoyed by the world population, and also because a universalised growth economy is not *environmentally* sustainable at the present state of technological knowledge and cost of 'environmentally-friendly' technologies. Therefore, concentration of income and wealth and ecological disintegration do not simply constitute *consequences* of the establishment of growth economy, but also *fundamental pre-conditions* for its reproduction. Contrary to the reformist Left's approaches, the growth economy in the North not only is not threatened by the growing inequality of present internationalised market economy, but, instead, depends on it. Thus, just as the production of growth economy is not possible without the plundering of nature, its physical reproduction is equally impossible without further concentration of economic power.

It is therefore clear that the present concentration of economic, political and social power in the hands of the elites who control the growth economy is not simply a cultural phenomenon related to the values established by industrial revolution, as significant currents within the ecological movement naively believe. The realisation of ecological balance is not just a matter of changes in value-systems (abandonment of

the growth logic, consumerism, etc.), which would subsequently lead us to an eco-friendly way of living. In fact, concentration of power constitutes the inevitable outcome of a historical process that started with the establishment of hierarchical social structures and the implied ideology of domination of human over human and nature and culminated in the development of market economy and its by-product growth economy in the last two centuries.

The market/growth economy and the concentration of economic power are opposite sides of the same coin. This means that neither the concentration of economic power nor the ecological implications of growth economy are avoidable within the present institutional framework of internationalised market economy. However, the increase in the concentration of economic power leads many people to the realisation that Progress, in the sense of improvements in welfare through economic growth, has a necessarily *non-universal* character. Therefore, the moment of truth for the present social system will come, when it will be universally acknowledged that the very existence of present wasteful consumption standards depends on the fact that only a small proportion of the world population, now or in the future, are able to enjoy them.

In conclusion, although economic growth has clearly played an important ideological role in both actually existing socialism (as part of socialist ideology) and actually existing capitalism (as part of liberal ideology), still, in the latter, economic growth is also an integral element of its dynamics and its profit and efficiency objectives. But, if growth is seen not just as an imaginary signification, or an ideology or value, but also as a structural characteristic of capitalist market economy, this has serious implications both at the theoretical, as well as the strategic levels.

At the theoretical level, as we have seen above, the issue whether de-growth is compatible with a market economy is not a dogma. It is simply a matter of History and study of the dynamics of the system of market economy. The question is: has there ever been a system of market economy, in the Polanyian sense, whose dynamic had not led to maximisation of economic growth – barring the periods of unwanted economic crises which, however, were always followed by the periods of growth – whether this was a capitalist market economy, or even a 'socialist' one like China of today in which state enterprises have to compete with private? If the answer is negative – as it should be – then this is a strong indication that de-growth could not be seen as just a matter of changing values and imaginary significations, or of 'abandoning a faith system, a religion' (Latouche 2004), and that it is simply non-feasible within a system of market economy and particularly so within the system of internationalised market economy, whose fundamental element, the open and liberalised markets, is crucially incompatible with de-growth. Clearly, therefore, de-growth presupposes a new kind of economy and society beyond the internationalised market economy.

Also, at the strategic level, as we shall see below, the growth economy could not be transcended through a program of reforms, like the ones suggested by the de-growth project, or even through radical decentralisation within the market economy institutional framework, whether this is effected through eco-villages, or urban villages and similar institutions.

Could We Transcend the Growth Economy through Reforms?

No one could, of course, take seriously the 'reforms' suggested by the political and economic elites at their annual luxury meetings in Davos – like the one held in 2007 when the ecological crisis still held priority for mass media and the members of transnational elite, as against the economic crisis which took its place in the Davos meetings since then. The reason is that these reforms take for granted not only the cause of present ecological crisis, i.e., the growth economy and the system of market economy, but also the privileges afforded to them by the same system. Their motto aptly summarised by Utz Claassen, who runs the German Power Company Energy Baden-Württemberg, was that 'only if governments put regulations and clear targets in place, but leave it to the markets to set prices and allocate resources, can the world tackle climate change' (see Weber, 2007). And, of course, not only new measures – according to the elites' logic – should not affect their privileges but, if possible, should also be used as a means to further expand them. As Daniel Esty, director of the Yale Center for Environmental Law and Policy, put it at the Davos World Economic Forum, 'better regulation, better markets, and better technology – all have to combine to ensure that resources are used and deployed correctly … There is a reason why General Electric is betting the company on the assumption that environmental opportunities will create a billion dollar market' (see Weber 2009).

But, what about the really radical reforms suggested by the de-growth project, as a step towards a de-growth economy? The rationale behind the proposed reforms, as were skilfully put by Latouche, is the following:

> The absolutely necessary change is not, of course, one of those, which a simple election could solve by putting in place a new government or by voting for another majority. What is necessary is much more radical: a cultural revolution, neither more nor less. However, let us clarify immediately that for us, as for Castoriadis, 'Revolution means neither civil war nor bloodshed …. The revolution signifies the entry of the essence of the community in a phase of *political* activity, i.e. *instituting*. The social imaginary is put at work and explicitly deals with the transformation of existing institutions' (Castoriadis 2005: 177). The project of a de-growth society is, in this sense, eminently revolutionary. It is about quite as much a change of culture, as of the legal system and the relations of production, the realisation of local 'democratic' initiatives is more 'realistic' than that of a global democracy. It is out of the question to overthrow frontally the domination of capital and the economic powers. There remains only the possibility of dissidence … The de-growth stake consists of thinking that the attraction of the convivial Utopia, combined with the weight of the constraints on change, is likely to favour a 'decolonisation of the imaginary' and to incite sufficient 'virtuous' attitudes in favour of a reasonable solution: an ecological democracy. (Latouche 2007)

However, given what was said above about the non-rejection by the de-growth project of either the system of market economy or its political complement, representative 'democracy', it is clear that the cultural revolution imagined by the de-growth project does not imply a systemic change. Yet, Castoriadis' works, particularly his early works, do imply a systemic change, although in his later works never attempted to articulate a strategy leading to the transcendence of political and ethical heteronomy, or even to outline a genuine democracy consistent with his autonomy project (see Fotopoulos 2002).

The de-growth project mostly deals, as the above extract explicitly states, with the 'decolonisation of the imaginary', i.e., a change in values and ideas. Even when talk is made about changes in the institutions, in the form of changes in the legal system and the relations of production, it is clear that these do not involve changes in the ownership of means of production and the market allocation of resources.

Thus, even if the reformist transition programme (Latouche 2006) was ever to be adopted – a possibility that Latouche rightly rules out – it would have never led to the creation of an alternative sort of socio-economic consciousness. Instead, it would have alienated the lower social groups (including the lower middle class), which would particularly have to pay the price for the adoption of the measures involved. This would be true of such measures as the following ones (also adopted by the mainstream Greens):

1. Bringing material production back down to the levels of the 1960s and 1970s, (something that clearly implies more unemployment and poverty particularly among the weaker social groups).
2. Internalising transport costs, (something that implies that private cars, as well as flying, would become again luxury commodities to be enjoyed mostly by the upper social groups).
3. Returning to small-scale farming, (this means higher prices for foodstuff, an eventuality that would particularly hit the lower social strata, as the food crisis that erupted a couple of years ago in many parts of the South showed).
4. Reducing energy waste by three quarters through measures like the ones proposed by the Negawatt scheme, which aims at a dramatic cut in energy consumption without any drastic reduction in needs, through the use of a system of taxes, norms, bonuses, incentives and selective subsidies to make virtuous behaviour an economically attractive option (this scheme which, even if successful – a big 'if'– is by no means certain, as Latouche himself rightly points out, that it would really avoid the ***rebound effect***, i.e., the economic principle whereby reduced material and energy costs lead, via reduced financial costs, to increased material consumption).

The reason why these adverse effects – that particularly hit the lower social strata – may arise has to do, of course, with the fact that the proposed reforms are based on market economics and particularly the internalisation of external diseconomies – i.e. those costs incurred by the activity of one player, but borne by the community at large, e.g., pollution costs. Similar considerations apply to technological fixes involved in the 'Green capitalism' heavily promoted by the transnational elite at present, like 'green' cars, or the extensive use of renewable energy resources which, as Ted Trainer among others has shown (Trainer 2007), could only have the desired effect if economic growth, living standards and consumption are drastically cut – something that clearly begs the question.

Still, Latouche is right when he argues that 'the creation of democratic local initiatives is more realistic than that of a democratic world government', particularly if such local initiatives take the form of a confederation of *Demoi*, as proposed by the Inclusive Democracy project, which Latouche discusses in some detail

(Latouche 2006). The idea of a democratic world government – recently revived by many reformist Left intellectuals who support the initiative to exert pressure on governments through NGOs, etc. for a global referendum, which will compel the convening of a framing conference where all of the stakeholders (national governments, NGOs, corporations, unions, religions, scholars, etc.) will have to sort through the issues and compose a world constitution – is another reformist folly. This is because the fundamental differences in the objective conditions between countries today (e.g. between USA and China or Holland and Brazil, etc.), following decades of uneven capitalist development are such, so that any idea of common ecological or economic policies which would involve the required radical changes on patterns of growth production and consumption is nonsensical.

However, localism, either it takes the form of urban villages and participatory democracy (Homs), or even of a confederation of *demoi* within a reformed market economy and representative 'democracy' (Latouche) clearly could not lead to a de-growth society on the basis of the above analysis. This sort of 'ecological democracy' in no way solves the problem of concentration of economic and political power – the root cause of present multidimensional crisis.

Similar considerations apply to Ted Trainer's *Simpler Way,* which involves the development of 'non-affluent (but quite sufficient) material living standards, mostly small, highly self-sufficient local economies' through a profound change in values and world view, away from some of the most fundamental elements in Western culture, especially to do with competitive, acquisitive individualism. Trainer argues that 'our best chance will be through an attempt to work here and now on the transformation of existing towns and suburbs towards being 'eco-villages' of a kind' – a process which, he suggests, could begin as of now, through small local groups beginning to take more control over their local economies. This, he concludes, could be achieved with no fight against capitalism: 'The Simpler Way is death for capitalism, but the way we will defeat it is by ignoring it to death, by turning away from it and building those many bits of the alternative that we could easily build right now' (Trainer 2006).

However, as I have pointed out in reply to this argument (Fotopoulos 2006), only if present anti-systemic activities prefiguring the system become an integral part of an anti-systemic movement, could they be part of a solution to the critical problem we face today rather than part of the problem itself. This process involves not the creation of eco-villages (mainly outside the main society) but, instead, the creation of local 'inclusive democracies in action' which would gradually move resources out of the capitalist market economy and create new political, economic and ecological institutions to replace the present ones. In other words, the core of the transitional process should involve a change of institutions at the local level which, through an interplay with a parallel change in values, would lead to a new culture rather than, as Trainer seems to argue, the whole process could simply be effected through a radical change in culture that is not necessarily connected with any parallel institutional change.

To conclude, economic localism, i.e., the change in relations of production in terms of creating self-sufficient or even self-reliant communities, is impossible as

long as the TNCs and their branches are now spread in every community, and markets for commodities, capital and labour are liberalised (the first two being also fully opened) within the context of present globalisation. Even in the transitional period, self-sufficiency is only one of the preconditions of economic democracy as part of an Inclusive Democracy, the other ones being demotic ownership of the means of production and a new system of democratic allocation of resources. All these institutions have to be set in motion on the way to replace, at the end of this process, TNCs and the system of market economy by a new system of economic organisation, which would not be geared by the market system and the principles of profit maximisation and efficiency that inevitably lead to a growth economy. Instead, it would be geared exclusively by the choice to cover the basic needs of all citizens and those of the non-basic needs that citizens themselves decide to cover – collectively, through their democratic assemblies and individually, through an artificial 'market' securing also freedom of choice, like the one proposed by the ID project – within a process aiming at integrating society with nature (Fotopoulos 1997: Chapter 6, 2005: Chapter 14).

Similarly, as far as political localism is concerned, even in the transitional period, forms of direct or political democracy have to be created which, initially, will be in a dual power relationship with the state, until eventually they become universalised and federated into a confederal ID. To my mind, it is only through a transitional strategy (Fotopoulos 2005: Chapter 16) aiming to create new democratic political and economic institutions and, through *paideia*, which would aim to make hegemonic the corresponding values, that we could realistically hope to create the conditions for the emergence of an economy and society not based on economic growth: a real ecological democracy, as an integral part of an Inclusive Democracy.

Postscript: De-growth and the Present Global Economic Crisis

As it has become already obvious, the multidimensional crisis mentioned above has deteriorated rapidly in late 2008 and early 2009, as a result of the present deep crisis of the internationalised market economy. This crisis began as a financial crisis – when the banks' huge losses because of the financial bubbles have made them reluctant to lend (Fotopoulos: 2008a), and consequently it has developed into a serious crisis of the real economy – when the lack of lending has pushed the world economy into a deep recession (Fotopoulos 2009). At the same time, the ecological deterioration has also accelerated, with scientists now predicting that world will have exceeded 2050 safe carbon emissions limit by 2020, namely, about 20 years earlier than planned under international obligations (Connor, 2009).

However, the present deep recession, which is also an enforced de-growth by the system itself, indirectly showed the sheer utopianism of the de-growth project. Thus, although, for as long as the crisis lasts, the pressure on resources would ease correspondingly, at the same time, the massive rise in unemployment and disguised unemployment and the consequent poverty among the lower social groups, which particularly pay the price of the crisis, had created conditions of social unrest that

have already led to a series of social explosions (Greece, Eastern Europe, etc.) that threaten the very stability of the system (Cohen 2009). Even therefore if the middle classes – which presently determine the electoral outcome in advanced capitalist countries, as the lower social groups mostly abstain from it – were to elect a government committed to de-growth, it is more than likely that it would be the lower social groups which will mainly pay the price for it – even if governments were to take some measures to improve income distribution, as de-growth supporters promise. This is because the middle and upper social groups could well afford some limits to growth that would imply certain cuts to their consumption standard, as supporters of de-growth like Paul Ariès argue (Ariès 2007), if they feel sufficiently threatened by the ecological crisis. But this is not the case with lower social groups. And the same applies at the world level, when, according to the UN's Food and Agriculture Organisation, almost a billion people are hungry and a multiple of them are poor (see Borger and Jowitt 2008). It is therefore clear that for all those people, who may be the majority of world population, the ecological problem is well down in their list of priorities to be persuaded to support the de-growth project. The fiasco of the Copenhagen world summit clearly illustrated all these issues!

Therefore, only a society which would have first eliminated inequality could meaningfully discuss de-growth as an objective, after it has already met the basic needs of all its citizens – as the ID project proposes. But, such a society is completely incompatible with an economy based on the market economy system, for the reasons I developed above. This is why, within the context of an internationalised market economy, the de-growth aim is a utopian myth.

References

Ariès, P. (2007). *Mésusage, Essai sur l'hypercapitalisme*. Paris: Parangon/Vs.

Borger, J., & Jowitt, J. (2008). Nearly a billion people worldwide are starving: UN agency warns. *Guardian,* December 10.

Castoriadis, C. (1991). Reflections on 'rationality' and 'development'. In D. Ames Curtis (Ed.), *Philosophy, Politics, Autonomy*. Oxford: Oxford University Press.

Castoriadis, C. (1996). La démocratie comme procédure et comme régime. *La montée de l' insignifiance*, 221–241.

Castoriadis, C. (1997). The retreat from autonomy: Postmodernism as generalised conformism. In C. Castoriadis (Ed.), *World in fragments* (pp. 32–45). Stanford: Stanford University Press.

Castoriadis, C. (2005). *Une société à la derive*. Paris: Seuil.

Cohen, N. (2009). Be very worried – rioting's coming home. *Observer*, January 25.

Connor, S. (2009). Climate chaos predicted by CO_2 study. *Independent*, April 30.

Fotopoulos, T. (1985). *Dependent development: The case of Greece*. Athens. Available at: http://www.inclusivedemocracy.org/fotopoulos/

Fotopoulos, T. (1997). *Towards an inclusive democracy*. London/New York: Cassell/Continuum.

Fotopoulos, T. (2001). The myth of postmodernity. *Democracy and Nature, 7*(1), 27–76. Available at: http://www.democracynature.org/dn/vol7/takis_postmodernism.htm

Fotopoulos, T. (2002). Towards a democratic liberatory ethics. *Democracy and Nature, 8*(3), 361–396. Available at: http://www.democracynature.org/dn/vol8/takis_ethics.htm

Fotopoulos, T. (2003). The Inclusive Democracy project – a rejoinder. *Democracy and Nature, 9*(3), 429–472. Available at: http://www.democracynature.org/dn/vol9/takis_rejoinder.htm

Fotopoulos, T. (2005). *The multidimensional crisis and inclusive democracy*. London: International Journal of Inclusive Democracy publication. Available at: http://www.inclusivedemocracy.org/journal/ss/ch8.htm

Fotopoulos, T. (2006). Is the eco-village movement a solution or part of the problem? *The International Journal of Inclusive Democracy, 2*(3). Available at: http://www.inclusivedemocracy.org/journal/vol2/vol2_no3_Takis_eco_village.htm.

Fotopoulos, T. (2007). The ecological crisis as part of the present multi-dimensional crisis and Inclusive democracy. *The International Journal of Inclusive Democracy, 3*(3). Available at: http://www.inclusivedemocracy.org/journal/vol3/vol3_no3_takis_torino.htm

Fotopoulos, T. (2008a). The myths about the economic crisis, the reformist Left and economic democracy. *The International Journal of Inclusive Democracy, 4*(4). Available at: http://www.inclusivedemocracy.org/journal/vol4/vol4_no4_takis_economic_crisis.htm

Fotopoulos, T. (2008b). Is sustainable development compatible with present globalisation? The Chinese case. *The International Journal of Inclusive Democracy, 4*(4). Available at: http://www.inclusivedemocracy.org/journal/vol4/vol4_no4_takis_chinese_case.htm

Fotopoulos, T. (2009). The 'new world order' hype and the new version of social-liberalism. *The International Journal of Inclusive Democracy, 5*(2). Available at: http://www.inclusivedemocracy.org/journal/vol5/vol5_no2_takis_new_world_order_hype.htm

Homs, C. (2007). Localism and the city: The example of 'urban villages'. *The International Journal of Inclusive Democracy, 3*(1). Available at: http://www.inclusivedemocracy.org/journal/vol3/vol3_no1_Homs_urban_villages.htm

Latouche, S. (2003). Will the West actually be happier with less? The world downscaled. *Le Monde diplomatique*, December.

Latouche, S. (2004). Why less should be so much more: De-growth economics. *Le Monde diplomatique*, November.

Latouche, S. (2005). Can democracy solve all problems? *The International Journal of Inclusive Democracy, 1*(3). Available at: http://www.inclusivedemocracy.org/journal/vol1/vol1_no3_latouche.htm

Latouche, S. (2006). The globe downshifted. *Le Monde diplomatique*, January.

Latouche, S. (2007). De-growth: An electoral stake? *The International Journal of Inclusive Democracy, 3*(1). Available at: http://www.inclusivedemocracy.org/journal/vol3/vol3_no1_Latouche_degrowth.htm

O'Connor, J. (1992). Capitalism, nature, socialism. *Society and Nature, 1*(2), 174–202.

Richards, S. (2009). A catastrophe that leaves our democracy in crisis. *Independent*, May 9.

Trainer, T. (2006). On eco-villages and the transition. *The International Journal of Inclusive Democracy, 2*(3). Available at: http://www.inclusivedemocracy.org/journal/vol2/vol2_no3_Trainer_eco-villages.htm

Trainer, T. (2007). Renewable energy: No solution for consumer society'. *The International Journal of Inclusive Democracy, 3*(1). Available at: http://www.inclusivedemocracy.org/journal/vol3/vol3_no1_Trainer_renewable_energy.htm

Weber, T. (2007). Has big business gone green at last? *BBC News Website*, Davos January 27. Available at: http://news.bbc.co.uk/1/hi/business/6302019.stm

Chapter 8
Bookchin's Social Ecology and Its Contributions to the Red-Green Movement[1]

Brian Tokar

Abstract Murray Bookchin, the founding theorist of social ecology, was a pioneer of left ecological thought and action beginning in the 1950s and 1960s, and his voluminous and many-faceted work continues to influence theorists and activists to this day. His historical and anthropological investigations in *The Ecology of Freedom* affirm the belief that any truly liberatory popular movement must directly challenge hierarchy in general, not just its particular manifestations as oppression by race, gender or class, and his 'libertarian municipalism' offers both an outline of a political strategy and the structure underlying social ecology's long-range reconstructive vision. This vision of directly democratic communities, challenging state power while evolving in harmony with all of nature, drew on decades of research into political structures, sustainable technologies, revolutionary popular movements, and the best of the utopian tradition in Western thought. At a time when the corrosive simplification of living ecosystems and the retreat into an increasingly unstable and synthetic world that Murray Bookchin predicted in the 1960s has evolved from a disturbing future projection into a global reality, our long-term survival depends to a large extent on our ability to challenge the dominant capitalist system at its core and evolve a broad, counter-hegemonic social movement that refuses to compromise its values and settle for partial measures. The revolutionary and reconstructive social and political vision of social ecology can still play an enlightening and encouraging role in such a movement.

Keywords The Institute for Social Ecology • Libertarian municipalism • Murray Bookchin • Red-Green movement • Social ecology

[1] An earlier version of this chapter appeared in Capitalism Nature Socialism, 19(2), March 2008, 51–66.

B. Tokar (✉)
Institute for Social Ecology, P.O. Box 93, Plainfield, VT 05667, USA
e-mail: info@social-ecology.org

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_8, © Springer Science+Business Media B.V. 2010

As a rising awareness of the consequences of environmental problems comes to reshape the agendas of critical thinkers and activists around the world, it is more important than ever to fully appreciate the origins of eco-socialist thought. Perhaps foremost among those who brought a coherent left analysis to environmental issues, while first introducing ecology to many on the left, is Murray Bookchin, the founding theorist of social ecology. Bookchin was a pioneer of left ecological thought and action beginning in the 1950s and 1960s, and his voluminous and many-faceted work continues to influence theorists and activists to this day.

Marcel van der Linden (2001) of the International Institute of Social History, based in the Netherlands, has described Bookchin's collection of 1960s-era essays, *Post-Scarcity Anarchism*, as 'definitely … one of the most influential works on the international generation of 1968'. New York's influential weekly newspaper, the *Village Voice*, placed Bookchin's influential work, *The Ecology of Freedom* 'at the pinnacle of the genre of utopian social criticism'.[2] Countless important concepts that became common wisdom among ecological activists in the 1960s and beyond were first articulated clearly in Bookchin's writings, including the socially reconstructive dimension of ecological science, the potential links between sustainable technologies and political decentralisation, and the further evolution of traditional class consciousness toward a broad historical critique of the roots of social hierarchy.

Bookchin authored more than 20 books and countless articles and pamphlets, seeking to offer a coherent theoretical underpinning to the work of a generation of ecological and libertarian socialist activists and writers.[3] Bookchin also revived and updated the tradition of social anarchism, which had fallen rather dormant by the early 1960s, but he later renounced his tie to anarchism and sought to articulate a new political synthesis, which he eventually termed 'communalism' (Bookchin 2007, Biehl 2007). During the 1960s–1980s, a period when much of the Marxist left remained wedded to the view that continued economic growth is fundamental to social progress, Bookchin was among the very first thinkers to explicitly link an ecological understanding of society and its relationships to non-human nature to a thoroughgoing critique of capitalism and modern technology, as well as the imperative of a radically democratic social vision.

Social Ecology

Murray Bookchin was raised in a family of socialist militants in New York City during the 1920s and 1930s, and often told of his expulsion from the Young Communist League at age 18 for openly criticising Stalin. He briefly identified with Trotskyism while working and organising in the auto foundries around Mahwah, New Jersey in the 1940s, and became involved with a group of like-minded

[2] Quoted at http://essentialbooks.com/id50.htm.

[3] A partial bibliography is available at http://dwardmac.pitzer.edu/Anarchist_archives/bookchin/bookchinbiblio.html.

former Trotskyists around the journal *Contemporary Issues* from the late 1940s through most of the 1950s. The *Contemporary Issues* group was critical of the increasing political accommodation and corruption of organised labour and moved toward a politics centered in the democratic renewal of communities (van der Linden, 2001). Bookchin's first published article, 'The problem of chemicals in food', appeared in *Contemporary Issues* in 1952. During this same period, Bookchin also encountered a group of anarchist veterans of an earlier generation of labour struggles, affiliated with the Workmen's Circle and Libertarian Book Club in New York. His subsequent identification with the social anarchist tradition continued up until the final decade of his life.

Bookchin's theory of social ecology emerged from a time in the early 1960s when ecological thought, and even ecological science, were widely viewed as 'subversive'. Even conventional environmental scientists were contemplating the broad political implications of an ecological world view, confronting academic censorship, and raising challenging questions about the widely accepted capitalist dogma of perpetual economic growth. In a landmark 1964 issue of the journal *Bioscience*, the ecologist Sears (1964) challenged the 'pathological' nature of economic growth and inquired whether ecology, 'if taken seriously as an instrument for the long run welfare of mankind [*sic*], would … endanger the assumptions and practices accepted by modern societies …'.

Bookchin carried the discussion considerably further, proposing that ecological thought is not merely subversive, but fundamentally revolutionary and reconstructive. With the World Wars and Great Depression of the twentieth century appearing to have strengthened global capitalism, Bookchin saw the emerging ecological crisis as the one challenge that would fundamentally undermine the system's inherent logic. His first book, *Our Synthetic Environment*, was issued (under the pseudonym, Lewis Herber) by a major New York publisher, Alfred A. Knopf, and was cited by authorities such as the microbiologist Réne Dubos (1965) as comparable in its influence to Rachel Carson's *Silent Spring*. *Our Synthetic Environment* offered a detailed and accessible analysis of the social origins of pollution, urban concentration, and chemical agriculture.

Bookchin's 1964 article, titled 'Ecology and revolutionary thought', represented a profound breakthrough. In that essay, originally circulated as an underground pamphlet in New York City, he stated (Bookchin 1971: 58):

> The explosive implications of an ecological approach arise not only because ecology is intrinsically a critical science – critical on a scale that the most radical systems of political economy have failed to attain – but also because it is an integrative and reconstructive science. This integrative, reconstructive aspect of ecology, carried through to all its implications, leads directly into anarchic areas of social thought. For, in the final analysis, it is impossible to achieve a harmonisation of man and nature without creating a human community that lives in a lasting balance with its natural environment.

Over the next 4 decades, Bookchin's social ecology emerged as a unique synthesis of utopian social criticism, historical and anthropological investigation, dialectical philosophy, and revolutionary political thought. It can be viewed as an unfolding of several distinct layers of understanding and insight, spanning all of these dimensions, and more.

At its most outward level, social ecology confronts the social and political roots of contemporary ecological problems. It critiques the ways of conventional environmental politics and points activists toward radical, community-centered alternatives. Bookchin always insisted that ecological issues should be understood primarily as social issues and was impatient with the narrowly instrumental approaches advanced by mainstream environmentalists to address particular problems. The holistic outlook of ecological science, he argued, demands a social ecology that examines the systemic roots of the ecological crisis, while challenging the institutions responsible for perpetuating an unsustainable status quo.

This critical outlook led to many years of research into the evolution of the relationship between human societies and non-human nature. Both liberals and Marxists have generally viewed the 'domination of nature' as a fulfillment of human destiny and human nature – or more recently as an unfortunate but necessary corollary to the advancement of civilisation. Bookchin sought to turn this view on its head, describing the 'domination of nature' as a myth perpetuated by social elites in some of the earliest hierarchical societies. Far from a historical necessity, efforts to dominate the natural world are instead a destructive byproduct of entrenched social hierarchies.

In *The Ecology of Freedom*, Bookchin examined the anthropological literature of the period, seeking forward looking principles and practices that emerge from our understanding of non-hierarchical 'organic' societies. These core principles include interdependence, usufruct, unity-in-diversity, complementarity, and the irreducible minimum, i.e., the principle that communities are responsible for satisfying their members' most basic needs (Bookchin 1982: 43–61). Complementarity for Bookchin meant disavowing the oppressive inequality of supposed 'equals' within contemporary societies, instead invoking traditional communities' efforts to compensate for differences in ability among members. Technology for Bookchin was never an end in itself, nor an autonomous principle of human evolution, but rather a reflection of an evolving 'social matrix' (Bookchin 1982: 240–266). His historical and anthropological investigations affirmed the belief that any truly liberatory popular movement must directly challenge hierarchy in general, not just its particular manifestations as oppression by race, gender or class.

These explorations of the persistent role of social hierarchies in shaping social evolution and our relationships with non-human nature led Bookchin further toward a philosophical inquiry into the evolutionary relationship between human consciousness and natural evolution. He sought to renew the legacy of dialectical philosophy, abandoning popular oversimplifications and reinterpreting dialectics from its origins in the works of philosophers from Aristotle to Hegel. Bookchin's 'dialectical naturalism' emphasises the potentialities that lie latent within the evolution of natural and social phenomena, and celebrates the uniqueness of human creativity, while emphasising its emergence from the possibilities inherent in Aristotle's first nature. It eschews the common view of nature as merely a realm of necessity, instead viewing nature as striving to actualise its underlying potentiality for consciousness, creativity and freedom (Bookchin 1990).

For Bookchin, a dialectical outlook on human history compels us to reject what merely is and follow the logic of evolution toward an expanded view (challenging

Hume and others) of what could be, and ultimately what ought to be. While the realisation of a free, ecological society is far from inevitable – Bookchin was not the narrow teleologist his critics sometimes caricatured him as – it is the most rational outcome of 4 billion years of natural evolution. This dialectical view of natural and social evolution led to the sometimes controversial claim that nature itself can be viewed as an objective ground for a social ethics.

While continuing to develop and clarify his philosophy of nature, Bookchin also developed a distinct approach to political praxis, one aimed at realising the ecological reconstruction of society. Bookchin's 'libertarian municipalism' draws on what he viewed as a fundamental underlying conflict between communities and the state as well as on historical examples of emerging direct democracies from the Athenian *polis* to the New England town meeting. Bookchin sought a redefinition of citizenship and a reinvigoration of the public sphere, with citizen assemblies moving to the center of public life in towns and neighborhoods, taking back control of essential political and economic decisions. Representatives in city councils and regional assemblies would become mandated delegates, deputized by their local assemblies and empowered only to carry out the wishes of the people.

Confederation is also a central aspect of libertarian municipalism, with communities joining together to sustain counter-institutions aimed at undermining the State and advancing a broad liberatory agenda. In contrast to many ecologists writing about politics, Bookchin embraced the historical role of cities as potential sites of freedom and universalism and viewed the practice of citizenship in empowered neighborhood assemblies as a means for educating community members into the values of humanism, cooperation, and public service (Bookchin 1992; 1974). The stifling anonymity of the capitalist market is to be replaced by a moral economy in which economic, as well as political relationships, can be guided by an ethic of mutualism and genuine reciprocity (Bookchin 1986).

Libertarian municipalism offers both an outline of a political strategy and the structure underlying social ecology's long-range reconstructive vision: a vision of directly democratic communities challenging state power while evolving in harmony with all of nature. This vision draws on decades of research into political structures, sustainable technologies, revolutionary popular movements, and the best of the utopian tradition in Western thought. Bookchin spent his last decade or so intensively researching the history of revolutionary movements in the West from the Middle Ages to the middle of the twentieth century, drawing out the lessons of the diverse, often subterranean, popular currents that formed the basis for revolutionary movements in England, France, the U.S., Russia, Spain, and beyond (Bookchin 1996 et seq.).

Radical Democracy in the Anti-nuclear Movement

The influence of this body of ideas upon popular ecological movements began with the largely underground distribution of Bookchin's essays during the 1960s. Ideas he first articulated, such as the need for a fundamentally radical ecology in

contrast to technocratic environmentalism, were embraced by the growing ranks of ecologically-informed radicals. Bookchin and his colleagues, including Institute for Social Ecology co-founder Daniel Chodorkoff, also participated in some of the earliest efforts to initiate the 'greening' of cities and bring alternative, solar-based technologies into inner city neighborhoods.

By the late 1970s, social ecology was playing a rather visible role in the rapidly growing movement against nuclear power. Utility and state officials were identifying rural communities across the U.S. as potential sites for new nuclear power plants, and the movement that arose to counter this new colonisation of the countryside united traditional rural dwellers and those who had recently moved 'back-to-the-land' with seasoned urban activists and a new generation of radicals who only partially experienced the ferment of the 1960s. Following the mass arrest of over 1,400 people who sought to nonviolently occupy a nuclear construction site in Seabrook, New Hampshire in 1977, decentralised anti-nuclear alliances began to appear all across the U.S. These alliances were committed to nonviolent direct action, bottom-up forms of internal organisation, and a sophisticated understanding of the relationship between technological and social changes. They were captivated by the utopian dimension of the emerging 'appropriate technology' movement for which Bookchin and other social ecologists provided an essential theoretical and historical grounding. Over a hundred students came to the Institute for Social Ecology (ISE) in Vermont every summer to acquire hands-on experience in organic gardening and alternative technology while studying social ecology, eco-feminism, reconstructive anthropology, and other relevant political and theoretical topics.

New England's anti-nuclear Clamshell Alliance was the first to adopt the model of the affinity group as the basis of a long-range regional organising effort.[4] Murray Bookchin introduced the concept of *grupos de afinidad* – borrowed from the Spanish FAI (Iberian Anarchist Federation) – into the U.S. in an appendix (Bookchin 1971: 221–222) to his influential 1968 pamphlet, 'Listen, Marxist' (Bookchin 1971: 173–220). Bookchin initially compared the revolutionary Spanish affinity groups to the countercultural collectives that were appearing in cities across the U.S. during the late 1960s. Quaker activists in New England initially advocated the formation of affinity groups as a structure for personal support and security during large demonstrations at Seabrook. But after the mass arrests there, followed by 2 weeks of incarceration in New Hampshire's National Guard Armories, participants began to view the affinity groups as the basis for a much more widely participatory, directly democratic form of social movement organisation than had ever been realised before.

Bookchin's original 'Note on affinity groups' was distributed widely in the lead-up to the planned follow-up action at Seabrook in June of 1978, and activists in Vermont, Boston, and elsewhere in New England worked hard to make the

[4] At least one earlier mass action, aimed at shutting down Washington, DC to protest the Vietnam War in the spring of 1971, was organised on the affinity group model, but Clamshell activists were the first in the U.S. to make this the underlying structure of their organisation.

Clamshell Alliance live up to the most profoundly democratic potential of this organisational model. Anti-nuclear alliances across the U.S. followed the Clamshell in taking their names from local species of animals and plants that were endangered by the spread of nuclear power, and adopted affinity groups and spokes-councils as their fundamental organisational and decision-making structures.[5]

The euphoria of affinity group-based internal democracy was to be short-lived in the Clamshell, however. Protracted debates over the appropriateness of various tactics within a framework of organised nonviolence led to a growing polarisation within the organisation. When most of the original founders of the Clamshell Alliance acceded to a deal with New Hampshire's Attorney General that led to the cancellation of the planned 1978 Seabrook occupation in favor of a large legal rally, activists at the ISE, in Boston, and elsewhere challenged that decision and pressed for a renewal of affinity group democracy. Bookchin's writing during this period helped sustain the anti-nuclear movement's powerful utopian impulses and encouraged the grassroots resistance to the betrayals of the movement's self-appointed 'leaders' (Bookchin 1980: 73–83).

These events largely bypassed the often retrograde U.S. Marxist Left of the 1970s. Marxist-Leninists of the period had little use for a resolutely anti-authoritarian ecological movement; many remained wedded to the increasingly dubious myth of advanced 'socialist' nuclear power in the USSR. Bookchin responded by elaborating his critique of Marxism, which he had launched with the colorful polemic, 'Listen Marxist!' first issued in 1968. In a series of in-depth theoretical articles originally published in the journal *Telos*, Bookchin (1980: 193–248) advanced the view that Marxism was incompatible with a distinctly ecological approach to politics and social ethics. Even as authors such as Foster (2000) would later come to re-examine the roots of Marx's ideas in early ecological science as well as classical philosophical materialism, Marxist-Leninist praxis during the latter part of the twentieth century remained largely oblivious to the new understandings of society and nature that were being advanced by a wide array of ecological thinkers, including Bookchin.

In his late 1970s writings, Bookchin characterised Marxism as 'the most sophisticated ideology of advanced capitalism', incapable of addressing the full extent of social domination, and fatally wedded to archaic myths of technological progress and economic determinism. 'The entire theory is captive to its own reduction of ethics to law, subjectivity to objectivity, freedom to necessity', Bookchin wrote (1980: 200). Even the Frankfurt School, which Bookchin read exhaustively, did not sufficiently question the roots of domination nor the 'historical necessity' of capitalist development. Later in his life, however, in response to the rising popularity of New Age mysticism and anti-organisational 'lifestyle anarchism', Bookchin became impatient with contemporary trends in anarchism and reaffirmed his theoretical indebtedness to the Marxist tradition, as we will see below.

[5] A sympathetic, but factually flawed description of the libertarian and feminist roots of this movement, on both the east and west coasts, is available in Epstein (1991).

Social Ecology and Green Politics

By the early 1980s, Bookchin and other social ecologists began to closely follow the emergence of a new Green political movement in West Germany and other European countries. Social ecologists became excited about the German 'anti-party party' that initially functioned more as an alliance of grassroots 'citizen initiatives' than a conventional parliamentary vehicle. In the early 1980s, many European Greens were running for office as delegates from various social movements, important decisions were made at the local level, and those elected to public offices or internal positions of responsibility were obliged to frequently rotate their positions. Greens in Germany and other countries were articulating a sweeping ecological critique in all areas of public policy, from urban design, energy use and transportation, to nuclear disarmament and support for emerging democratic movements in Eastern Europe. Translations of Bookchin's writings played an influential role in the development of this new Green political agenda.

Staff members from the Institute for Social Ecology played a central role in organising the first gathering, in 1984, aimed at constituting a Green political formation in the U.S. One significant bloc of participants at that meeting were pushing for a national organisation through which self-appointed representatives of various issue-oriented constituencies would form a national organisation, relate to other NGOs on the national level, and perhaps create a U.S. Green Party within the year. The model that prevailed, however, was that of a more decentralised, grassroots-based movement, rooted in Green locals empowering regional delegates to make confederal decisions following locally debated mandates. Social ecologists in New England had already begun to form a confederation of Green locals on that model, and the idea once again spread across the country. By the first national conference of the U.S. Greens in July of 1987, there were already over a hundred grassroots Green locals spread across the country. Ideas from social ecology and activists based at the ISE played key roles in the development of the first national Green Program between 1988 and 1990 (Tokar 2006a).

The early 1990s saw a growing tension between Greens committed to grassroots democracy and a municipalist politics, and those advocating for a U.S. Green Party that would field candidates for national office. Bookchin and other social ecologists in New England circulated a call for a Left Green Network in 1988, and similarly-minded activists in the San Francisco Bay Area developed a Radical Green caucus. As Greens across the U.S. collaborated on the development of a national program, policy positions advocated by the Left Greens were adopted by three consecutive national gatherings, much to the chagrin of those promoting a more mainstream agenda. Ironically, many Left Greens and other grassroots activists began losing interest in the Greens at this point. Green moderates went on to form a separate national organisation, based exclusively on state-certified Green Parties, while the Left Green Network continued holding educational conferences and publishing educational materials largely independent of any other Green entity.

During the same period, a group of recent ISE students formed a youth caucus in the Greens, which eventually became an independent organisation known as the

Youth Greens. The Youth Greens attracted a significant base of young radicals largely from outside the Greens and joined with the Left Greens to initiate a major direct action to coincide with the April 1990 twentieth anniversary of the original Earth Day. On the day following the official commemorations – a Sunday filled with polite, heavily corporate-sponsored events – several hundred Left Greens, Youth Greens, eco-feminists, environmental justice activists, Earth Firsters and urban squatters converged on Wall Street seeking to obstruct the opening of stock trading on that day. Activists based around the ISE in Vermont had prepared a comprehensive action handbook, featuring a variety of social ecology writings and helped create a broad, empowering coalition effort. The next day, columnist Juan Gonzalez (1990) wrote in the *New York Daily News*,

> Certainly, those who sought to co-opt Earth Day into a media and marketing extravaganza, to make the public feel good while obscuring the corporate root of the Earth's pollution almost succeeded. It took angry Americans from places like Maine and Vermont to come to Wall Street on a workday and point the blame where it belongs.

Meanwhile, in Burlington, Vermont, Bookchin and other social ecologists formed the Burlington Greens to develop positions on urban issues and run candidates for local office. They opposed the commercial development of the city's Lake Champlain waterfront and argued that the neighborhood assemblies established by a Progressive city administration for planning and administrative purposes should become the basis for a more empowered model of democratic neighborhood governance. The Burlington Greens gained national headlines in 1989 when the Greens contested several City Council seats and a Green candidate challenged the city's Progressive mayor in a citywide election.

Movement Debates and Directions

While the debates continued among the U.S. Greens, Bookchin found himself at the center of a far more explosive public controversy, rooted in his pointed critique of the emerging philosophy of 'deep ecology'. Deep ecology, which originated in Norway but gained many adherents in the English-speaking world, is a philosophical outlook rooted in principles of 'self-realisation' (i.e., deepening one's personal identification with all life on earth) and 'biospheric equality', the assertion that humans are coequal with other forms of life (Devall 1995; Devall and Sessions 1985). Deep ecology has inspired an extensive literature in environmental ethics, eco-psychology, conservation biology, and other fields, and in the 1980s formed the underlying world view of most of the founders of the Earth First direct action movement.

While Earth First's often-dramatic action campaigns in defense of endangered forests helped redefine radical environmentalism in the 1980s and beyond, several of that movement's founders began to articulate shockingly regressive views on a variety of crucial issues, rooted in a grim and avowedly misanthropic view of human nature. In their attempts to overturn what they viewed as an inherently destructive 'anthropocentrism', even among dedicated environmentalists, prominent

authors in the *Earth First!* journal railed against Native American hunting practices and primitive agriculturalists, touted AIDS and famine as 'natural' cures for human overpopulation, and blamed refugees from Mexico for despoiling the deserts of the American Southwest.[6] Journal editor Foreman (1987) insisted that his focus on population control should be 'an absolute litmus test' for whether one 'belongs' in Earth First.

In a scathing polemic, first presented at the first national conference of the U. S. Greens in 1987, Bookchin (1987) attacked deep ecology as 'vague, formless, [and] often self-contradictory', a 'black hole of half-digested, ill-formed and half-baked ideas', and an 'ideological toxic dump'. He condemned deep ecologists for ignoring the social and historical basis of the ecological crisis, upholding a distorted biological determinism with quasi-fascist implications, and compromising the moral and ethical basis for a viable eco-philosophy. The ensuing debate between Bookchin and various proponents of deep ecology was carried into the pages of several prominent publications of the period and greatly heightened Bookchin's public notoriety. Ultimately, more left-leaning voices within Earth First, such as the feminist labour activist Bari (1994: 57), disavowed their founders' misanthropic leanings and insisted that 'Earth First! is not just a conservation movement, it is also a social change movement'. Today, Earth First underscores its opposition to all forms of oppression, and advocates for global justice, indigenous rights and radical urbanism, along with the defense of wilderness.

During the 1980s and 1990s, social ecologists also played a central role in the development and elaboration of eco-feminist ideas. Ynestra King's eco-feminism classes at the ISE during the late 1970s were among the first to be offered anywhere, and annual eco-feminist colloquia were organised by Chaia Heller and other social ecologists during the early 1990s. Eco-feminist activists played a central role in initiating two Women's Pentagon Actions and a women's peace camp alongside the Seneca Army Depot in New York State, and also played a central role in the evolution of Green politics in the U.S. (Gaard 1998). Eco-feminism evolved through the 1990s, however, as a predominantly cultural and spiritual movement that social ecologists became increasingly critical of as the decade progressed (Heller 1999; Biehl 1991).

In the later 1990s, activists connected to the Institute for Social Ecology became involved in the rapidly growing movement to promote global justice and challenge the institutions of capitalist globalism. Social ecologists raised discussions around the broad potential for direct democracy as a counter-power to centralised economic and political institutions and helped further the evolution toward a longer-range reconstructive vision within the movement that came of age on the streets of Seattle. A few ISE students were centrally involved in the organising to shut down the WTO in Seattle, and several others formed an affinity group to participate in and document those actions. After Seattle, the ISE booklet *Bringing Democracy*

[6]Among the most controversial articles were those by George Wuerthner, Daniel Conner, and Christopher Manes (writing as 'Miss Ann Thropy') in the *Earth First!* journal, September 1986, May 1987, August 1987, and December 1987.

Home highlighted the writings of various social ecologists on potential future directions for the movement. Global justice activists from across the U.S. attended programs at the ISE in Vermont to further their political analysis and join Bookchin and other faculty members in wide-ranging discussions of where the movement might be heading.

The rising popularity of anarchist ideas and anti-authoritarian organisational forms in the aftermath of Seattle was not sufficient, however, to assuage Bookchin's rising concern about the limits of anarchist theory. The popular anarchist press had not taken kindly to Bookchin's libertarian municipalism, especially his advocacy of municipal electoral engagement and the development of revolutionary counter-institutions. Anarchist writing and youth culture in the 1990s was increasingly centered in punk-inspired disdain for organisation and 'green anarchist' fantasies of an impending 'end of civilisation' (Zerzan 1994). In response, Bookchin rose in defense of such unpopular notions as reason, civilisation, historical continuity, and the philosophical legacy of the European Enlightenment. Facing an increasingly hostile audience in the anarchist-inspired youth scene, Bookchin cast aside his once-ringing defenses of the libertarian communist tradition of Kropotkin and the Spanish anarcho-syndicalists. Encouraged by international colleagues, particularly in the Scandinavian countries, he articulated a new framework, which he called 'communalism', and redoubled his focus on the need for sustained political engagement and revolutionary organisation (Biehl 2007).

Bookchin in his later years was also more forthcoming about his theoretical debt to Marxism, describing it as 'the most comprehensive and coherent effort to produce a systematic form of socialism' (Bookchin 2007: 88). Marxism, however, remained imbedded in the world view of early industrial capitalism, much as classical anarchism could be seen as a product of an even earlier 'peasant and craft world'. The anarchist tradition, according to the later Bookchin, was fatally rooted 'in a strong commitment to *personal* liberty rather than to *social* freedom' [emphasis in original], and hence stagnated within an essentially liberal ideological framework. Communalism, he argued, required a 'new and comprehensive revolutionary outlook' drawing on the best of Marxism and the libertarian socialist tradition and rooted in an expansive view of a confederal, municipally-centered democracy developing non-statist counter-institutions capable of contesting political power on a broadly revolutionary scale. Speaking of his new communalist synthesis, Bookchin wrote (2007: 98):

> From Marxism, it draws the basic project of formulating a rationally systematic and coherent socialism that integrates philosophy, history, economics, and politics. Avowedly dialectical, it attempts to infuse theory with practice … From anarchism, it draws its commitment to anti-statism and confederalism, as well as its recognition that hierarchy is a basic problem that can be overcome only by a libertarian socialist society.[7]

During the same period, the ISE's Biotechnology Project pioneered the use of New England's traditional annual Town Meetings as a primary organising vehicle to

[7] For a response to Bookchin's critique of contemporary trends in anarchism, see Clark (2009).

express opposition to the genetic engineering of food. In March of 2002, residents in 28 Vermont towns voted for labeling genetically engineered (GE) foods and a moratorium on GE crops, the first popularly sanctioned debates on genetic engineering in the United States.[8] Eight towns took the further step of declaring a moratorium or otherwise discouraging the planting of GE crops within their town. By 2007, 85 Vermont towns and 120 across New England had passed similar resolutions.

At a time when efforts to adequately regulate biotechnology products at the national level had become hopelessly deadlocked, this campaign invigorated public discussion of genetic engineering in the region and across the U.S., gained international attention, and helped illuminate a broader analysis of the social and ecological implications of genetic engineering and the commodification of life. The campaign also inspired efforts in other parts of the U.S., including one that led to permanent bans on genetically engineered crops and livestock in four California counties. It also exposed some of the limits of local organising absent a broader municipalist consciousness. A majority of those in Vermont who worked to bring the issue to their towns were content to view their resolutions primarily as a means to lobby state legislators and other public officials rather than as part of a broader strategy to reclaim municipal political power, a problem that continues to be debated and theorised by social ecologists today (Grosscup 2007).

Social Ecology and the Future

In the early years of the twenty-first century, the traditional environmental movement in the U.S. was rocked by an internal crisis of confidence, one that came into popular view in 2004 with the wide distribution of an extended essay provocatively titled 'The death of environmentalism' (Shellenberger and Nordhaus 2004). Responding to the dramatic rollback of environmental regulation under two Bush administrations and the failure of policy advocates in the U.S. to adequately address the impacts of global climate disruptions, the essay echoed some radical critiques of environmental praxis, while seeking to unite big business and organised labour in a 'New Apollo Project' for the development of renewable energy technologies. In 2005, a group of prominent environmental justice advocates circulated a response titled 'The soul of environmentalism' (Gelobter et al. 2005), which sought to reclaim the social movement roots of environmentalism in early civil rights struggles and urge more attention to 'big issues', community building, and 'deep change'. This response effectively challenged the narrow assumptions of 'The death of environmentalism' and reaffirmed vital historical and practical links to other social movements but was relatively sparse in its specific proposals for moving forward.

[8] On the evolution of resistance to genetic engineering in the U.S., see Tokar (2001a). For a more theoretical treatment, see Tokar (2001b). On the Vermont and New England town meeting campaigns against GMOs, see the pamphlet 'Vermont towns vs. genetic engineering: A guide to reclaiming our democracy', available from: biotech@social-ecology.org.

Meanwhile, a flowering of popular movements for land rights, for community survival, and against neo-liberal privatisations of public services has arisen in recent decades throughout the global South. From the Zapatistas in Chiapas, Mexico to 'water wars' in Bolivia and India, land seizures by displaced farming communities in Brazil, and the activities of radical farmers in South Korea, among others, these movements increasingly captured the imagination of global justice advocates, even those who may have initially taken ecological matters for granted. These movements offer a profound challenge to environmental politics, as it is commonly practiced in the North, and have also helped provoke a broad critique of traditional Northern approaches to land conservation as practiced by transnational NGOs such as the Nature Conservancy and World Wildlife Fund. While some authors (e.g., Lohmann 1995) have appropriately cautioned against the automatic labeling of indigenous, land-based movements as ecological, the resurgence of interest in these movements has furthered the evolution of global justice activists' outlook on ecological matters. It has also encouraged thoughtful urban youth to broadly identify with the world views of those whose livelihoods are still derived from the land.

Today, with a growing awareness of global climate disruptions and the profound economic and ecological upheavals that are already upon us, environmental politics once again appears ascendant. But most often it is the same narrowly instrumental environmentalism that Bookchin critiqued in the 1960s and 1970s. 'Green consumerism', which first emerged as a widespread phenomenon around the 1990 Earth Day anniversary, has returned with a vengeance, incessantly promoted in the U.S. and elsewhere as the key to reducing our personal impact on the climate (Tokar 2006b). Market-based trading of carbon dioxide emissions, a transparently false solution first proposed in the late 1980s, has been advanced as the most politically acceptable policy option for reducing greenhouse gases (Tokar 1997; Lohmann 2006). Debates in the U.S. range from fruitless controversies over whether or not human-induced climate change is real, to narrow prescriptions for establishing a market price for carbon dioxide that might perhaps induce corporations to reduce their emissions. Even well-known radicals, such as the popular British columnist George Monbiot (2007), often focus on demonstrating the feasibility of a 'least painful' lower-energy scenario, rather than posing a fundamental ecological challenge to the further destructive development of global capitalism. Meanwhile, the recent global economic downturn threatens to seriously limit the availability of public funds to address the climate crisis.

In this disturbingly constrained political and intellectual environment, what is the potential for a more comprehensive red-green synthesis? Will capitalism finally come to terms with the environmental crisis? Or does the imperative of responding to the threat of catastrophic climate change still present a fundamental political challenge and a hope for a radically transformed future? To address these questions it is useful to consider some of the particular ways that social ecology may continue to inform and enlighten today's emerging social and environmental movements.

First, social ecology offers an uncompromising ecological outlook that challenges the supremacy of capitalism and the state. A movement that fails to confront

the underlying causes of environmental destruction and climate disruption can, at best, only superficially address those problems. At worst, capitalism offers false solutions – such as carbon trading and the worldwide production of so-called biofuels to replace gasoline and diesel fuel – that only aggravate problems in the longer term (Tokar 2007; Jonasse 2009). Ultimately, to fully address the causes of climate change and other compelling environmental problems requires us to raise visionary demands that the dominant economic and political systems will likely prove unable to accommodate.

Second, social ecology's 40-year evolution offers a vehicle to better comprehend the origins and the historical emergence of ecological radicalism, from the nascent movements of the late 1950s and early 1960s to the eco-saturated present. Over 4 decades, the writings of Murray Bookchin and his colleagues reflected upon the most important on-the-ground debates within ecological and social movements with passion and polemic, as well as with humor and long-range vision.

Third, social ecology offers the most comprehensive theoretical treatment of the origins of human social domination and its historical relationship to abuses of the earth's living ecosystems. Social ecology has consistently pointed to the origins of ecological destruction in social relations of domination, in contrast to conventional views that an impulse to dominate non-human nature is a product of mere historical necessity.

Fourth, social ecology presents a framework for comprehending the origins of human consciousness and the emergence of human reason from its natural context. Dialectical naturalism reaches far beyond popular, often solipsistic notions of an 'ecological self', grounding the embeddedness of consciousness in nature in a coherent theoretical framework with roots in classical nature philosophies. It offers a philosophical challenge to overturn popular acceptance of the world as it is, and to persistently inquire as to how things ought to be.

Fifth, social ecology offers activists a historical and strategic grounding for political and organisational debates about the potential for direct democracy. Social ecologists have worked to bring the praxis of direct democracy into social movements since the 1970s, and Bookchin's work offers a vital historical and theoretical context for this continuing conversation.

Sixth, at a time when the remaining land-based peoples around the world are facing unprecedented assaults on their communities and livelihoods, social ecology reminds us of the roots of Western radicalism in the social milieu of peoples recently displaced from rural, agrarian roots. Bookchin's (1996 et seq.) four-volume opus, *The Third Revolution*, describes in detail how revolutionary movements in Europe from the Middle Ages to the Spanish Civil War often had cultural roots in pre-industrial social relations, an understanding which can serve to historicise and deromanticise our approach to contemporary land-based struggles. Rather than an exotic other, vaguely reminiscent of a distant and idealised past, current peasant and indigenous movements offer much insight and practical guidance toward reclaiming both our past and our future.

Seventh, social ecology offers a coherent and articulate political alternative to economic reductionism, identity politics, and many other trends that often dominate

today's progressive Left. Bookchin polemicised relentlessly against these and other disturbing tendencies, insisting that our era's ecological crises compel a focus on the general interest, with humanity itself as the most viable revolutionary subject. Social ecology has helped connect contemporary revolutionaries with the legacies of the past and offered a theoretical context for sustaining a coherent and emancipatory revolutionary social vision.

Finally, Bookchin insisted for 4 decades on the inseparability of oppositional political activity from a reconstructive vision of an ecological future. He viewed most popular leftist writing of our era as only half complete, focusing on critique and analysis to the exclusion of a coherent way forward. At the same time, social ecologists have often spoken out against the increasing accommodation of so-called 'alternative' institutions – including numerous once-radical cooperatives and collectives – to a stifling capitalist status quo. Opposition without a reconstructive vision leads to exhaustion and burnout. 'Alternative' institutions without a link to vital, counter-systemic social movements are cajoled and coerced by 'market forces' into the ranks of non-threatening 'green' businesses, serving an elite clientele with nominally socially responsible products. A genuine convergence of the oppositional and reconstructive strands of activity is a first step toward a political movement that can ultimately begin to contest and reclaim political power.

Defenders of the status quo would have us believe that 'green' capitalism and the 'information economy' will usher in a transition to a more ecological future. But, like all the capitalisms of the past, this latest incarnation relies ultimately on the continued and perpetual expansion of its reach, at the expense of people and ecosystems worldwide. From urban centers to remote rural villages, we are all being sold on a way of life that will only continue to devour the earth and its peoples. Today's high-tech consumer lifestyles, whether played out in New York, Beijing, Bangalore, or the remotest reaches of our human civilisation, aims to defy all meaningful limits, ultimately raising global inequality and economic oppression to previously unimaginable proportions while profoundly destabilising the earth's ability to sustain complex life.

The corrosive simplification of living ecosystems and the retreat into an increasingly unstable and synthetic world that Murray Bookchin predicted in the 1960s has evolved from a disturbing future projection to a global reality. Our survival now depends on our ability to challenge this system at its core and evolve a broad, counter-hegemonic social movement that refuses to compromise its values and settle for partial measures. Hopefully such a movement will embrace and continue to expand and elaborate the revolutionary and reconstructive social and political vision of social ecology.

References

Bari, J. (1994). Breaking up is hard to do. In *Timber wars* (pp. 55–59). Monroe, Maine: Common Courage Press.

Biehl, J. (1991). *Rethinking eco-feminist politics*. Boston: South End Press.

Biehl, J. (2007). Bookchin breaks with anarchism. *Communalism*, *12*. Retrieved from http://communalism.net/Archive/12/bba.php

Bookchin, M. (1971). *Post-scarcity anarchism*. Berkeley: Ramparts Press (Reprinted 1986, Montreal: Black Rose Books, and 2004, San Francisco: AK Press).

Bookchin, M. (1974). *Limits of the city*. New York: Harper & Row.

Bookchin, M. (1980). *Toward an ecological society*. Montreal: Black Rose Books.

Bookchin, M. (1982). *The ecology of freedom*. Palo Alto, CA: Cheshire Books (Reprinted 1991, Montreal: Black Rose Books, and 2005, San Francisco: AK Press).

Bookchin, M. (1986). Market economy or moral economy. In *The modern crisis* (pp. 77–97). Philadelphia: New Society Publishers.

Bookchin, M. (1987). Social ecology vs. deep ecology. In *Green Perspectives*, *4–5*. Retrieved from http://dwardmac.pitzer.edu/ANARCHIST_ARCHIVES/bookchin/socecovdeepeco.html

Bookchin, M. (1990). *The philosophy of social ecology: Essays on dialectical naturalism*. Montreal: Black Rose Books.

Bookchin, M. (1992). A new municipal agenda. *In urbanization without cities*. Montreal: Black Rose Books.

Bookchin, M. (1996). *The third revolution: Popular movements in the revolutionary era*, Vol. 1. London: Cassell; Vol. 2 (1998). London: Cassell; Vol. 3 (2004). New York: Continuum; Vol. 4 (2006). New York: Continuum.

Bookchin, M. (1999). *Anarchism, Marxism and the future of the left*. Oakland, CA: AK Press.

Bookchin, M. (2007). The communalist project. In *Social ecology and communalism* (pp. 77–116). Oakland, CA: AK Press. Also available at http://communalism.net/Archive/02/tcp.html

Clark, J. (2009). Bridging the unbridgeable chasm: On Bookchin's critique of the anarchist tradition. In *Perspectives in Anarchist Theory*. Retrieved from http://www.anarchist-studies.org/node/231

Devall, B. (1995). The ecological self. In A. Drengson & Y. Inoue (Eds.), *The deep ecology movement* (pp. 101–123). Berkeley, CA: North Atlantic Books.

Devall, B., & Sessions, G. (1985). *Deep ecology: Living as if nature mattered*. Salt Lake City, UT: Peregrine Smith.

Dubos, R. (1965). *Man adapting*. New Haven, CT: Yale University Press.

Epstein, B. (1991). *Political protest and cultural revolution*. Berkeley, CA: University of California Press.

Foreman, D. (1987). Whither Earth First!? *Earth First! Journal 8*(1) November, 20–21.

Foster, J. B. (2000). *Marx's ecology: Materialism and nature*. New York: Monthly Review Press.

Gaard, G. (1998). *Ecological politics: Ecofeminists and the Greens*. Philadelphia: Temple University Press.

Gelobter, M., et al. (2005). *The soul of environmentalism: Rediscovering transformational politics in the 21st century*. Oakland, CA: Redefining Progress. Retrieved from http://www.rprogress.org/soul/soul.pdf

Gonzalez, J. (1990). Getting serious about ecology. *New York Daily News*, April 24.

Grosscup, B. (2007). *Town meeting advocacy in New England: Potentials and pitfalls*. Paper presented at the 2007 Colloquium of the Institute for Social Ecology, Marshfield, VT.

Heller, C. (1999). *Ecology of everyday life*. Montreal: Black Rose Books.

Jonasse, R. (Ed.) (2009). *Agrofuels in the Americas*. Oakland, CA: Food First Books. Also available at http://www.foodfirst.org/en/node/2426

Lohmann, L. (1995). Visitors to the commons. In B. Taylor (Ed.), *Ecological resistance movements* (pp. 109–126). Albany, NY: State University of New York Press.

Lohmann, L. (2006). *Carbon trading: A critical conversation on climate change, privatization and power*. *Development Dialogue*, *48*. Uppsala: Dag Hammerskjold Center.

Monbiot, G. (2007). *Heat: How to stop the planet from burning*. Boston: South End Press.

Sears, P. B. (1964). Ecology: A subversive subject. *BioScience, 14*(7), 11–13.

Shellenberger, M., & Nordhaus, T. (2004). *The death of environmentalism: Global warming politics in a post-environmental world*. Retrieved from http://www.thebreakthrough.org/images/Death_of_Environmentalism.pdf

Tokar, B. (1997). *Earth for sale*. Boston: South End Press.

Tokar, B. (2001a). Resisting the engineering of life. In *Redesigning life? The worldwide challenge to genetic engineering*. London: Zed Books.

Tokar, B. (2001b). Biotechnology: Enlarging the debate. In *Z Magazine*, June 2001, 48–54.

Tokar, B. (2006a). The Greens as a social movement: Values and conflicts. In F. Zelko & C. Brinkmann (Eds.), *Green parties: Reflections on the first three decades* (pp. 97–107). Washington, DC: Heinrich Böll Foundation North America.

Tokar, B. (2006b). Can we buy our way to an ethical society? In *Verdensmagasinet X* (*World Magazine X,* Oslo), 6.

Tokar, B. (2007). The real scoop on biofuels. Available at http://www.4report.com/node/2864

van der Linden, M. (2001). The prehistory of post-scarcity anarchism: Josef Weber and the movement for a democracy of content (1947–1964). *Anarchist Studies, 9*, 127–145.

Zerzan, J. (1994). Future primitive. In *Future primitive and other essays*. New York: Autonomedia. Retrieved from http://www.primitivism.com/future-primitive.htm

Chapter 9
How the Ecological Footprint Is Sex-Gendered

Implications of Eco-feminism for an Eco-socialist Theory and Praxis

Ariel Salleh

Abstract The chapter argues that unless eco-socialism is sex-gender literate, it cannot even begin to function as a democratic politics. The essay amplifies eco-feminism using the ecological footprint indicator, and addresses sex-gender differences in energy consumption patterns, preferred solutions to climate change, and policy decision-making styles at international forums like the IPCC. Eco-feminists attend to the logic of women's reproductive labour, and how it engages a different set of values from those in the productive economic sector. An eco-socialist politics must find a way to accommodate this 'difference', if it is to be a globally just and deep green theory and movement.

Keywords Eco-feminism • Ecological footprint • Eco-socialism • Global environmental issues • Sex-gendered

When governments and think tanks deliberate on strategies for combatting climate change, you can be sure they'll bypass one highly salient variable. Yes, you've got it! – Global warming causes, effects, and solutions are 'gendered', or strictly speaking sex-gendered. Why for example, is women's ecological footprint negligible in comparison with men's? Why are women and children the main victims of global warming? Why are women under-represented in negotiations at local, national, and international levels? And guess who carries the social cost of Kyoto policies …

The gender differential (how boys and girls are trained into different adult behaviour models) is critical to understanding questions like resource consumption and energy security (Salleh 1997, 2009). But it will also affect how eco-socialism is theorised, as I will argue further into this Chapter. Social norms for 'masculinity and femininity' lead to different attitudes in energy use, and to preferred policy approaches at competitive neo-liberal forums like the Intergovernmental Panel on Climate Change (IPCC). This claim is based on research from the German government funded

A. Salleh (✉)
School of Social and Political Sciences, Faculty of Arts, University of Sydney,
P.O. Box 281 Church Point, New South Wales 2105, Australia
e-mail: ariel.salleh@sydney.edu.au

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_9, © Springer Science+Business Media B.V. 2010

women's NGO – GENANET, led by Ulrike Roehr (2007), and on surveys compiled by the Women's Environment Network – WEN, in London (2007).

One way to illustrate this systematic gender difference is through the ecological footprint measure (Wackernagel and Rees 1996).[1] In Africa, for instance, there was a time when women farmers provided 80% of the continents' food with minimal resource inputs and pollution outputs. Today, in parts of the global South where communal land holdings are untouched by war, free trade deals, and technology transfers, many women continue this ecologically sound and self reliant subsistence economics.

High tech economies also reveal a distinction between men's and women's patterns of resource use. A Swedish Government report shows that men's ecological footprint in that nation is remarkably larger than women's is (Johnsson-Latham 2006). There are always individual variations, but on average, Swedish men as a social category, are found to be big consumers of energy expensive manufactures and durable assets like houses, cars, and computers, while Swedish women are mainly purchasing weekly domestic consumption items – nature's perishables. But women's ecological footprint is actually smaller again, if adjusted for the fact that most are shopping for two or more other household members. Australia, as a medium size developed nation will show a similar pattern to Sweden. I am not qualified to speak about the sociology of resource consumption in China.

Energy use in the transport sector also reflects the way in which modern societies are structured by gender as much as by class or ethnicity. Focussing on the former, a 2006 report commissioned by the European Parliament from a transnational consortium of researchers, including the University of East London and the prestigious Wuppertal Institute, points out that men in EU states tend to make trips by car for a single purpose; and over longer distances than women do (European Parliament 2006). A high sense of individualism and low awareness or concern for the environmental costs of private transport is inferred. Conversely, the EU statistics show that it is mainly women who travel by public transport or on foot. When women do use private cars, it is for multiple short journeys meeting several purposes on the one outing.

The reason for this complex activity pattern of women, is that even among those in the waged workforce, most undertake reproductive or domestic labour for husbands, children, or elderly parents. The double shift, as feminists call it. Meike Spitzner, an author of the European Parliament report observes, that women's days are characterised by multi-tasking and their transport needs are characterised by 'spatio-temporal scatter'. Moreover, the time spent by women moving between one labour activity and another – say from office to kindergarten to supermarket – adds to their existing economic exploitation as unpaid household care providers.

Of course, it is important not to overgeneralise. All around the world, the number of childfree career women is increasing, but this in turn, means that environmentally

[1] This is not to suggest that advocates of the footprint indicator themselves are concerned with gender difference. I wrote to Rethinking Progress about this in 2004 and the reply was – good idea, but not on our research agenda.

speaking, their transport footprint will be more like that of men in the waged productive sector. Even so, these emancipated women remain a statistical minority. Generally the pattern in industrial economies is that men have determinate job hours and simpler schedules than working women. For this reason, men could more easily make good use of public transport options; but they don't – or at least in Europe they don't. Again, this choice is a gendered one, having to do with structural differences in earning capacity.

Internationally, workplace gender bias is so entrenched that women are concentrated in lower salaried jobs and even when they perform the same tasks as men, their wages are lower by one fifth. Thus, it is mainly men as a social category who have money available for purchasing big status cars, as well as time available for leisure pursuits. Here they favour high energy consumption recreation involving speedboats, golf courses, motorbikes, and computerised entertainments. Under capitalism, speed and technology are associated with the psychology of masculine prowess.

By contrast, due to the time consuming double shift of work and home, women's leisure footprint is all but non-existent. Today, globalised economic scarcity and environmental stress extracts more time from women's lives. But under pressure, women are found to meet their reproductive labour tasks with fewer resources, by using good organisation and time management. This internalised response to environmental pressures contrasts with the accepted public practice of externalising or displacing problems on to less powerful sections of the community.[2] To amplify this from the EU evidence: men interviewed about solutions to social and environmental problems, prefer technological solutions and end-of-pipe remedies. Ethically (and thermodynamically), this is essentially a form of 'deferred or displaced responsibility'.

GENANET notes that while women readily adjust their own energy consumption habits, far too many men accept humanly risky responses to climate change like nuclear power, or ecologically untested solutions like ocean sequestration. This high tech tunnel vision is encouraged by the fact that the impacts of industrial growth are often uncounted social externalities left for women to pick up. In the case of nuclear spills, for instance, it is women who cope with the biological and economic costs of nursing deformed babies or relatives with radiation induced leukaemias. Such experiences explain why women resist risky technologies, and why they have been quick to recognise the urgency of global warming. As feminists say: 'the personal is political!'

These observations on the asymmetry of learned gender norms and responsibilities and the different gender skills that result from them, apply just as much in the so called developing South as in the North. So it is not surprising that an international cohort of women is now insisting that policy planners start thinking about gender justice and environmental sustainability together. At the 2004 Conference

[2] I am thinking here of how governments locate waste disposal sites in poor ethnic neighbourhoods or on indigenous land; or how excessive water use by factories is state subsidised while householders are taxed for it.

of the Parties (COP) in Milan, a Gender and Climate Change Network was formed to bring the UN Climate Change Convention and Kyoto Protocol into line with international agreements on women's rights.

An analysis of decisions adopted at IPCC meetings reveals this policy arena to be very androcentric indeed. Women are under-represented in all relevant political and economic decision-making bodies – local, national, and international. In fifteen years of climate negotiations, only one resolution has dealt with gender. And this was about committee participation procedure – not the nitty-gritty socio-economics of agency – that is, how accepted 'masculine and feminine' behaviour trends are differently implicated in global warming.

Beyond gender blindness, the androcentric orientation of IPCC decision making is compounded by Eurocentrism. Thus, the Kyoto regime and Clean Development Mechanism (CDM) use countries on the postcolonial periphery to mop up waste emissions from key industrialised nations. Deferred responsibility again. Under Kyoto, ecosystems are accorded economic value for their photosynthetic capacity to absorb CO2 and convert it back to O2. So, a Third World nation can be readily induced to resolve foreign debt by trading on the ecological cleansing service of its forests.

The case of Costa Rica is telling – and should serve as an alarm bell to eco-socialists. With encouragement from a solidly masculine partnership of Canadian government agencies, international environmental NGOs, mining and logging industries, the Costa Rica Ministry of Environment and Energy has enclosed 25% of the nation's territory as 'conservation zones'. This land includes national parks, wetlands, biological reserves, and wildlife refuges. But in the process, hundreds of indigenous and peasant families have been evicted from forested areas, losing their livelihood. Peruvian ecological feminist researcher Ana Isla has followed these displaced communities as they migrate to San Jose tourist areas hoping to survive by the cash economy. Isla finds that now women and girls are forced to become breadwinners, supporting their families by prostitution (Isla 2009).

Yes, offering up conservation areas as CO_2 sinks results in debt cancellation and can be a national boon for foreign exchange through ecotourism. But ecotourism slides into sex tourism and sex tourism means that Costa Rica has become a destination for paedophiles. The CDM is simply another 'solution by displacement' on to the lives of others. Out of sight, out of mind. Will this happen in our Asia-Pacific region? Could Australian or Chinese governments become a party to such mindless global environmental policy?

The Gender and Climate Network has called on the international community to revisit the historic 1995 Declaration of the Fourth World Conference on Women held in Beijing. This Platform of Action invited governments and agencies to get their heads around the many structural links between sex-gender and environments; to analyse all measures and programs for gender content; to make gender informed budgets; to include women in all decision-making and empower women through equal access to resources (UN 1995). In order to achieve gender literate policy on climate change, women in Europe, Africa, Asia, Oceania, and America will need research funds to document gendered opinions and behaviours, and travel funds to lobby at climate change meetings. Most critical of all, governments will need to provide gender disaggregated national statistics for the energy consumption sector.

Today, Women for Climate Justice, a worldwide NGO established at the Bali COP in 2008 drives this gender analysis forward, despite the intransigent 'real politic' of big powers at the Copenhagen COP in 2009 (GenderCC 2010). But the absence of gender literacy among policy analysts, academic researchers, and even climate change activists, indicates that urgent 'capacity building' is wanted, North and South. For without a grasp of basic sociological notions like sex-gender difference, it will be impossible to identify accurate long term global warming strategies or even to implement workable short term ones.

And how about eco-socialist theory – is it developing in a gender literate way? Are there lessons for theorists to draw from the gendered ecological footprint? The analysis certainly reminds us not to theorise in an essentialist manner, that is, assuming that all humanity acts in the same way. Women and men are not implicated in the global environmental crisis to the same extent and women and men approach this crisis with different solutions.

In climate change circles, the phrase 'common but differentiated responsibilities' is used to emphasise the historical role of North-Atlantic industrial states and their satellites in causing unsustainable greenhouse emissions (UN 1994). As nations of the economic South point out, not all countries bear the same degree of responsibility for this international disaster. However, the phrase 'common but differentiated responsibilities' can also have a gendered meaning. For it is quite apparent that worldwide, and even in the twenty-first century, styles of development, decisions about energy consumption, and policy recommendations, are being driven overwhelmingly by men.

On the other hand, the European research cited above suggests that women, experienced in socially reproductive labour, find ways to manage threatened resources with more care. Can eco-socialist policy and politics integrate the logic of this gender differentiation and take inspiration from it?

This question invites us to look at women's labour more closely. Most socialists will be aware of the massive structural consequences of the gendered division of labour in industrialised societies. For example, ILO statistics consistently show that women receive less than 10% of all wages paid globally and only 1% of women in the world own property (Shah 2007). After 3 decades of post War modernisation, the majority of women around the world still expend their time and energies in tasks that are economically invisible. In fact, the expectation is that women's work should mediate natural processes as a prior condition for the economic transaction that takes place between capitalist employers and working men. UK sociologist Mary Mellor describes this household servicing as putting in 'biological time' (Mellor 1992).

The domestication of the female working body has a long history. Moreover, in researching mercantilist Europe and its South American colonies, Silvia Federici finds that working class men have been complicit with capital in the economic subsumption of women, dependent as they are on women's reproductive labour for their daily needs (Federici 2004). This trans-class gender betrayal continues in our era with what Canadian activist Terisa Turner calls 'the male deal'. In oil rich states such as Nigeria, for instance, local men and government officials derive wealth and status through deal making with overseas trading interests. So traditional communal land is taken out of the hands of village women and food scarcity is the result

(Turner and Brownhill 2004). On every continent, women can be found carrying the cost of World Bank loan repayments, IMF structural adjustment measures, and WTO mandated free trade.

The principle of equality must be a central plank of eco-socialist politics. But my focus here is actually on the principle of difference. Thus, on the positive side of the eco-socialist equation, women as community food producers in the global South and as primary care givers in the economic North, are skilled practitioners in sustainable agriculture and experts in precautionary judgement. Scientist Vandana Shiva has demonstrated the complex economic and ecological rationality of foraging techniques used by women forest dwellers in North India (Shiva 1989). Her German eco-feminist colleagues Veronika Bennholdt-Thomsen and Maria Mies, describe women's subsistence provisioning methods on a global scale, identifying them as a ready made alternative to the failing global economy (Bennholdt-Thomsen and Mies 1999).

The subsistence or eco-sufficiency model of economics does not exacerbate climate change or biodiversity loss, because it proceeds by internalising responsibility for resource use. But eco-socialist theorists do not yet acknowledge this unique contribution of women's labours across diverse cultures internationally, nor the radical significance of the eco-feminist literature which highlights it. Women's reproductive labour is not only the invisible material foundation of the existing capitalist economic system. Women's skill in the management of embodied and natural metabolic cycles prefigures the regenerative epistemology needed to build just and sustainable futures.

Whether as housewives, peasants, or indigenes, women are well qualified to design eco-socialist theory and well qualified for practical leadership in the alter-globalisation movement. The grassroots responses to neo-liberalism flourishing at the World Social Forum from Porto Alegre, Mumbai, Caracas, to Nairobi, show that it is not urban industrial labour, so much as non-monetised meta-industrial labour – mothers, small farmers, hunter-gatherers on the fringes of the exchange economy – who know best how to achieve social justice and cultural autonomy with ecological sustainability (Salleh 2004).

Arguing this way is not to dismiss the classic sociological thesis of the proletariat and its historical role, but to adapt that invaluable paradigm to fit our own conjuncture. Eco-socialists will have to deepen their political analysis in order to broaden their political alliances. And it makes strategic sense for eco-socialists to recognise who the global majority of workers is. The goal of eco-socialists is surely to draw together – worker's, women's, peasant, indigenous' and ecological struggles – as a single unassailable agency of change. But integrating the concerns of these groupings must be done in a way that honours 'common but differentiated responsibilities'.

In preparation for this unity in diversity, an inclusive eco-socialist theory will raise questions like:

- How are productive and 'reproductive labour' dialectically interrelated?
- What is the political-economic function of 'woman = nature' or 'native = nature' ideologies?
- How is gender constitutive of class and how is 'materialism embodied'?

- Can eco-socialism coexist with cultural diversity and with 'ecocentric' values?
- What 'technologies' are compatible with democracy and sustainability?
- Who are the key 'agents' in alter-globalisation struggles for the commons and resource sovereignty?
- Is a new theory of 'value' called for, to build an ecologically sustainable society?

The intellectual challenge here is to uncover how gendered power relations enter into the formulation of political indicators like the ecological footprint and how they undermine the coherence of visions like eco-socialism. As scholars our work is to help activists and communities understand the gender bias built into theoretical constructs like accumulation, labour, class, dialectics, and materialism, and to revitalise such tools where necessary. To this end, the journal *Capitalism Nature Socialism* hosts an ongoing dialogue between eco-socialists and eco-feminists (Salleh 2006). Perhaps some of you will join this conversation?

References

Bennholdt-Thomsen, V., & Mies, M. (1999). *The subsistence perspective*. London: Zed Books.
European Parliament. (2006). *Women and transport in Europe*. Retrieved November 7, 2007, from www.europarl.europa.eu/EST/download.do?file=9558
Federici, S. (2004). *Caliban and the witch*. New York: Autonomedia.
Gender CC (2010). Women for Climate Justice. Retrieved January 7, 2010, from www.gendercc.net.
Isla, A. (2009). Who pays for Kyoto Protocol? In A. Salleh (Ed.), *Eco-sufficiency and global justice*. London/New York: Pluto Press, (pp. 199–217).
Johnsson-Latham, G. (2006). *Initial study of lifestyles, consumption patterns, sustainable development and gender*. Stockholm: Swedish Ministry of Sustainable Development.
Mellor, M. (1992). *Breaking the boundaries*. London: Virago.
Roehr, Ulrike (2007). GENANET – Focal point on gender justice and sustainability. Retrieved September 10, 2007, from www.genanet.de
Salleh, A. (1997). *Ecofeminism as politics*. London: Zed Books.
Salleh, A. (2004). Global alternatives and the meta-industrial class. In R. Albritton, S. Bell, J. R. Bell & R. Westra (Eds.), *New socialisms: Futures beyond globalization* New York: Routledge, (pp. 201–211).
Salleh, A. (Ed.), 2006. Symposium: Ecosocialist-ecofeminist dialogues. *Capitalism Nature Socialism* 17: 32–124.
Salleh, A. (Ed.), (2009). *Eco-sufficiency and global justice*. London/New York: Pluto Press.
Shah, A. (2007). *Global issues*. Retrieved November 25, 2007, from www.globalissues.org/HumanRights/WomensRights.
Shiva, V. (1989). *Staying alive*. London: Zed Books.
Turner, T., & Brownhill, L. (2004). We want our land back. *Capitalism Nature Socialism,* 15, 21–40.
UN. (1994). *UN framework convention on climate change* Article 3. Retrieved September 10, 2007, from www.unfccc.int/resource/docs/convkp/conveng.pdf
UN. (1995). *The official report of the United Nations Fourth World Conference on Women*. Retrieved September 1, 2007, from www.un.org/womenwatch/daw/beijing/index.html
Wackernagel, M., & Rees, W. (1996). *Our ecological footprint*. Gabriola Island, BC: New Society.
Women's Environment Network and National Federation of Women's Institutes, (2007). *Women's Manifesto on Climate Change*. Retrieved May 10, 2008, from www.wen.org.uk

Part IV

Chapter 10
Evaluating Japanese Agricultural Policy from an Eco-socialist Perspective

Masatsugu Maruyama

Abstract When discussing the sustainability of agriculture, we cannot help but turn to the specific characteristics of farming labour. It is from such an eco-socialist perspective, of course in a very broad sense, that we can easily understand the incompatibility of environmental protection of rural areas and an internationalising market of agricultural products. Furthermore, as the analysis of the Japanese case has shown, to integrate agricultural production policy with environmental protection policy, we have no alternative but construct a decentralised market where local people can physically confirm the credibility of environmental safety for themselves. In this sense, the agricultural environmental policy reform pursued in Western industrial countries, including in Japan, can clearly not meet these requirements, if not moving along a wrong direction.

Keywords Agricultural policy • Eco-socialist perspective • Environmental policy • Japan • Subsistence perspective

Introduction

It is self-evident that sustainability of agriculture is closely related with sustainability of a society. We human beings, as a component part of the world of living creatures, cannot live a life of decency without sacrificing the lives of other creatures – even if one chooses to be a vegetarian, he/she still has to take certain amount of vegetation for survival. Unlike other living beings, though, since entering into the post-hunting/gathering era we satisfy our need for food mainly through agricultural production. With acknowledging this basic fact, we can easily understand one of the key characteristics of human civilisation, and realise the crucial roles what the sustainability of agriculture play in maintaining the sustainability of our society, ancient or modern.

M. Maruyama (✉)
Department of Political Science and Public Administration, Yamanashigakuin University, 77 Hikage Yamatocho, Koushyushi 409-1204, Japan
e-mail: maruyama@ygu.ac.jp

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_10, © Springer Science+Business Media B.V. 2010

In this regard, agriculture in capitalist society has been basically walking a thorny path. As early as in 1899, Karl Kautsky, in his essay 'Agrarian Question', already identified agricultural production as a problem for capitalism from a Marxist point of view, stressing that agriculture does not respect the laws discovered from industrial production but instead follow its own logic (Kautsky 1988: 11). A major insight hidden in Kautsky's analysis of the possibility of socialist revolution is that, agricultural production under the pressure of an undifferentiated commodity competition in capitalist society will confront ever growing difficulties.

Today, such an observation is no longer restricted to Marxism. For instance, it is a well-known economic axiom that the income ratio of agricultural sector is relatively lower than that in industrial sectors (Egaitsu 2003: 15). Furthermore, according to the theory of microeconomics, because the income flexibility of food demand is smaller than 1, the demand for food, the main product of agriculture, will not contribute much to the increase of GDP when the national income per capita reaches certain level. So this theory predicts that, agriculture will gradually lose its specific gravity as an economic sector with the development of capitalist economy (Egaitsu 2003:11). As a matter of fact, the disadvantageous position of agriculture compared with industry is an empirical phenomena of today throughout the capitalist world. And a common strategy of governments (including supranational government like European Union) to alleviate this problem is to provide subsidies for agriculture through the assorted 'agricultural policies' which require spending national finance.

It is until as late as 1980s, sustainability of agriculture (re) emerged as a significant issue which is discussed in the context of how to achieve a sustainable development of industrial societies. In this regard, Japan is a good example. In the past decade, Japanese agricultural policy has been experiencing a fundamental change. While the original 'Basic Law of Agriculture', adopted in 1961, which prescribed the post-war policy skeleton of agriculture, advocates the establishment of 'modern agriculture' and pursues the 'economic independence of agriculture', the current 'Basic Law of Agriculture' of 1999 brings some new concepts with a strong implication of sustainability such as 'multiple functions of agriculture' and 'agriculture protection' to the forefront. Then an arisen question is that, can such a policy change be a successful case which leads to the sustainability of Japanese agriculture? In this chapter, I will make a primary evaluation of this policy adjustment from an eco-socialist viewpoint.[1]

Eco-socialism on Agricultural Protection

Let us first identify the main viewpoints of eco-socialism that can be used to justify the protection of agriculture. Generally speaking, agriculture in Marxism has not been regarded as an important issue. Investigation of the cause for such negligence

[1] Like every concept of social thought, eco-socialism is in itself contentious. In this chapter, I will evade this difficult question of definition but focus upon the theories of Ted Benton and the eco-feminists, who propose for rethinking the importance of agriculture from a broad eco-socialist standpoint.

is not our task here. It will suffice to mention that, there was, so to speak, a dogma in Marxism about the role of farmers: because self-supporting farmers are small landowners or small businesspersons, they must be members of the reserve army of bourgeoisie, i.e. the petit bourgeoisie, and accordingly hold an anti-proletarian position. Based on this creed, Kautsky, who was actually aware of the inherent nature of agriculture, decisively denied any protection for the farmers. An only exception would be the 'agricultural proletariat' which assumed to be born from the dissolution of the class of farmers. According to Japanese socialist Shirai (2002), such an understanding suggested by Kautsky, which can be conceptualised as 'the farmer = petit bourgeoisie formula', became a practical policy of the Communist Party as well as a theory later advocated by Lenin and Stalin. Arguably, without this dogma there would be no obsession about the 'collectivisation of agriculture' in the 'actually existing socialist countries'.

It seems difficult to find any thought on agriculture protection of eco-socialism from such a 'tradition' of mainstream Marxism. Fortunately, as an alternative, we can turn to the self-claimed eco-Marxists who are actually critical of Marxism, especially its classic version as mentioned above. In this aspect, what are most noteworthy are, from the author's point of view, the theory of 'eco-regulatory labour process' proposed by Ted Benton and the notion of 'subsistence perspective' held by Maria Mies and others.

Benton: Labour Process of 'Eco-regulation'

Benton criticised Marx's general concept of labour process. According to him, Marx's notion of labour process is biased towards 'the productive, transformative labour process', without taking into account various other labour processes. One example of such processes, according to Benton, is 'eco-regulatory labour process', which include farming work in particular and has the following four characteristics (1996: 161):

1. The 'subject of labour' (in Marx's terminology) is therefore *not* the raw material but rather the conditions within which it grows and develops.
2. This labour, optimising the conditions for organic growth and development, is primarily a labour of sustaining, regulating and reproducing, rather than of transforming.
3. The spatial and temporal distributions of labouring activity are to a high degree shaped by the contextual conditions of the labour process and by the rhythms of organic developmental processes.
4. Nature-given conditions (water supply, climatic conditions, etc.) figure both as *conditions* of the labour process, *and as subjects* of labour.

This classification of the elements of labour process is not similar to Marx's tripartite classification (labour, instruments of labour, raw materials). By generalising the special features of eco-regulatory practices, Benton intended to reconstruct

the concept of Marx's labour process. A new contribution of Benton's theory, among other considerations, is that recognising labour can not only target at the raw materials but also the surrounding conditions. That implies, agricultural labour is basically an 'ecologically caring' labour that pursues the health and upbringing of our surrounding environment.[2] This position is indeed very much close to the 'subsistence perspective' of Maria Mies.

Mies: Subsistence Perspective

As to Benton's 'eco-regulatory labour process' theory, we can also summarise Mies' idea of 'subsistence perspective' as four arguments.

1. The problem of subsistence accompanies with market economy. Karl Polanyi, a distinguished scholar in theoretical economics, agrees with this viewpoint. And this position is also recognised by Ivan Illich, who highlighted the significance of studying regional economy, focusing on the two splitting domains resulting in 'subsistence problem': the market economy dominated by money, and the unpaid 'shadow economy'. It seems that Mies and others are clearly aware of these observations, but they do not want to confront them directly at the cost of their theoretical constructions.

   According to Mies, subsistence perspective was first raised by Rosa Luxemburg while re-examining Marx's theory of capital primitive accumulation (Mies 1988: 6). Marx described capital primitive accumulation as a process of 'separating direct producers from the means of production' (and the hierarchical differentiation between capitalists who are owners of the means of production and wage labourers who own nothing but their labour power), and assumed that this process as an independent stage will be completed at certain point following the development of capitalism. On the contrary, Luxemburg contended, implicitly but decisively, that this process will never be terminated; even if capitalism develops into a very advanced level, this process will at least continue in certain sectors like agriculture and in the colonies.

   Mies and others carried on these ideas further, paying more attention to the continuity of capital primitive accumulation accompanying with the development of capitalism, and identifying a distinctive producer population who do not belong to the two largest classes: workers and capitalists, which are composed by farmers and housewives.

[2] One of the well-known caring theorists, Milton Mayeroff, defines care in this way: 'To care for another person, in the most significant sense, is to help him grow and actualise himself' (Mayeroff 1971: 1). He asserts that there is a universal pattern of caring which covers non-human life or even an idea. However, as his definition above shows, the interpersonal relation is at the center of his model. In a care activity, communication between the caring person and the cared is particularly important. Therefore, we must be cautious to apply this general idea directly to agricultural labour. Farmers inquire after soil or listen to crops though there is no answer except the one that the questioner imagines. May we not say this posture is almost caring?

2. Without the products of farmers and housewives, that is to say, food and human life, any other production would be impossible. Mies defined subsistence in this way:

> In so far as the production of human life and of *living-working* capacity is the necessary precondition of all modes and forms of production, we shall call this the *subsistence production and reproduction* ... Subsistence production thus defined involves a variety of human activities ranging from pregnancy, the birth of children, to production, processing and preparations of food, clothing, making of a home, cleaning, as well as the satisfaction of emotional and sexual needs. (Mies 1988: 27–28)

   This definition appears to be somewhat inclined toward 'housewife' labour. However, 'the subsistence production/reproduction' that Mies refers to covers 'the production of the means of subsistence and the production of new life' (loc. cit.): The former is indispensable to meet human basic needs so as to sustain life, and the latter is essential to preserve society from generation to generation. Moreover, 'the production of the means of subsistence' certainly includes the production of foods. The importance of agriculture and farmers is thus recognised here – a fundamental position in subsistence production or subsistence labour (different from industrial production) absolutely necessary for every economic system.
3. Farmers and housewives in capitalist production are regarded as paradoxical entities, because they produce what capitalism itself does not produce. They produce the most requisite element for the general maintenance of capitalist accumulation, but capitalistic system cannot yet separate them materially from their means of production. These 'means of production' are land in the case of farmers, and woman's body and her womb in the case of housewives. They are both the elements of 'nature'. Capitalist production as a mode of social production dislikes any natural limit, and always attempts to realise the proliferation of capital by meeting people's unlimited demands or desires. However, it is obvious that, judging from the specialty of their modes of production, both farmers and housewives have to respect the various natural limits. The problem in capitalist system is that, not only their labour mediating the relations between nature and society are considered as low productive, but the farmers and housewives themselves are placed outside the market and treated as if they are 'nature' itself. This is the very reason why their subsistence production is perceived as deserving gratis or a low-price (von Werlhof 1988).
4. Subsistence labour or production is the basis of every economic system. In capitalistic system, however, it is artificially and even intentionally too much undervalued, and thus housewives and farmers are exploited by the resulting unjust status, economically and socially. That is the reason why we need a fight against all this as follows:

> A necessary consequence of non-exploitative relations with ourselves, nature, other human beings and other peoples or nations will be the regaining of *autonomy over our bodies and our lives* ... Autonomy in this sense should not be understood individualistically and idealistically – as it often is by feminists, because no single woman in our atomised society

> is able to preserve her autonomy. Indeed, it is the antithesis of autonomy if it is understood in this narrow egoistic sense ... Autonomy understood as freedom from coercion and blackmail regarding our lives and bodies, can be brought about only by collective effort in a decentralised, non-hierarchical way. (Mies 1998: 212)

What Mies emphasise here is that the regaining of autonomy is the bedrock for the feminist liberation strategy. Of course, this can also be understood as a fundamental principle of all political and social movements which aim for a sustainable agriculture and thus a sustainable society, namely, respecting the autonomy of subsistence and resisting all kinds of unjust exploitation of subsistence labour, both of women and men. For instance, farmers can grow agricultural products based on the natural conditions surrounding them, and send those products rather than to the distant markets but instead to local ones. Or if possible, they sell them directly to the consumers without any intermediaries. Moreover, local residents who are becoming supermarket buyers today can cultivate crops at their allotment. From this perspective, anti-globalisation is the basic strategy for liberation.

Agricultural Policy Reform in Japan

With the theoretical basis of eco-socialism briefly outlined above, we can move ahead to evaluate the lately development of Japanese agricultural policy in the past years. Generally to say, it was the external rather than the internal factors that eventually result in this agriculture policy change. Or in other words, GATT Uruguay Round negotiations constituted the major dynamics for the adoption of new agriculture policy in Japan.

Up to its Uruguay Round of trade negotiations, the General Agreement on Tariffs and Trade (GATT) was only authorised to handle the trade of industrial products. And the aim of the Uruguay Round was to make an agreement among the international leaders that the GATT could also cover the trading of farm products. Because in this aspect, the US, whose farm products has a strong competitiveness in international market, is opposed to the EU, which practises the Common Agricultural Policy (CAP) for protecting regional agriculture against farm products import, the negotiations ran into difficulties. Eventually, the agreement was reached in December 1993, and the main rules for agricultural trade were decided upon as follows (Egaitsu 2003: 113):

(a) Means of domestic agriculture protection are limited to only a tariff (but the rice trade of Japan and Korea is treated as an exception, and a grace period is given to Japan until 2000 and to Korea until 2010, respectively).
(b) Every signatory member country should gradually reduce all restrictions on domestic agriculture protection, including tariffs.

Japan is a member of the Organisation for Economic Co-operation and Development (OECD) and the signatory part of the GATT new agreements, and accordingly, an agricultural policy that accords with these rules is required. The main purpose of the

new Basic Law of Agriculture is thus to meet this requirement. In other words, it is to comply with the international agriculture market order, which has determined the new direction of Japanese agriculture policy through the new Basic Law of Agriculture.

According to this new Basic Law of Agriculture, the 'security of stable supply of food' and the 'display of multiple functions of agriculture' are given the highest priority. Moreover, as the means to achieve these two goals, 'sustainable development of agriculture' and 'promotion of farm villages' are also advocated.

Indeed, there are some discernible differences between the new Basic Law of Agriculture and the old one. For instance, article 1 of the new Basic Law of Agriculture stresses to 'improve the social position of farmers', making farmers have a comparable income with the employees in other economic sectors. In this sense, the new Basic Law of Agriculture is 'a law of and for farmers'. However, the 'security of stable supply of food' is emphasised from the very beginning of the new Basic Law of Agriculture, showing that what is under consideration are not only the interests of farmers but also the other key national interests.

The emphasis on the 'multiple functions of agriculture' appears for the first time in the new law. Its article 3 states that, 'multiple functions of agriculture include not only the food supply but also other farm products which are produced by agricultural activities in farm villages'. Japan and the EU countries reached an agreement on the concept of 'multiple functions of agriculture' in the process of the Uruguay Round negotiations, and this consensus prescribed a context for the related countries to justify their policy for supporting agriculture in the negotiations of WTO. According to Takumi Sakuyama, who participated in these international negotiations as a staff member of Japanese Ministry of Agriculture, Forestry and Fisheries, the multiple functions theory identifies those functions as the 'external economic effects' in farming. Moreover, it also recognises that farming has the function of providing 'public goods' in economic terms (Sakuyama 2006: 16–17).

The analysis above clearly shows, multiple functions theory evaluates agriculture not just as an activity of food production, but rather as a public service to serve the public need of the nation. Thus, agriculture is again not perceived only from the viewpoint of farmers.

Agricultural Environmental Policy in Other Advanced Capitalist Countries

Of course, such an agriculture policy reform is not confined to Japan, but also in other advanced capitalist countries. Generally speaking, these countries all attempt to improve the competitiveness of their own agriculture by taking the liberalisation of farm products trade as the policy bedrock. Our discussion here will concentrate upon those policy elements which are related with environmental protection in rural area.

In the Western countries, the policy formula to conceptualise the efforts in combing agricultural policy and environmental policy is called 'agricultural environmental

policy', or an agricultural version of 'environmental policy integration'. As far as this policy perspective is concerned, two points are most noteworthy.

First, the OECD has been being an enthusiastic promoter for such policy integration. A good example is that the OECD published a report entitled 'agricultural and environmental policies: opportunities for integration' as early as in 1989. This report stated that, 'better integration of agriculture and environment policies would provide mutual benefits and where necessary, enable tradeoffs to be made between competing objectives' (OECD 1993: 8). As to the 'multiple functions of agriculture', the OECD made great efforts for the coordination of diverse concepts, and expressed its support for the function of environmental protection through agriculture (OECD 2001).

For the OECD, the continuation of economic growth and the liberalisation of world trade are two of its three key goals. Within the setting that most of the developed nations are in favour of expanding the global trade under the framework of WTO, it is quite understandable and sensible that the OECD formulates and propagates such an agricultural environmental policy, and the same explanation can be applied to the enactment of the new 'Basic Law of Agriculture' in Japan.

Second, both the US and European countries, the main advocators for such policy integration, are able to better combine the aim of environmental protection with the measures decreasing the surplus of agricultural products. These countries were plagued by the surplus of farm products in the 1970s and 1980s, and the disposal of such surpluses became a serious policy issue. Thus one of the key governmental policy targets was to reduce the production of agricultural products, through gradually cutting down the financial subsidies for farm products and introducing the system of production quota. In addition, a policy initiative aiming for lowering the productivity of agriculture was pursued: the US government began to advocate a low input, but sustainable agriculture, and the EU added an extended strategy to the established CAP. All these measurements aim to harmonise the relation of environment and agriculture by restricting the overproduction of agriculture.

In short, advanced industrial countries are now confronting with different, sometime paradoxical, demands, such as 'stressing environmental protection', 'promoting the globalisation of market' and 'reducing the intervention in market'. The so-called agricultural environmental policy – just like its Japanese version – can be regarded as an end result of responding to these assorted requests.

Some Reflections from the Eco-socialist Perspective

The real question for such an agricultural environmental policy in advanced capitalist countries is that, can it achieve its policy target for the sustainability of agriculture – stabilising agricultural production and improving environmental protection in rural areas? There are probably very different answers to this question from different standpoints. From the eco-socialist perspective, as discussed earlier, I will emphasise the following difficulties for this agricultural environmental policy in realising its policy goals.

First of all, there is a possibility of reversing the end and the means. While initiating the Uruguay Round negotiations, the specific characteristics of agriculture which had been accepted to some extent until then was rejected as a general principle; and a free-trade principle equal to that of industry products was applied to almost all farm products. By contrast, the new Basic Law of Agriculture in Japan recognised the multi-functions of agriculture, respecting and protecting the 'particularity of agriculture' comparing with other economic sectors. However, it seems that the agricultural environmental policy in Japan, like in other industrial countries, simply pieces together these two opposing targets: market globalisation and environmental protection. To achieve its comprehensive goal, however, a policy of decoupling economic growth and environmental protection, e.g. separating the environmental protection and agricultural subsidies, is necessary.

Although the understandings to the connotation of 'decoupling' vary from country to country, according to Yoshio Yaguchi, a staff at the Legislation Examination Bureau of National Diet Library, in the setting of the Uruguay Round negotiations it can be interpreted as the follows:

> Briefly, decoupling implies deceasing the side effects of market distortion that agricultural policy bring about, and at the same time, supporting the income of farmers through a special fund of government. In other words, this policy needs to increase the income of farmers on the one hand, and to keep the neutrality of government in face of market on the other. (Yaguchi 1999: 41)

As his explanation clearly shows, one of the major characteristics of decoupling is the direct financial subsidies of government for farmers. Government can achieve the aim of environmental protection by setting up the environment-friendly farming as a requirement to receive these direct payments. Environmental policy consideration incorporated in an agricultural agreement of the WTO is remarkable, which tries to introduce economic incentives for environment-friendly farming activities.

Like other policies depending on 'economic incentives', this policy is based on the theoretical assumption of 'homo economics', believing that farmers, owing to the stimulus of economic benefits, will provide better environmental public goods. To achieve all this, a very important precondition is that agriculturists or managers can implement effective management in response not only to the natural environment where farm products produce, but also to the various 'demands' of market. In reality, however, these agriculturists or managers might give up the ideal method of environment-friendly farming, surrendering to the temptation of market opportunity which may emerge at ay time.

Secondly, there is a high risk within the intensification of the administrative experts rule. What characterises the policy of direct payment is that government pays the farmers for the 'external economic effects' while disregarding the equal rights of tax-payers. And as a consequence, the authority of the amount of such direct payment become uncontrollable in itself (therefore, for example, the system of 'shadow pricing' is performed). But more significantly, this fact makes the experts become the prominent actor in measuring the external economic effects.

For instance, according to the revised CAP of 2003, the EU began to implement the 'Single Payment Scheme', of which the amount of payment was calculated basing on the previous results of payment, aiming at improving the conditions in the fields such as environmental protection or animal welfare (cross-compliance). On the one hand, this scheme will undoubtedly lead to the advancement of environmental protection, while on the other hand, it will also result in increasing the work of monitoring and inspections for administrators. And consequently, a predicament for this policy will turn up. Taking direct payment as an example, if stressing the equity, more accuracy in monitoring and inspections is necessary, which means the increase in administration costs, while if stressing the decrease of administration costs and then reducing the monitoring and inspections of administrators, there will be a dramatically increased risk of engaging in malpractice for selfish ends.

On the contrary, in a society advocated by the subsistence perspective, people who purchase farm products at a local market or through direct exchange will act, so to speak, as watchdogs of environmental safeguards. It becomes extremely difficult for a producer to betray trust inasmuch as there is mutual interchange and/or constant communication between him or her and a user. In such decentralised relations, we cannot deny the possibility of citizens' double-dealing behaviour, but the deception in relation with production will be much rarer, and if any, much easier to monitor than it is now in a contemporary capitalist society.

Finally, there is a problem with such a policy that it often cannot fully consider the national particularity in international market. An appropriate case here is the EU, which has been carrying out the CAP for more than half a century and recently adopted a new policy called 'agri-environmental measures' (AEMs).

A report issued by the European Commission, which attempted to conduct a general review of the impacts of the AEMs between 2000 and 2006, stated:

> The total spending on the agri-environment is in fact significantly higher as Member States have to add their co-financing. In addition, some Member States also choose to pay for state-aided agri-environment measures … The role of AEMs payments varies considerably from one Member State to another. For instance, in Sweden, Austria and Italy, expenditure for the AEMs is much higher than the Community average, i.e. 50% of European Agricultural Guidance and Guarantee Fund (EAGGF) Guarantee expenses, while Belgium, Spain, the Netherlands and Greece hardly reach 30%. (European Commission 2005: 5)

This picture clearly shows the differences in implementing the agricultural environmental policy among the member states of the EU, though, the EU institutional framework makes the help each other among member counties at least to some extent possible in tackling common agricultural-environmental issues. However, for the countries that have a competitive relationship with each other in international market, incentive to help the others establish a workable agricultural environmental policy does not exist or work.

In 'countries with disadvantaged conditions' that boldly undertake agricultural production, the pressure to abandon farming will fall on them persistently as long as market competition represents the basic element of public policy. The 'external economic effects', such as a good environment, represents the public goods that cannot separate specific agents from the enjoyment. These kinds of goods always

cause the incentive to become a free rider, rather than a net-payer. 'A country with disadvantaged conditions' has to resist the temptation of such injustice and still create an agricultural environmental policy after having been compensated for disadvantageous conditions. We can imagine that that would be extremely difficult. If the globalisation of market is assumed, then the conflict of interests between nations is almost unavoidable. Of course, the external circumstances will not change that the area where the conditions for agricultural production are disadvantageous is, relatively speaking, in a dire situation, even if market is limited within a country or a specific region. However, it seems true that a disadvantaged area can gain understanding and co-operation more easily in a small market where countries are acquainted each other than in an 'anonymous' world market.

Conclusions

When discussing the issue of sustainability of agriculture, we cannot help but turn to the specific characteristics of farming labour. It is from such an eco-socialist thinking, of course in a very broad sense, that we can easily understand the incompatibility of environmental protection of rural areas and an internationalising market of agricultural products. Furthermore, to integrate agricultural production policy with environmental protection policy substantially, unlike what is proceeding in Japan or in other advanced capitalist countries, we have no alternative but construct a decentralised market where local people can physically confirm the credibility of environmental safety for themselves. In this sense, the agricultural environmental policy reform pursued in Western industrial countries, including in Japan, can clearly not meet these requirements, if not moving along a wrong direction.

References

Benton, T. (1996). Marxism and natural limits: An ecological critique and reconstruction. In T. Benton (Ed.), *The greening of Marxism* (pp. 157–183). New York: Guilford.

Egaitsu, F. (2003). *Agricultural economics*. Tokyo: Iwanami.

Commission, E. (2005). *Agri-environment measures: Overview on general principles, types of measures, and application*. Brussels: European Commission.

Kautsky, K. (1988). *The agrarian question* (Vol. I). London: Zwan Publication.

Mayeroff, M. (1971). *On caring*. New York: HarperCollins.

Mies, M. (1988). Introduction. In M. Mies, et al. (Eds.), *Women: The last colony* (pp.1–10). London: Zed Books.

Mies, M. (1988). Capitalist development and subsistence production: Rural women in India. In M. Mies, et al. (Eds.), *Women: The last colony* (pp. 27–50). London: Zed Books.

Mies, M. (1998). *Patriarchy and accumulation on a world scale: Women in the international division of labour*. London: Zed Books.

OECD. (1993). *Agricultural and environmental policy integration: Recent progress and new directions*. Paris: OECD.

OECD. (2001). *OECD report: Multifunctionality of agriculture*. Tokyo: Nosongyosonkyokai.
Sakuyama, T. (2006). *International negotiations over the multifunctionality of agriculture*. Tokyo: Tsukubashobo.
Shirai, A. (2002). Agriculture, farmer and socialism. *Quest*, No. 19.
von Werlhof, C. (1988). On the concept of nature and society in capitalism. In M. Mies, et al. (Eds.), *Women: The last colony* (pp. 96–112). London: Zed Books.
Yaguchi, Y. (1999). Development of world agricultural politics and decoupling. In Japan Agriculture Research Center (Ed.), *Studies of Japanese style of decoupling*. Tokyo: Nourintoukeikyokai.

Chapter 11
Alternative Development: Beyond Ecological Communities and Associations

Do-Wan Ku and Hyoung-Beom Yeo

Abstract Though Korea is commonly cited as an example of 'successful model of developmental states', from an ecological perspective, Korean capitalism can only be properly described as a successful story of neo-liberal globalisation. In other words, the Korean model of development, like that in other capitalist countries, is neither just nor sustainable. Of the four ecological discourses on alternative development: eco-authoritarianism, liberalist environmental managerialism, welfare state ecologism, and ecological communities and associations, the latter two are more desirable and/or feasible to draw an alternative theory and strategy, for quite different reasons. Furthermore, a real workable discourse and strategy should be an appropriate combination of them two: converting developmental or capitalist states into ecological welfare states on the basis of ecological communities or associations, and meanwhile, creating a self-governing system of associations that would develop ecological democracy beyond the framework of nation state. Until ecological communities or associations grow up step by step and eventually surpass ecological welfare states, our society will still be in the hands of the authoritarian capitalist states, which are neither ecological nor democratic.

Keywords Alternative development • Ecological communities and associations • Ecological paradigm • Industrial paradigm • Korea

Introduction

Global capitalist economy is showing clear signs of instability due to the U.S. credit crisis started in the spring of 2008. The neo-liberalist system, which had exerted its control over the world since the 'end of history' in the early 1990s, is revealing its

D.-W. Ku (✉) and H.-B. Yeo
Environment and Society Research Institute, 1245, Daechung Tower Gaepo-dong 13-3, Gangnam-gu, Seoul, Korea 135-989
e-mail: kudowan@korea.com

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_11, © Springer Science+Business Media B.V. 2010

strong and weak points at the same time. The self-regulating market is deluding itself that it was born without parents, while it was actually born from nature and society. Such natural or social events as the jump in the oil price and farm products, the growing threat of climate changes, and the successive rule of the left in South America, convince us that nature and society are the roots of the self-regulating market. Thus a reasonable question would be, is such a market possibly able to keep up against the backlash of nature and society?

What about South Korea, which has got on the train of global capitalisation and is commonly cited as an example of a 'successful model of developmental state'? Having examined the cases of the Kim Dae-jung administration, which came into power amid the IMF crisis in 1997, and the succeeding Roh Moo-hyun administration, which took the reins of government based on the people's fervent support, we can ascertain that the autonomy of a state cannot help but be restricted to an 'embedded autonomy', an autonomy deeply embedded in capitalism. The two administrations could retain their autonomy in the train of world capitalism, only insofar as they guaranteed profits of both global and domestic capitals. Specifically, leftist neo-liberalism and neo-developmentalism are the terms accounting for these attributes of Roh Moo-hyun administration. Although Korean civil society, which had experienced rapid development since 1987, succeeded in democratising the developmental state of Korea, it could not succeed either in radicalising or in ecologising the resulting democracy.

The model of 'rush-to modernisation' sought by the Park Chung-hee administration, has been pursued, though in a transformed manner, even after the fall of the Park regime. Despite some important changes, such as the shift from the bureaucracy-centered to the capital-centered development policy and the development of democracy and civil society, the basic attributes of developmental state have not been dramatically changed. The present development model, which is centered on industry and capital, is neither sustainable nor just in a global context, because it is spreading social and ecological inequity worldwide, while at the same time underpinning the sustainability of the affected areas. Therefore, we are facing an ecological as well as social crisis, which can be properly named as 'eco-social crisis'.

Then, how can we overcome this eco-social crisis? How can we live happily and more equitably, helping each other and being in harmony with nature in the era of eco-social crisis? This is the major concern of this chapter. In order to shed some lights on these questions, the present study will evaluate the characteristics and sustainability of the development model of Korea, and explore alternative models and discourses that can surpass the current ones. With this aim, this chapter proceeds as follows: First, it examines the discourses on state and its development, making a division between industrial paradigm and ecological paradigm, and then, discusses the strategies to restructure society and state based on ecological communities and associations.

Evaluation of the Sustainability of the Korean Development Model

Lot of research has been done on the Korean development model since the 1980s. In particular, a variety of theories, ranging from the so-called 'social formation' (*Gesellschafts*-formation) debates to the theory of neocolonial state monopoly capitalism and the theory of peripheral capitalism, were formulated, and active discussions were held among Korean scholars and intellectuals about the structural limits of Korea's capitalist development. Among theoretical debates over the world capitalist system such as the dependency theory, the world-system theory, and the dependent development theory, an overwhelming claim was that a country of colonial dependency like Korea can hardly achieve economic development, and even if it is possible, it is still likely to remain dependent on and be constantly exploited by colonial powers.

Unlike these theories, the developmental state theory highly valued the aspects of Asian developmental states such as state autonomy (bureaucratic efficiency) and efficient distribution of resources, and explored the reasons for the success of those countries. In doing so, the discourse of economic success began to substitute the discourse of dependency and underdevelopment. Meanwhile, as economic growth continued despite the difficult circumstances since the 1990s, an argument was raised that it would be proper to abandon political authoritarianism and instead to pursue 'a democratic developmental state'. With the fall of state socialism and the ensuing dominance of the Hegelian conception of 'end of history', it became difficult to find any other alternative than to control markets and capitalism with bottom-up democracy. Meanwhile, those who accepted the discourse of post-modernity sought the conversion of capitalism through the 'politics of difference' or 'escape from capitalism'.

What are the differences between the 1980s and the 2000s? Why have left-wing theories, such as the dependency theory and the theory of neocolonial state monopoly capitalism, faded from the scene, giving way to the developmental state theory or to the advancement discourses? One noticeable point here is that capital markets in Korea have seen tremendous growth for the last 20 years in the flux of globalisation. Having gone through the IMF crisis in 1997, many Korean corporations have gained more stability through the efforts to improve their efficiency and transparency. As a result of democratisation, state corruption has remarkably decreased, and some Korean corporations are ranked the world's first in the sectors of steel, shipbuilding, and semiconductors. These 'economic successes' took people's eyes away from the dependency theory and the theory of neocolonial state monopoly capitalism.

However, this is not the end of the story. Korean state and capital, which were completely immersed in the sea of neo-liberalist globalisation, threw out of their

ship the 'people', which could be burdensome to the economic system, so that they could lighten the ship's load in the vast ocean. Those who were considered a hindrance to the efficiency of the self-regulating market system were externalised to the status of irregular employees, small-scale businessmen, and voluntary or involuntary unemployed, and thus were alienated from society (Polanyi, 1948).

More complex than this social externalisation (exclusion) is the issue of environmental externalisation. With people's increased interest in environmental issues and the development of environmental movements, environmental policies and budgets have been steadily on the rise since the 1990s. Owing to this, the quality of environment, such as the quality of air and water, has been partially improved. However, since only technical or administrative countermeasures were taken, their effects were still very limited. Moreover, such environment policy adjustments were not enough to handle the increased loads of pollution caused by rapid economic growth. Contamination prevention and treatment technology and equipment investments would not help much in decoupling economic growth and environmental pollution. In particular, in an era of a full planetary environmental crisis, exemplified by climate changes, Korea's current development model is not ecologically sustainable.

To sum up, the successful Korean capitalism can be regarded as a success story of neo-liberal globalisation. With the appearance of new production and consumption markets, such as China, Russia, Brazil, and India, world capitalism obtained a new engine for further development. This engine would pump life into world capitalism for quite a long period of time, if we could successfully deal with the problems such as resources exhaustion, planetary environmental crisis, and social resistance. Nonetheless, world capitalism is a system that can only be sustained by colonising society and environment. This kind of colonisation has led to exhaustion of petroleum resources and climate changes, while provoking liberalisation and democratisation movements in various countries. Now that the dominant model of development, its Korean version in particular, is neither just nor sustainable, we have to reform it or find an alternative. The question is when and how. In the next section, we will investigate the discourses on this issue, by dividing them into industrial paradigm and ecological paradigm.

Discourses on Alternative Development: Two Paradigms

Industrial Paradigm

In order to plan for a more just and sustainable future, first of all, we need to reflect the dominant discourses of development in the era of industrial capitalism. Although the eco-social crisis is affecting our daily life, we are still living and thinking within the framework of industrial capitalism. While academic discussions on postmodern or postindustrial society are active, the ruling paradigm of discourse in reality is still that of industrial modernity.

To analyse the main discourses of industrial paradigm, the four-type-state model suggested by Noam Chomsky will be helpful. Chomsky categorises the developed industrial states into four types of government: classical liberalism, state socialism, state capitalism (contemporary welfare states), and libertarian socialism (Chomsky 2006: 9; Karatani 2007). This distinction is a useful frame through which today's states and development models can be understood. Chomsky, an anarchist, proposes to extend the tradition of liberalism and conduct revolutionary mass movements in order to eliminate the state organ, which is oppressive and authoritarian, as well as other public or private bodies. He claims that, the ideal of classical liberalism, which has been articulated and developed in the form of libertarian socialism, is an objective that is more than attainable (Chomsky 2006: 66). Kojin Karatani has adapted this classification by Chomsky as follows (Table 11.1).

This four-type-state model by Chomsky can be referred to as industrial paradigm since they do neither theoretically nor practically presuppose the limits of ecosystem. Rather, these models, which are mainly based on the ideology of anthropocentrism, focus on the relation between economic system and society.

In Korea, many discussions have been held in the recent years concerning alternative development, however, most of them are conducted broadly within the framework of industrial paradigm. Let's examine some remarkable features of them related to the discourses on alternative development in Korea, based on the four-type-state paradigm.

First, there are very few who present state socialism as an alternative in Korea. After the fall of Soviet Union and the following collapse of East European socialism, the development model in which state takes the initiative to nationalise the means of production and to pursue positive equity is already devoid of practicability and legitimacy. Many problems involved in this model, such as betrayal of individuals' aspiration for freedom, people's aversion against bureaucracy, and inefficiency of the top-down plans, put an end to the historical test of this model.

Second, liberalism cannot be taken as an alternative because it has already been established as the ideological and practical mainstream in Korean society, as a result of the combination of liberalism, anticommunism and pro-Americanism.

Third, lots of people are presenting welfare state capitalism as an alternative. Broadly speaking, the Kim Dae-jung and Roh Moo-hyun administrations had this development model as their objective. However, these two administrations could not help adopting neo-liberalist economic strategies due to such roadblocks as the intensified competition of world capitalism, the resistance of domestic capital, and the conservative geopolitics.

Table 11.1 Types of the discourses of industrial paradigm. (Adapted from Karatani 2007: 18)

	Equity-oriented	Inequity-oriented
Pro-state (control)	State socialism (communism)	Welfare-state capitalism (social democracy)
Anti-state (liberty)	Libertarian socialism (associations)	Liberalism (neo-liberalism)

Most of the Korean discourses on welfare state capitalism as an alternative start from the problems of 'low growth' and 'social polarisation'. These discourses break out of existing perspectives that see growth and distribution in oppositional terms and emphasise that these two issues can be dealt with in a harmonious manner. According to these discourses, growth strategy is needed to solve social crises while at the same time aggressive social welfare policy should be implemented to maintain economic growth. What they have in common is the objective to solve the problems of polarisation and social exclusion, which are caused by market economy, through the strengthening and restructuring of state. They also agree in that the ecological crisis should not be regarded as a main framework of problems.

Fourth, discourses on libertarian socialism, a utopian socialism that seeks to secure individuals' freedom, social equity and democratic participation, had once flourished in the form of various theories and experiments since the nineteenth century, but after the failure of state socialism it is barely maintaining its existence through the cooperative society movement or the local currency (LETS: Local Exchange Trading System) movement. Nevertheless, it seems evident that these sorts of 'association movements' have theoretical and practical potentiality, which enables it to rise beyond state socialism and welfare state capitalism. In Korea, academic researches on anarchism have been working on this issue and in particular, recently, a variety of discourses such as commune-ism and commune have been circulated (Ko et al. 2007). Cooperative movements – which will be discussed later in this chapter – have also been constantly developed.

Here, we need to pay some attention to the discussions on the concept of association. Kojin Karatani (2007: 18) suggests call Chomsky's libertarian socialism 'association' for the reason that if it is named in the term of 'socialism' or 'communism', it can be confused with 'state socialism' (Karatani 2007: 49). The 'association' referred to here is related to the society that, according to Marx and Engels' *Communist Manifesto*, is supposed to appear following the end of class society. That is to say, this term alludes to the extinction of state.

> In place of the old bourgeois society, with its classes and class antagonisms, we shall have an association in which the free development of each is the condition for the free development of all (Marx and Engels 1955: 32).

According to R. M. MacIver, association is a concept opposed to that of 'community'. He argues that, the term 'community' signifies common life carried on within a certain area, whereas the term 'association' means a combined group that is formed artificially and intentionally based on individuals' common interests. However, Karatani's concept of association is different from that of MacIver. Karatani calls for the general movements to recover reciprocal exchange superseding the trinity of state-nation-capital, or 'association' (Karatani 2007: 49–50). Representative of this is the local currency movement (Karatani 2005: 57–61).

From the concepts of association articulated by Marx, Engels, or Karatani, I believe, we can find the seeds of alternative discourses, which will help us to overcome the eco-social crises. The ideal of community that is today pursued by a number of community movements, including the ecological community movement, is the community of solidarity and friendship. This community is different from a

traditional community bound by kinship, region, nation and culture. And, 'network of mature democratic solidarities formed by free individuals who broke out of the frame of mechanical solidarity' can be called 'association'.

However, in present society, such alternative movement is usually called 'community movement'. It is, unlike what can be observed in traditional communities, a purposeful collective act in which free individuals cultivate relations of friendship and reciprocity on their own free will. Strictly speaking, it is a movement close to that of association, though, when referring to this movement, such terms as 'community' or 'commune' are often used to emphasise the relations of common culture, friendship and reciprocity. Therefore, in this chapter, we will on most occasions use them interchangeably. Though, there are clearly certain differences between the two concepts. Community values emotional and primary relations, whereas association emphasises free individuals' voluntary participation and formation of democratic, reciprocal relationships; community is more close to romanticism whereas association to rationalism.

Till now, we have examined the four discourses of industrial paradigm. Then, is it possible to overcome the eco-social crisis with the industrial paradigm of discourse? Since the discourse of industrial paradigm, which are dominant in our time, are based on a development model centering on industry, they do not recognise the limits in the carrying capacity of ecological system. Even if they do so, they would assume that such problem can be solved with technical and institutional solutions. The industrial paradigm, which relies on the adjusting mechanisms of market and technical innovations, is dominated by the industrialist ideology that sustainable growth is possible and desirable. This model could help to deal with the eco-social crisis locally. An Example of this model would be the European countries, which are enjoying high quality of life as a result of social welfare policies or corporatism. However, when viewed from a global perspective, this model seems to exclude nature and society. Such an unbalanced development is not sustainable in the long term given that information is circulating globally, work forces are moving freely, and the effects of ecosystem degradation are spreading rapidly. Although it might be possible to achieve short-term and local development by following one of those four discourse models, it would be almost impossible to ensure future development of the global community sustainable and just.

Ecological Paradigm

Ecological paradigm perceives environmental problems or environmental crisis as critical issues and put priority on addressing these issues. Borrowing the four-type-state framework suggested by Chomsky, we can also classify the discourses of ecological paradigm into four categories, depending upon their attitudes on state (more control or freedom) and ecological democracy. According to these two criteria, the discourses of ecological paradigm can be divided into four categories: eco-authoritarianism (more powers to state and bureaucrats!), liberalist environmental

Table 11.2 Types of the discourses of ecological paradigm

	Anti-ecological democracy	Ecological democracy
Pro-state (control)	Eco-authoritarianism	Welfare state ecologism
Anti-state (liberty)	Liberalist environmental managerialism	Ecological communitarianism/ associationism

managerialism (leave it to the market!), welfare state ecologism (let's achieve both ecology and welfare through capitalism!), and the principle of ecological community and association (leave it to ecological communities or associations!) (Table 11.2).[1]

First, let's look at the discourse of eco-authoritarianism. This discourse supports a top-down ecological conversion, in which a strengthened ruling power – 'an eco-authoritarian state' – will solve all the ecological problems. Such an eco-authoritarian state can be established both in capitalist countries and socialist countries. Being unaware of the contradictions and fissures of state socialism, some Korean youth believed in the 1980s that it would be possible to solve the problems of capitalism including environmental crisis by ecologically reforming socialist states. Even today, some people still believe in overcoming ecological problems through strengthening the power of state. For them, controlling human desires and preserving nature and environment could be only possible by the strong power of state. However, there are few successful cases of this kind in reality. Ecologism without democracy may be unavoidably necessary in critical situations, and it might partially solve ecological problems, but it would probably bring about new social problems. That is why 'eco-authoritarian state' cannot be an alternative.

Second, the liberalist environmental managerialism is a discourse that calls for solving environmental problems through an improved market mechanism. An extreme form of this discourse is the idea that, 'the tragedy of commons' like environmental problems can only be resolved through the full liberalisation of markets and private ownership of environment. The United States, which took the lead in implementing aggressive environmental policies in the 1960s and 1970s, is now satisfied with liberal management of environment in the age of neo-liberalism. It goes without saying that the U.S. is the principal offender of current environmental crisis on the planet.

The liberalist state of environmental management falls again in the vicious circle by resorting to markets, which have been the cause of eco-crises, as a solution to ecological problems. If the political power, which can set the limits of ecosystems, surpasses the power of markets, market mechanism could then operate as a mechanism

[1] This is an ideological classification. In reality, the four discourses are intertwined with one another and converted into a variety of theories and practices. An example of this is the discourse of green state' (Mun 2006b; Jeong 2006a). The green state theory is a discourse that attempts to transform capital and state into green structures, by transcending their current characteristics of 'capitalism' and 'statism'. Here, 'green' is a symbol, which can stand for a variety of values, such as ecologism, democracy or peace.

serving for the balance of ecosystem within the limits. However, in the countries where neo-liberalism predominates, ecology and society are dominated by economy, serving the demands of proliferation of capital and the interests of its owner. Therefore, liberalist states of environmental management cannot be an alternative to overcome the eco-social crises.[2]

The third discourse is welfare state ecologism. This model of discourse advocates ecologically transforming the welfare state capitalism, which takes social democracy as its basis of political ideology. In a situation where neo-liberalism has been predominant in many countries following the collapse of state socialism, this model seems to be a feasible and attractive development model. Examples in this regard are the countries such as The Netherlands, Germany, and Sweden, which are commonly recognised as successful cases in practicing the theory of ecological modernisation.

This model of discourse has deep relations with the discourses of sustainable development and ecological modernisation which strongly believe that it is possible to control and manage the eco-destruction of capitalist state and society while at the same time maintaining the core of capitalism and statism unchanged (Ku 2006). According to the proponents of ecological modernisation, the above-mentioned countries have offered empirical evidences that environmental problems can be solved through the ecological reform of capitalist system and social welfare. Of course, this claim is to some extent reasonable.

At this point, it is appropriate to make some remarks on the ecological discourses of Korean scholars. Because, 'green progress' articulated by Myeong-rae Cho's (2006) and 'ecological welfare society' by Seong-tae Hong (2004, 2006) seem to belong to the category of welfare state ecologism discussed above. In particular, Cho is apparently inclined to the systemic reform of capitalist state.

In order to implement a real ecological post-modernisation, it is needed to ecologically restructure capitalism, and even to consider and practice controlling the politics and economy of capitalism, which ultimately aims at converting the existing industrial capitalism to a green capitalism (Cho 2006: 348).

Characterising the present-day Korean society as a 'neo-developmental' state, Myeong-rae Cho summarises four strategies of ecological post-modernisation. They include the state-led ecological post-modernisation, conversion of the developmental state into a green state, transformation of the industrial production system and markets into environment-friendly structures, and the 'greening' of civil society based on the integration and participation of the citizens with 'green self-consciousness'. When he presents these strategies, what he emphasises is the role of state. In short, the major message from Myeong-rae Cho is that, he believe, we could reform capitalist state into an ecological welfare state as the first step, and then gradually convert capitalism into 'green capitalism'.

[2] Se-il Park, a liberal, insists that, 'the act of destroying nature and life is nothing more than self-destruction or self-denial'. He recognises present environmental problems on the planet being very serious, and tries to 'find a fundamentally different way of industrialisation, a completely new way of life and work'. Nevertheless, the 'community liberalism' that he proposed as a solution is nothing more than a variation of neo-liberalism (Park 2006: 157–158).

By contrast, Seong-tae Hong defines the present-day Korean society as 'Park Chung-hee regime', or a 'construction state', which is characterised as the deeply embedded growth-orientation and the values of development. This construction state is still producing lot of problems such as distortion of the policy-making process, mismanagement of state finances, waste of taxes, delay in the reform of industrial structure and labor structure, persistent corruption, and destruction of nature. Furthermore, he identifies construction projects as the mechanism maintaining such a construction state, and emphasises that in order to make the Korean society an 'ecological welfare society', the most urgent task is to reform public development sectors through improving the efficiency of democracy. Hong advocates a 'resources circulatory agricultural society', which is considered by ecologists as the ultimate model of ecological society. He admits that, though, 'it is necessary to take a roundabout way of "ecological industrial society" in order to achieve the ultimate goal' (Hong 2006: 286).

In summary, both Myeong-rae Cho and Seong-tae Hong focus their interests on the ecological reform of nation state, calling for enhancing the sustainability of society and economy through a top-down ecological transformation, though there are some differences between them in how to understand the conceptions of ecological community or association, which will be discussed in the following.

Finally, main representatives of the discourses on ecological community and association in Korea are Jong-cheol Kim, Gyu-seok Cheon, and Gwang-hyeon Sim. For Jong-cheol Kim and Gyu-seok Cheon, they prefer to use the term 'community'. Through the magazine *Noksaek pyeongnon* (Green Review), they advocate agriculture-centered communities transcending state, industrialism and capitalism.

According to Jong-cheol Kim, the claim that it is urgent to recover the publicness of state, which is on the decline under the control of neo-liberalist economic logic, and to expand the functions of state so that it can protect the weak of the society may sound plausible. However, it should not be overlooked that the welfare state system is basically a system that requires continuous growth as its prior condition and that will further contribute to the expansion and extension of capitalist system. He also reminds us that, we cannot disregard the possibility that people may be treated as passive recipients of systemic care provided by state, such as social security networks, free education, and free medical services. Therefore, he insists, the welfare state is not the right solution, because 'it could weaken people's power of free and independent mind' (Kim 2007: 8).

For Gyu-seok Cheon, 'community welfare', which enables people to work and live in a self-supporting manner, is more important than 'state welfare'. He emphasises that, state welfare, which makes self-reliance and self-management impossible, is nothing more than 'subordinate welfare, slaves' welfare, and beggars' welfare', whereas traditional community welfare is a 'non-free welfare, represented by self-dependence, self-reliance and self-management'. From his point of view, welfare paid by taxes is not true welfare; true welfare is the community welfare managed without taxes based on self-dependence, self-reliance and self-management. Consequently, he further initiates a 'movement of insubordination against market principles' – 'down to the countryside movement' (*habang undong*) – by

encouraging direct transaction with farmers without the mediation of markets, to create real autonomous communities of production and consumption, which are independent from modern cities and markets (Cheon 2007).

Jong-cheol Kim and Gyu-seok Cheon show their favour towards rural societies and communities, leveling severe criticism against modernity and state, whereas Gwang-hyeon Sim endorses a strategy of transcending modern market system and state through establishing ecological associations or communes.

Sim (2006) proposes to activate public sphere and democratic consensus so as to strengthen the control over capital and state, by creating networks of ecological cultural communes, through which people can foster their capability of economic, cultural and political autonomy and independence. From his point of view, the 'networks of ecological cultural communes' should cover such areas as self-managing cooperative associations, life-world including leisure and consumption, public services including public education and public medical services, and local councils, etc. These ecological cultural communes will constitute a central bulwark in the confrontation against capital-state, otherwise, 'the established social public sphere and democratic consensus cannot help but drift about between capital and state'. Of them, he believes, labor unions, which have closest access to the residents, are the largest local community organisations that could play a leading part.

Constitution of Alternative Models

Is it possible to ensure a just and sustainable society in the era of eco-social crisis, when industrial paradigm is still predominant? It might be temporarily possible only if society and nature can survive the exclusion. This is also the message delivered by the fourth report of the Intergovernmental Panel on Climate Change (IPCC). That is granted, we have to find the real alternative within ecological paradigm, and as analysed earlier, liberalist environmental managerialism and eco-authoritarianism cannot be our choice.

Then, how about the model of welfare state ecologism or ecological welfare state? Although it is the most feasible and imaginable model of alternative development of today, there are some evident limitations within it.

First, the welfare state model is challenged by the threat of its constant declining in the midst of global capitalist competition. Such threat is becoming even stronger after the collapse of state socialism. In addition, the ecological welfare state model is always in the danger of being co-opted by capital-state. Without a powerful ecological civil society, sustainable development in practice might be converted into sustainable growth or sustainable management, and the word 'ecological' contained in the phrase of 'ecological modernisation' would be degraded into a mere rhetoric to the discourse of "rush-to modernisation (green washing).

Second, there remains a question that ecological welfare state model would be spread over the globe. As regards this question, there are two oppositional answers: 'no' from *The Limits to Growth* by Donella H. Meadows and 'yes' from

Our Common Future by the World Commission on Environment and Development (WCED). Of course, it is a hard question. However, in light of the ongoing destruction of local environments all over the world and global climate change, the discourse in *The Limits to Growth* looks persuasive again. A clear thing is that, without a radical structural change of society and economy rather than technical solutions, 'the limits to growth' could become a reality sooner or later, and the most possible victims would be the poor people in poor countries.

Third, ecological welfare state model is basically based on a top-down, state-centered strategy of change. As long as the current international system that presupposes the exclusion between nation states remains unchanged, ecological, social sustainability and everlasting peace in the world would be a long way off.

Unlike the three discourses examined above,[3] the discourse on ecological communities or associations does not recognise the positive functions and legitimacy of state. And accordingly, the model of ecological community or association seeks a strategy of eliminating state or creating communities or associations outside the framework of state. In other words, this discourse or model aim to create an ecological economy and society based on alternative communities or associations outside the frameworks of capitalism and statism. Typical examples in this aspect are eco-anarchism and social ecology (expounded by Murray Bookchin). According to these theories, the root source of present eco-social crisis is capitalism/industrialism and statism, and thus the real solution can only be a theory and practice that endeavors to fight against capitalism/industrialism and statism. In a world where the dominant position of capitalism is unchallengeable, however, this model, which is exemplified by small-scale communities or cooperative associations, faces a predicament: it is quite radical in terms its ecological ideology, but in practice it appears to be supplementary to or parasitic on the system of capital-state, let alone to change it. It seems that imagining how the sum of ecological communities or associations would lead to the formation of an ecological welfare state and then go beyond it is one thing, and how to realise these wonderful ideas through an appropriate strategy is another.

Then, can the discourse and strategy of ecological welfare state and ecological communities or associations be our alternatives? As we have demonstrated above, with appropriate economic, social and natural conditions, any country can attempt to create an ecological welfare state; on the other hand, as long as we are caught in the complex of capitalism-industrialism-statism, a just and sustainable Green state can only be a remote future, if not impossible. And this judgement also confirms or highlights the importance of ecological conversion of society in any possible conversion of modern state into an ecological welfare state. It is also the reason why we need to put more efforts in contemplating how to form associations, 'associations of associations' (Karatani 2005), so as to dissolve the dominant trilogy of state,

[3] The liberalist environment managerialism seemingly opposes state, but actually, it is a discourse and practice that proposes for having a strong state and strengthening the roles of state in order to ensure the maintenance and exercise of property rights.

capital and industry and then lead to a new way of living, though some of these ecological communities and associations are neither just nor sustainable. Given the analysis above, I would suggest a synthesis of the two discourses and models: build an ecological welfare state on the basis of ecological communities and associations (a bottom-up manner).

Why it must be based on ecological communities or associations? It is difficult to sustain the harmony of nature and society in the long term without the free, reciprocal relations of the grass-roots people. That is also the reason why all top-down oppressive environment policies are doomed to a failure. As long as the capitalist structure of commodity production is predominant in the world, state and capital can instrumentalise society and nature at any time.

Why it must aim at an ecological welfare state? We have observed the cases of failure in the states such as the Soviet Union, China, and North and South Korea. Socialist countries attempted to make the people internalise 'moral economy' through the top-down seizure of power, but ended up in failure, while capitalist countries cannot help but locate their resources on fixing and repairing the 'treadmill of production' (Schnaiberg 1980) with the 'embedded autonomy' being captured by capital. On top of everything else, the system of nation state is unjust in that it makes wars latent in people's daily life. The more the eco-social crisis deepens, the more acute the disputes and conflicts between countries over the lack of resources and environmental pollution become. For example, a structural feature what social democracy and ecological modernisation have in common is its social-ecological exclusion. That does not mean, however, we have to dissolve all public control systems because of the defects of state. Ecological communities or associations are not strong enough to prevent the dominance of the weak by the powerful. Due to this, what we really need to do is to restructure capitalist states or developmental states in a bottom-up manner: deconstruct traditional states through establishing ecological communities and associations and replace them with an alternative system – an ecological association of associations.

Therefore, the new public management system that will be emerged in the process of dissolving and restructuring the existing states through creating ecological communities and associations can be called 'ecological welfare state'. This is a state that will ecologically restructure capitalism and mediate the class conflict based on the principles and strategies such as sustainable development and ecological modernisation. It is noteworthy that, if such ecological welfare state keeps on mobilising 'exclusive altruism' and thus maintaining the structure of nation state under the world capitalist system, neither everlasting peace nor ecological sustainability is achievable. In that case, it will reach the limits of its ability to adjust the conflicts between countries, classes and groups within the capitalist system. To cope with this highly possible scenario, we need also to establish a global control system going beyond the framework of nation state. Concretely, it would be a 'super-state' that transcends the framework of nation state, or a federation, league or association at the supranational or global level – something like the 'association of associations', suggested by Kojin Karatani. The 'association of associations' should be developed into a mature self-governing regime composed of free individuals,

fostering ecological democracy within the ecological limits. If its components – ecological communities and associations – are really ecological, they still can not shake off the yoke of the industrial enlightenment era's dogma on human beings.

In short, we need a new strategy of converting developmental or capitalist states into ecological welfare states on the basis of ecological communities or associations, and meanwhile, creating a self-governing system of associations that would develop ecological democracy beyond the framework of nation state. Until ecological communities or associations grow up step by step and eventually surpass ecological welfare states, our society will be in the hands of the authoritarian capitalist states, which are neither ecological nor democratic. To make any progress, an appropriate discourse strategy and necessary actions for ecological communities and associations are indispensable in face of the powerful state and aggressive capital.[4]

Alternative Development Strategies

Ecological communities and associations movement has been active in Korea for the last few years. Assorted ecological communities or associations such as cooperatives, social corporations, ecological communities, environmental movement organisations, alternative capitals, and local currency users are moving beyond the boundaries of state and capitalism, expanding the cases of alternative exchanges for reciprocity and solidarity. This amounts to bringing the capitalist market, which is dominated by the principle of equivalent exchange, under the control of community and nature. It also involves controlling and transforming the market, which ignores the limits of nature and destroys the community's relations of reciprocity and solidarity. In the course of transforming the market, state is not something that should be objected, but rather a central power to be utilised and transformed. Building up an ecological community and association and ecologically transforming state are not two different tasks but the two sides of the same coin. What is more important, in the course of building ecological communities, is to ecologically transform state and create an 'association of the associations', which will replace state and function as an autonomous association for ecological welfare.

The core strategy for this ecological model is to fundamentally transform the market, state and society. First of all, we need to put some brakes on and ecologically control the global expansion of market, otherwise, no alternative development can be brought forward. There are two ways to achieve this. The first method is to put market under the ecological and social limits through a direct control of market by green consumerism and civic activism. The most radical and fundamental strategy is to withdraw from the capitalist market. Gyu-seok Cheon insists that, people

[4] Kojin Karatani proposes to form a 'world republic' and to dream of eternal peace, through the idea of 'associationism' (Karatani 2007). For the author of this chapter, though, eternal peace cannot be achieved without an ecological conversion.

should refrain from going to markets if they are to diminish and abolish them. A way to be completely freed from market is to retreat to a self-sufficing farming economy. But, a problem in carrying out such strategy is that, it requires too much of social imagination and solidarity: experiments at the local level can be quite successful,[5] but it is extremely hard at the regional or national level. One of the alternative ways is to push forward 'green consumerism' through consumer activism. But more importantly, a reciprocal market, along with the capitalist market, is needed. In this market, prices are determined by the principle of social solidarity within ecological limits, even though they are still under the influence of the exchange market. Why the cooperative movement can be called as social movement is that, it is a discourse of action that goes beyond the framework of market.

Another method is to control capital through the mechanism of nation state and global governance. Socially responsible investment can be helpful as a way to bring capital under the control of ecology and society, but it is not enough. What must do also is to increase and improve the quantity and quality of ecological and social capitals, which are operated by voluntary citizens within the ecological limits.

Secondly, we need a strategy to ecologically transform state. The most ideal and theoretically possible model is a utopia, in which communities and associations freely develop and realise their solidarity and unity in the absence of nation state. But more urgent, and more realistic, is that, in the face of the threats of global violence and war, to transform nation state into an ecological and social community rather than to abolish it. Therefore it is a favourable progress to replace the development model of state capitalism with that of ecological welfare state. In such a process, theories of sustainable development and ecological modernisation can serve as practical tools for promoting the realistic social movements and reformative policy-making.

Third, a strategy for ecologically transforming society is also necessary. The alternative development does not stop at demanding state to provide welfare and environmental policies. Rather, it is a long-term process in which one society reorganises its economy, centering on the principle of ecology and solidarity. Diverse communities and associations such as cooperatives, communities, and environmental groups, have done numerous experiments to create a cooperative economy based on ecological principles, and quite a lot of them are successful. Of them include civic renewable power plants, local currencies, medical cooperatives and associations of cooperatives. Experiments of urban community developing are actively underway in urban areas such as Seongmisan in Mapo-gu of Seoul, Wonju in Gangwon-do, Bansong in Busan, and Hanbat LETS in Daejeon, in addition to the experiments of alternative rural communities in Hongdong-myeon in Hongseong county, Jinan in Jeollabuk-do province and Asan in Chungcheongnam-do province.

These activities can be regarded as a process through which individuals voluntarily build new type of value-sharing living communities, equipped with a new ideology

[5] In a broader sense, even this kind of community cannot but rely on state and market to some degree.

different from that of the traditional rural communities, which have already been dissolved. Those who would like to live together within the ecological limits take initiative to create social relations of donation and reciprocity. These experiments serve as seeds not for the market-centered associations but for the ecological communities and associations which will bring about the reorganisation of society and ecology. At present, these experiments, based on the small-scale, face to face relations, are confined to the solidarity and reciprocity of 'their own groups', thus spatially very limited. Nevertheless, we should never underestimate the potential of their social and cultural influence. Noteworthily, exchanges with Japanese civic groups, which have a long history, serve as a crucial basis for the dissemination of such experiences in Korea; meanwhile, Korea's dynamic experiments of building ecological communities and associations, which are combined with its experience of democratisation, are also exerting influence on Japan.[6]

One key issue is that although these ecological communities and associations have the will to transform global capitalism and nation state system, they lack concrete programs and visions for how to make it. Confronting with the problems such as structural unemployment and social polarisation, many of them often choose self-relief first or relying on state subsidies. Cooperatives have been growing, but an observable tendency is that they are degenerated into a mere medium between the consumers for better food and the producers for more stable profits. It is also highly probable that social enterprises will lose their independence as a result of their reliance on state.

Therefore, in order to make the ecological communities and associations lead to the future for an alternative society, we need to articulate a clearer vision regarding how to incorporate the power of social solidarity into the project of institutional reforms and state conversion. Simply shouting the slogan, 'No state, no capital. Let us go back to the traditional rural community', would not help much ecologically transforming state and capital. It is essential for the communities or associations to form a strong social, ecological sphere so as to ensure an independent social life. The stronger the influence state and capital have, the more difficult it becomes to defend the community life. Just staying with the status quo will never bring about an alternative society, but what is more important is to develop a program which institutionalises the principle of care for and solidarity with the socially and ecologically weak people and at the same time empower them. Ecological communities and associations should serve as an ecological sphere resisting the violence of developmental states. In addition, we must draw a long-term plan in order to bring state under the control of ecology and society and then turn it into an agent for eternal peace, for violence is inherent in state and capital.

This bottom-up transformation strategy of ecological communities and associations is different from the top-down reform strategy of ecological welfare states,

[6] The influence of Japanese cooperatives and communities can be found in such cases as Hansalim Movement, the rice-duck farming system in Hongdong-myeon, Hongseong-gun county, and Sanan (Yamagishi) Village in Hwaseong-gun county, Gyeonggi-do province.

based upon different philosophies. The former criticises the violence and incompetence of state, while the latter recognises the inevitable existence of state and its public functions. Unless they learn from each other, there would be no way to find a true vision of green transformation.

Conclusions

In recent years, lot of academic research on the alternative society has been undertaken, including in Korea. If turning to the reality, however, we can see that even the rightist social democratic ideas, like the 'Third Way', are losing their ground amid the economic globalisation dominated by neo-liberalism. Libertarian socialism or associationism failed to put forth its buds and is on the verge of being frozen due to the collapse of the so-called actual existing socialist countries. Nevertheless, the seed is destined to bud after living through cold winter. There are still people who want to live helping each other in nature. As Karl Polanyi claimed, if the self-regulating market brings excessive attacks on society and nature, these attacks, in turn, would bring again the exchange market, which is just like a wild horse without reins, into its realm. This seems to be already portended by climate changes and diverse experiments for a new socialism and new communities. It is an open question whether the future of historical capitalism would be more dismal or better than now. But, if we make efforts to resuscitate ecology and society here and now, it would lead to opening up another era of capitalism or a post-capitalist future.

We have expounded the model of building and going beyond ecological welfare state based on ecological communities and associations, and gradually moving towards an alternative society. It is an attempt to make up for the absence of ecological perspectives in Marxism, which is focused only on social relationships as well as to go further beyond the naive anarchism which fails to note the strength and inevitability of state. This analysis should also go beyond the limits of the Marxist prediction that once the dictatorship of proletariat is achieved, a classless society will be created and associations of free men will be established. In my point of view, it is possible as well as necessary to constantly hold in check the exclusive violence of state and the ever extending universal rationalism, by virtue of the reflective power of ecological communities and associations. Only by doing so, can we hope for eternal peace of the world.

References

Cheon, G-s. (2007). Jinjeonghan bokji-neun jageup jachi-ui sam-ida: minju nodongdang-ui noksaek jeongchi-wa bokji gusang-e daehae (Authentic welfare is the life of self-sustenance and autonomy: On Democratic Labor Party's conception of green politics and welfare). *Noksaek pyeongnon* (Green Review), 9–25.

Cho, M-r. (2006). *Gaebal jeongchi-wa noksaek jinbo (Development politics and green progressivism)*. Seoul: Environment and Life.

Chomsky, N. (2006). *Chomsky, mirae-ui jeongbu-reul malhada* (*Chomsky, Government in the future*) (G-e.Yu, Trans.) Seoul: Mosaek.

Hong, S-t. (2004). *Saengtae sahoe-reul wihaeyo (For the ecological society)*. Seoul: Munhwa Gwhasaksa.

Hong, S-t. (2006). *Gaebaljuui-reul bipan-handa (Criticising developmentalism)*. Seoul: Dangdae Publishing Co.

Jeong, G-h. (2006a). Noksaek gukga-e daehan ironjeok tamsaek (A theoretical exploration of green states). In S-h Mun (Ed.), *Noksaek gukga-ui tamsaek*. Seoul: Arche Publishing House.

Jeong, G-h. (2006b). Noksaek gukga-roui jeonhwan, banghyang-gwa gwaje (Green state, its directions and tasks). In S-h Mun (Ed.), *Noksaek gukga-ui tamsaek*. Seoul: Arche Publishing House.

Karatani, K. (2005). *Transcritique* (*Transcritique: On Kant and Marx*) (T-u. Song, Trans.). Seoul: Hangilsa Publishing.

Karatani, K. (2007). *Segye gonghwaguk-euro* (*Toward world republic: Beyond capital-nation-state*) (Y-i. Jo, Trans.). Seoul: b Publishing Co.

Kim, J-c. (2007). Chaek-eul naemyeonseo (Introduction to this issue). *Noksaek pyeongnon* (Green Review): *96*(September/October).

Ko, B-g, et al. (2007). *Komyunjuui seoneon (Manifesto of Commune-ism)*. Seoul: Gyoyangin.

Ku, D-W. (2006). Hanguk hwangyeong undong-ui damnon: nangmanjuui-wa hamnijuui (*Korean environment movement discourses: Romanticism and rationalism*). *Gyeongje-wa sahoe* (*Economy and Society*)*, 69* (Spring).

Marx, K., & Engels, F. (1955). Communist Manifesto (S. H. Beer, Ed.). Wheeling, IL: Harlan Davidson Inc.

Mun, S-h. (2006a). *Noksaek gukga-ui tamsaek (An exploration of green states)*. Seoul: Arche Publishing House.

Mun, S-h. (2006b). *Jeongchi saengtaehak-gwa noksaek gukga (Political ecology and green states)*. Seoul: Arche Publishing House.

Park, S-i. (2006). *Daehanminguk-ui seonjinhwa jeollyak* (*Korea's strategy of advancement*). Seoul: Book21 Publishing Group.

Polanyi, K. (1948). *The great transformation*. Boston: Beacon Press.

Schnaiberg, A. (1980). *The environment: From surplus to scarcity*. Oxford: Oxford University Press.

Sim, G-h. (2006). Munhwa sahoe-jeok sahoe guseongche-ron-eul wihan siron (An essay for sociocultural social formation theories). *Munhwa gwahak (Cultural Science), 46*, 157–180.

Chapter 12
Conceptualising the Environmentalism in India: Between Social Justice and Deep Ecology[1]

Shulan Zhang

Abstract Environmentalism as a green ideology and social movement is a comprehensive subject, which can only be studied in an interdisciplinary manner. That is to say, in order to offer any meaningful or convincing theoretical explanation on the environmentalism in a society, we need to understand not only the various values and belief systems, but also the social communication mechanism, which may play their promoting or restricting parts. There is no exception to Indian environmentalism. This chapter places the Indian environmentalism under a theoretical framework of 'social justice vs. deep ecology', and characterises it as social justice, non-violence, grassroots democracy, and local economy. Or in other words, Indian environmentalism has been being, and will continue to be for apparent reasons, a type of 'eco-socialist' movement, struggling for a sustainable development alongside social justice as well as ecological sustainability.

Keywords Eco-feminism • Ecology • Environmentalism of the poor • India • Social justice

As Ramachandra Guha argues, environmentalism 'should go beyond the literary appreciation of landscapes and the scientific analysis of species. Environmentalism must be viewed as a social program, a charter of action which seeks to protect cherished habitats, protest against their degradation, and prescribe less destructive technologies and lifestyles' (Guha 2008:3). So it is apparent that, environmentalism as a green ideology and social movement is a comprehensive subject, which can only be studied in an interdisciplinary method. That is to say, in order to offer any

[1] For this chapter article, I owe much to Ramachandra Guha, Joan Martinez-Alier, Sumi Krishna, Mahesh Rangarajan and other scholars who have done so much profound work on Indian environmentalism. I would also thank Daniel Koldyk for his kind help of editing work.

S. Zhang (✉)
School of Political Science and Public Administration, Institute of Environmental Politics, Shandong University, Hongjialou 5, 250100 Jinan, China
e-mail: zhangshulan@sdu.edu.cn

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*, DOI 10.1007/978-90-481-3745-9_12, © Springer Science+Business Media B.V. 2010

meaningful or convincing theoretical explanation on the environmentalism in a society, we need to understand not only the various values and belief systems, but also the social communication mechanism, which may play their promoting or restricting parts. There is no exception to Indian environmentalism. In other words, we can only draw accurate judgements on the Indian environmentalism after we have investigated the key aspects of Indian environmentalism, including its origin and development, its organisational structure and political mobilisation, the related policy issues and claims, the main characteristics of Indian sociopolitical system, and so on. The main aim of this chapter is to attempt to conceptualise the Indian environmentalism under a theoretical framework of 'social justice vs. deep ecology', in order to enable us make fruitful comparison of it with its counterparts in Western societies.

Origin and Development

According to Guha, there are two waves of the development of Indian environmentalism: an early period of pioneering and prophecy, and a more recent period when intellectual reflection is allied with popular social movements (Guha 2006: 35–36). I would argue, though, it is only from the 1970s onwards that Indian environmentalism as a whole came into being. Just as Pravin Sheth explained:

> It was from the lower strata of the society that it trickled up to the sensitive part of the middle class and informed urban citizens, who then conceptualised 'environmentalism' and provided the intellectual and communicational infrastructure to the movement through their newly formed NGOs. (Sheth 1997: 8–9)

Prior to the 1970s, there was a lack of environmental consciousness in Indian society, which resulted in the environmental abuse of local communities (Martinez-Alier 2005: 205). Then, in the early 1970s environmental protection developed into an important issue along with the rise of Indian nationalism. More importantly, unlike other social movements in India, such as the human rights movement, environmentalism did not fade out gradually; to the contrary, it continued to grow and turn out to be a globally influential environmental discourse.

Three events occurred in 1973 helped in particular foster Indian environmentalism and raised the 'ecological question' at the national level. On March 27, at Mandal, a remote Himalayan village, a crowd of peasants stopped the loggers from felling hornbeam trees. This episode sparked a series of similar protests, which collectively constitute the Chipko movement. On March 31, the *Economic and Political Weekly of Bombay* published a long essay by B. B. Vohra entitled 'a charter for the land'. Through it, Vohra helped to push the movement forward by calling for a national policy to create new governmental department to monitor and manage land use. Finally, in April, the government of India announced the launching of 'Project Tiger', an ambitious conservation program aimed at protecting the country's wild animals (Guha 2006: 54–55).

Of course, Indian environmentalism did not form in one step. Other influential events include: in 1972, the Indian national government enacted a law aimed at protecting wildlife; Garhwal women in the Himalayan region took direct action to protect trees since 1973, which helped to make the Chipko movement well-known all around India; in 1974, the environmental protests in Kerala forced the Indian people to think about environmentalism more seriously.

From then on, Indian environmentalism grew stronger in conjunction with the development of Indian political economy and the rise of the public's environmental awareness.

Claims and Ideological Orientations

Political claims or ideological orientations within the Indian environmentalism are diverse. American scholar N. Patrick Peritore first identified three main social sectors: government, the business and the non-governmental community (NGOs), and then specifically along the Green standard divided them into three streams: the Greens, the eco-developers, and the managers (Peritore 1993: 804–818). For the most part, the Greens respect life and natural diversity and criticise the technological hubris hidden in Western developmental model. They prefer a sustainable economy which mixes traditional and modern production methods and cut down the use of energy. They advocate a living style of 'voluntary simplicity' originated from the Gandhian tradition, and insist that only grassroots economic development based on Indian traditional values can lead to successful environmental protection. The eco-development perspective proposes for replacing India's developmental model with a small-scale, environmentally conscious one. It puts its emphasis on a just distribution of resources, population planning, women's education, and the consensus among social classes. It also stresses that there should be only a limited opening to the international market. The managers believe in a rational management of economic growth that incorporates a serious environmental perspective. They differ from the eco-developers by emphasising on the primacy of human needs (including women's) and the rational management of environment. They trust the efficacy of large-scale, high-energy technologies such as nuclear, hydroelectric power, and the biotechnological transformation of agriculture.

By contrast, Madhav Gadgil and Ramachandra Guha suggested that, there has emerged a cleavage in Indian society that divides the whole population into the omnivores, the ecosystem people, and the ecological refugees. The omnivores, following the Western development model, absorb the natural resources of India as fuel for the development of urban industrial centers. Most of these people are upper castes and constitute India's much-lauded burgeoning middle class. The ecosystem people are rural and largely uneducated. Because of their impoverishment, this population is not involved in any significant way in the industrial paradigm unless they become ecological refugees. The ecological refugees flee the hardscrabble life of the countryside and flock to the cities, where they generally become day labourers

and servants. Though the ecosystem people and the ecological refugees have the highest birth rates and thus contribute to India's population crunch, they consume the least amount of resources per capita (Gadgil and Guha 1995: 3–5, 180–182).

Furthermore, Gadgil and Guha identified three distinct ideological perspectives within the Indian environmental movement. The first one, Crusading Gandhian, relies heavily on a moral/ religious idiom in its rejection to the modern style of life and for a return to precolonial (and pre-capitalist) village society, which it upholds as the exemplar of social and ecological harmony. The second trend is Marxist in inspiration. It views the environmental problems in political and economic terms, arguing that it is unequal access to resources, rather than the question of values, which can better explain the pattern and processes of environmental degradation and social conflict. Accordingly, creation of an economically just society is the precondition for ecological harmony. In between Gandhian and Marxist, lies a third school, which may be termed as 'Appropriate Technology'. It strives for a practical synthesis of agriculture and industry, big and small industry, and Western and Eastern (or modern and traditional) technological tradition. It puts its emphasis on demonstrating in practice a set of socio-technical alternatives to the centralising and degrading technologies presently in operation. Apart from these three influential strands, there are other two noteworthy viewpoints. The first one is naturalist in perspective. It has provided abundant documentation of the decline of natural forests as well as the plant and animal species within them, and urges the governments to take remedial actions. And the other is scientific conservation. Its solution lies in the creation of new governmental departments to deal with the problems of environmental degradation through financial and administrative measures (Gadgil and Guha 2007: 416–420).

For Sumi Krishna, environmentalism in India encompasses several different philosophical approaches, including Gandhian, socialist, humanist, Marxist, liberal, democratic, radical and others, not to mention various permutations and combinations of all these approaches. From the perspective of environmental discourse, she argues, three prominent discourses can be discerned among the kaleidoscope: popular, managerial, and radical. The popular Gandhian discourse permeates a large section of the general public's understanding of environmental crisis. The managerial discourse differs significantly in its regulatory and sectoral approach to environmental issues and thus its scientific understanding of environmental problems. The radical discourse has a more militant attitude towards socio-political activism, but does not see the environmental crisis as the primary problem. It shares some features with the popular discourse, but also agrees with certain elements of the managerial discourse. For the most part, it is less articulated than the other two discourses. Despite the differences mentioned above, ideological boundaries among the three discourses remain fuzzy. For example, some NGOs have shown populist, managerial and radical ideological properties on different occasions (Krishna 1996: 411–412).

In addition, Harry Blair has developed a scheme to classify the major categories of human ideologies that seek to achieve harmonious relations with nature, trying to introducing the Hindu approach into our understanding of ecology (see Chapple 2000).

The first category appreciates the exploitation of natural resources. It endorses economic-social development and the conquest of inherent natural order. The second one advocates a mutually beneficial utility, seeing the relationship of human beings and nature in a reciprocal manner. This approach stresses the sustainability of development and social ecology. It would give voice to the persons who seek to sustain themselves in a simple manner, but it also would allow for some consuming of natural resources. The third category worships the romance of nature, believing ultimate reality manifesting itself in the natural world. It respects the divinity of nature and urges its adherents to practice deep ecology. The fourth category stands for asceticism. Following the tradition of the renunciants, this approach calls for a withdrawing from the physical world. Though not practical for all persons to accept such an anti-'omnivore' culture, it nonetheless demonstrates an eco-friendly ethic.

Despite so many ideological attitudes and claims among the Indian environmentalists discussed above, we can easily see the two opposite environmental positions – the managers' and that of the Greens. The omnivores and conquerors can be put into the former category while ecosystem people, radicals, romanticists in the latter. Between these two extremes are eco-developers, ecological refugees and the popular and utility groups.

Policy Issues and Positions

In this section, let us turn to the main policy issues and positions in the Indian environmentalism. The core eco-political issues are those government-related, such as identifying the responsibilities of governments in environmental crisis and pushing governments for adopting appropriate measurements to deal with those problems. In the opinion of Anil Agarwal and Sunita Narain, Guha, and the others, it is the governments' policies and plans that result in the environmental crisis: under the governments' authorisation and instigation industrialists, bureaucrats, and contractors conspire to control and exploit natural resources while ignoring the needs of the general populace. As such, natural resources are exploited by those in a power, and the environmental crisis is not only the product of greed and need but representative of the destruction of democratic rights. This scenario makes it difficult for the people to trust the governments' statements for protecting the environment. Nonetheless, they believe, governments' laws and rules are necessary to solve the current environmental crisis. The real question, though, is how the environmental movement can develop a more comprehensive solution in which incorporates those disadvantaged groups. That is to say, all the people should have the right to be included in the development plans that will affect them. At the very least, they should be able to express their opinions regarding these plans (Agarwal and Narain 1997).

By contrast, all the eco-economic controversies surround the question: 'is development the cause or the cure of environmental crises?' The dominant viewpoint is that development is the cure in poor countries while poverty is a cause. This idea was

put forward by Indira Gandhi at a national conference on environment in May, 1972 (Gandhi 1984: 10). She asserted that, 'poverty is the biggest polluter' and people can not improve their environment in a state of poverty. She captured world-wide attention when she made similar comments at the Stockholm conference in the same year (Gandhi 1972/1983: 60–67). However, the Indian Ministry of Environment and Forestry (MEF) pointed out in 1988 that, India must reorient its development model differently from Western countries so as to face the current and future challenges. According to this statement, India must wisely exploit natural resources in order to realise sustainable economic development. Only by doing so can India satisfy the population's basic needs and the necessity for further development (MEF 1990: 23). But, the question remained is that what such a new development model should look like. Some environmentalists claim that, the best way is to return to the pre-industrialisation era, because Indian culture strongly believes that rivers, trees, animals and the earth are all holy. Instead, the leftists insist that India should change the power structure, empowering the disadvantaged to participate in managing natural resources, which will significantly improve local environmental situations.

The core eco-social issue is the debate on the relationship between ecology and social culture. This debate covers such topics as traditional culture, women, caste systems, village life, population control, and consumption modes. Some environmentalists assert that, it is only within the Indian tradition that people can coexist with nature. According to world-famous eco-feminist Vandana Shiva, all South Asian religions and cultures are rooted in forests, and this is primarily due to deeply embedded ecological awareness. In addition, in ancient societies there was more equality between men and women, partly because there was no concept of the domination of nature but rather a harmonious relation with nature (Shiva 1991: 74–77; 1988).

At present, many environmentalists reflect that, traditional society, including the Indian *Advasi*, have been romanticised. For example, Bina Agarwal argued that, India should not go back to traditional models because women and men were actually unequal in Indian history. Rather, Agarwal stated:

> For transforming the relationship between women and men and between man and nature, we need to enhance the bargaining power of women in relation to men, and of those seeking to protect the environment in relation to those causing its destruction. (Agarwal 1998: 85)

On the contrary, Govind Kelkar and Dev Nathan argued that, the caste and state system are the key factors of Indian civilisation. It is culture, rather than ecology, that decides the labour division between men and women, and it is because women lost the control of land and forest resources that the patriarchal system arose (Kelkar and Nathan 1991: 112–113).

In exploring the relationship between Hinduism and environmentalism, Sumi Kirshna pointed out that, re-establishing the ecological harmony cannot be equal to re-establishing the Hindu ecological theology. Because, Hinduism is not as harmonious with nature as some environmentalists have claimed (Agarwal 1992).

As far as the relationship between the caste system and environment is concerned, Karve Iravati indicated in 1962 that the caste system is a double-edged sword when it comes to the protection of natural diversity (Karve 1962: 549). A caste society was a sharp stratified society, with the terms of exchange between different caste groups

weighted strongly in favour of the higher status castes. On the other hand, as a system of natural resource use, there was a method of resource diversification based on endogamy and territoriality, which fostered ecological prudence. Madhav Gadgil and Guha hold a similar opinion. The caste system is favourable to the upper caste, yet there are two advantages of the caste system in the sense of environmental protection. Since the ecological spaces among different castes are hereditary, there can be no struggle over natural resources. Rather, each caste does much to develop its own sustainable mode when using their natural resources. Otherwise they will destroy their own means of subsistence (Gadgil and Guha 2007).

With regard to the relationship between environment and village life, a quite popular claim is that, Indian village communities have developed a good tradition of using public resources, and thus India should return to the traditional village life. However, many serious scholars, like Amita Baviskar, have used archival research to dispute this claim. They point out that, while it may be the case that rural people have a greater respect for nature, there is little evidence to indicate that rural practices, where successful, could be adopted more broadly (Baviskar 2008: 16–18).

As for the relationship between environment and consumption, one extremist position is that the rising population is the biggest menace to environment. While population does have dramatic effects on the sustainability of an ecosystem (MEF 1990: 3), many environmentalists dispute this claim with a Gandhian motto: nature can satisfy every people's need, but it can not satisfy people's greed. Land can be greened and environment can be improved, but only if people learn to control their greed (Agarwal and Narain 1985: 395). Therefore, the real crisis confronting us is not the resource shortages but instead the unequal distribution of natural resources and unbalanced development.

Main Characteristics

N. Patrick Peritore pointed out in1993 that, Indian environmentalism lies within an entirely different matrix it does in the West. It is more firmly imbricated in India's heritage in order to create a complex model more suitable to the Indian dynamic (Peritore 1993: 804–818). Mainly depending upon his study of the Indian case, Guha drew a clear-cut division between environmentalism in the South and that in the North. According to him, environmentalism in the South is principally a question of social justice, of allowing the poor to have as many claims on the fruits of nature as the powerful; on the contrary, environmentalism in the North shifts its attention away from human beings towards the rights of plants, animals and wild habitats, on most occasions focusing on wildness protection. In his point of view, the Northern version of environmentalism is basically invented by the middle class, who most cares about the quality of life and personal satisfaction and is guided by the post-materialist values (Guha 2008: vi).

Instead, Joan Martinez-Alier described Indian environmentalism with the following three intertwined terms: the 'cult of wildness', the 'gospel of eco-efficiency', and the 'environmentalism of the poor'. The 'cult of wildness' is

mainly concerned with the preservation of nature but says little about industry and urbanisation. It is indifferent or opposed to economic growth but rather concerned about population growth. The 'gospel of eco-efficiency' is concerned with sustainable management or the 'wise use' of natural resources and the control of pollution. It rests on a belief in new technologies and the 'internalisation of externalities' as instruments for ecological modernisation, which tends to be endorsed by industrial ecology and environmental economics. The environmentalism of the poor grows out of the local, regional, national, and global conflicts in ecological resources distribution, that are caused by economic growth and social inequalities (Martinez-Alier 2005: 1–14).

It is true that, as Martinez-Alier has pointed out, India is the cradle of the notion 'environmentalism of the poor' (Martinez-Alier 2005: vii). Compared to environmentalism of the North, environmental protests there are mainly stimulated by a greater urgency to deal with the negative health impacts of pollution. As such, the most prominent feature of Indian environmentalism is the 'environmentalism of the poor' or the 'environmentalism of the dispossessed'.

Concluding Remarks

Indian environmental movement, vigorous even from the beginning of the 1970s, took place in step with European movements and much earlier developed than their American counterparts. The Chipko and anti-dam movements are good early examples of environmental protests in India. The Indian masses, especially the peasants, were key players in these movements, and they continue to struggle for equality in the distribution of natural resources and the benefits of development. This fact exemplifies how closely tied Indian environmentalism is to social justice and equity.

When the environmental effects of economic development directly threatened the survival of a large number of poor people who depend on local resources, as is the case with the *Advasi*, social conflicts with an ecological implication broke out one after the other throughout the countryside. In many cases there was a prior claim on the resource in question – be it land, wetlands, forests, fish, water, or clean air. Sometimes these claims were ignored by the governments, or commercial interests working in concert with the governments, which allowed outsiders to gain oil, mineral, water or logging concessions. Due to this, there is a palpable sense of betrayal. There is a strong feeling that government has let the poor down by taking the side of the rich (be they Indians or foreigners) (Martinez-Alier 2005: 205).

Farmers and other lower classes have struggled for the power of controlling natural resources for survival. They sometimes take use the language of economic compensation, but on other occasions appeal to non-economic values, especially environmental ethics and values. That is why, in effect, these environmental actions are so heavily intertwined with ideas of social justice, and moreover, the concept of 'environmentalism of the poor' has spread across the South. Many activists as well as researchers

now hope that a bridge is created between this environmentalism and the environmental justice movement in the United States (Martinez-Alier, 2005: 209).

Undoubtedly, there are quite lot of environmentalists who are actively involved in wildness protection in India. However, as I analysed above, they are few in number and their sociopolitical influences are weak.

Last but not least, as Martinez-Alier has correctly indicated (Martinez-Alier 2005: 210), the Indian environmental movement has lot in common with feminism because women have been playing a significant and sometimes critical part in the environmental protests. Surprisingly to many of us, it is women in India who have assumed the leadership role in fighting against social injustice and ecological destruction.

To sum up, the major characteristics of Indian environmentalism are social justice, non-violence, grassroots democracy, and local economy (Singh 2000: 181). Or in terms of the framework introduced at the beginning of this chapter, 'social justice vs. deep ecology', we can reasonably conclude with saying that the environmentalism in India has been being, and will continue to be for evident reasons, a type of 'eco-socialism', struggling for a sustainable development alongside social justice as well as ecological sustainability (Greenough 2004: 315).

References

Agarwal, B. (1992). The gender and environment debate: Lessons from India. *Feminist Studies, 18*(1), 119–158.

Agarwal, B. (1998). *A field of one's own: Gender and land rights in South Asia*. Cambridge: Cambridge University Press.

Agarwal, A., & Narain, S. (eds). (1985). *State of India's environment 1984–85: The second citizens' report*. New Delhi: Centre for Science and Environment.

Agarwal, A., & Narain, S. (eds). (1997). *Dying wisdom: Rise, fall and potential of India's traditional water harvesting systems*. New Delhi: Centre for Science and Environment.

Baviskar, A. (2008). *In the belly of the river: Tribal conflict over development in the Narmada valley*. New Delhi: Oxford University Press.

Chapple, C. K. (2000). Introduction. In M. E. Tucker, & C. K. Chapple (Eds.), *Hinduism and ecology: The intersection of earth, sky and water*, Cambridge: Harvard University Press. Available at http://fore.research.yale.edu/publications/books/book_series/cswr/hinduint.html

Gadgil, M., & Guha, R. (1995). *Ecology and equity: The use and abuse of nature in contemporary India*. New Delhi: Penguin.

Gadgil, M., & Guha, R. (2007). Ecological conflicts and the environmental covenant in India. In M. Rangarajan (Ed.), *Environmental issues in India* (pp. 410–436). New Delhi: Dorling Kindersley (India) Pvt. Ltd.

Gandhi, I. (1972/1983). *Man and his world*. A speech at the UN Conference on the Human Environment, Stockholm, 14 June, 1972; *People and problems*. London: Hodder & Stoughton.

Gandhi, I. (1984). *Indira Gandhi on environment*. New Delhi: Ministry of Environment and Forestry.

Greenough, P. (ed). (2004). *Nature in the global South*. Hyderabad: Orient Longman Private Limited.

Guha, R. (2006). *How much should a person consume?* New Delhi: Permanent Black.

Guha, R. (2008). Environmentalism: A global history. In the R*amachandra Guha omnibus*. New Delhi: Oxford University Press.

Karve, I. (1962). *The Indian social organisation.* In S. K. De et al. (Eds.), *The cultural heritage of India*, Vol. II. Calcutta: The Ramakrishna Mission Institute of Culture.

Kelkar, G., & Nathan, D. (1991). *Gender and tribe: Women, land and forest in Jharkhand*. New Delhi: Kali for Women.

Krishna, S. (1996). The environment discourse in India: New direction in development. In T. A. Sathyamurthy (Ed.), *Class formation and political transformation in post-colonial India*. New Delhi: Oxford University Press.

Martinez-Alier, J. (2005). *The environmentalism of the poor: A study of ecological conflicts and valuation*. New Delhi: Oxford University Press.

MEF. (1990). *National strategy for conservation and sustainable development: Report of the Core Committee*. Ministry of Environment and Forest (MEF): New Delhi.

Peritore, N. P. (1993). Environmental attitudes of Indian elites. *Asian Survey*, xxxiii(8), 804–818.

Sheth, P. (1997). *Environmentalism: Politics, ecology and development*. Jaipur: Rawat Publications.

Shiva, V. (1988). *Ecology and the politics of survival in India*. New Delhi: Sage.

Shiva, V. (1991). *Staying alive: Women, ecology and survival in India*. New Delhi: Kali for Women.

Singh, A. (2000). *The politics of environment administration*. New Delhi: Galgotia Publishing Company.

Chapter 13
Growth Economy and Its Ecological Impacts upon China: An Eco-socialist Analysis[1]

Qingzhi Huan

Abstract While identifying the emerging features of China's economy as a growth economy, this chapter argues that the real ecological threat is the increasing dependence of Chinese economy and society on economic growth itself, and that building socialist ecological civilisation, or a new pattern of eco-socialism, may function as a greener and more fruitful political ecology to resist or reverse this tendency. After 30 years of carrying out the reform and openness policy, in the author's observation, China is standing at a crucial crossroad: not very much in terms of the stages of its economic growth, but whether or not it can move forward to a sustainable future.

Keywords China • Ecological impacts • Environmental politics • Growth economy • Red-green politics

Partly because of the complexity of reality, various approaches can be applied to explore and frame the relationship between the on-going process of economic modernisation in China and its ecological outcomes. Basing upon an eco-socialist or red-green perspective, this chapter will first conceptualise the nature of China's economy of today and its relationship to the ecological deterioration, then turn to analyse the evolution of dominant political ecology responding to the environmental problems, and lastly conclude with judging to what extent an alternative is necessary and/or possible.

Q. Huan (✉)
Research Institute of Marxism, Peking Centre for Environmental Politics Research, Peking University, 100871 Beijing, China
e-mail: qzhuan@pku.edu.cn

[1]An earlier version of this chapter was published as an article in *the International Journal of Inclusive Democracy*, 4(4) 2008 (http://www.inclusivedemocracy.org/journal).

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_13, © Springer Science+Business Media B.V. 2010

The Nature of China's Economy of Today and Its Ecological Outcomes

Let us start with making a terminological distinction between these two terms: growing economy and growth economy.[2] A growing economy refers to an economy which maybe characterised by a rapid economic growth but only on a certain stage of its development, while a growth economy is a growth-oriented or growth-dependent economy. Therefore, to distinguish these two different types of economy, the following three questions can be raised.

1. What is the fundamental purpose of economic growth? The guiding principle for a growing economy is to satisfy the basic needs of people, such as food, clothing, housing, travel, and so on, while a growth economy is subject to the 'maximum profit' law of capital (Fotopoulos 1997). In other words, what a growing economy really cares about is the subsistence or wellbeing of human beings while a growth economy's objective is the economy's growth itself or the proliferation of capital. It is not easy in practice to draw a clear-cut line of division between a growing, people-oriented, economy and a growth economy. But, we can reasonably describe a growing economy as one aiming at the satisfaction of the basic needs of its people and those non-basic needs which are economically and ecologically sustainable, in contrast to a growth economy whose aim is maximisation of growth either for profit and capital accumulation or for the development of productive forces per se.
2. Is economic growth socially controlled? To a large extent this question can be reshaped as this: between societal regulation and economic growth which enjoys the priority? If the answer is societal regulation, then we can call an economy a growing economy, otherwise, a growth economy. In other words, a growing economy is a socially meaningful or controllable economy, while a growth economy is not or no longer. A measurement difficulty probably exists too, namely, by what standard we can claim that an economy is already moving beyond the limit of social control. However, we can safely say that an economy is moving beyond the limit of social control if the answers to the fundamental questions of any scarcity economy, i.e. *what* to produce, *how* to produce it and *for whom* are given by the market forces.
3. Is economic growth still reversible? One of the key contrasts between a growing economy and a growth economy is whether economic growth is a temporary stage or instead a permanent phenomenon. In a growing economy, growth is just a necessary, and thus temporary, stage in a long-term development that will lead

[2]For a more comprehensive and distinctive analysis of the concept of growth economy, see Takis Fotopoulos, *Towards an Inclusive Democracy: The Crisis of the Growth Economy and the Need for a New Liberatory Project* (London: Cassell, 1997), pp. 62–63. In this chapter, my starting-point is not to criticise economic growth unconditionally, but instead how to make the Chinese economy to leave behind a necessary stage of economic growth and move forward in a more sustainable way.

to the satisfaction of the needs of its citizens. From a long-run perspective, the real function of a growing economy is to prepare for its transformation into a new type of economy, in which economic growth is no longer a major feature. Quite the contrary, a growth economy is growth-oriented or growth-dependent, and therefore low- or zero economic growth for such an economy is undesirable or even unimaginable.

Basing upon the above analysis, we can attempt to conceptualise the nature of China's economy of today. A key question is that, is the Chinese economy now still a growing economy after almost 30 years' growth with an annual growth rate around 10%? If restricted to economic figures, the answer would be a quite easy one. As many prominent economists – both from China and the West – argue, an economic growth rate around 10% in China will last at least for the decade to come (Sun 2007; Steve 2008). However, if measuring with the indicators which are laid above, we have to admit that Chinese economy is undoubtedly gaining some features of a growth economy.

As Table 13.1 shows, on the one hand, though there is an observable long-term trend of decline, an economic growth rate of higher than 9.5% in China has been maintaining for 3 decades, and such an economic growth rate will probably hold in a near future;[3] on the other hand, what accompanies such a high-speed economic growth is the even higher growth rate of total investment in fixed assets and government expenditure. For instance, the corresponding figures during the period of 1990–2005 are 9.7: 20.8: 16.8. Very different reading can be made for this data, but it seems that there is an undeniable connection between the high-speed economic growth and the even higher growth of capital investment.

It is true that there are still some discernable differences between today's economy of China and that of Western countries, such as the GDP per capita, the disposal revenue per capita, warm gases emission per capita, and so on. As far as the commonality of growth economy is concerned, however, China appears to be walking on the same track as the Western countries rather than offer an alternative. As Geping Qu – the former head of State Environmental Protection Agency (SEPA) – pointed out, 'the fundamental reason why economic indicators can be easily achieved every year while environmental protection indicators can not is that, economic development is still dominated by the conventional model of development characterised as "high investment, high consumption, high pollution", and the decisions for many large-scale developing projects are made through unscientific and undemocratic procedures' (Qu 2006).

With recognising the emerging features of China's economy of today as a growth economy, we can have a more comprehensive understanding of its ecological impacts.

[3] As of writing this chapter, it is still too early to make any clear judgement the world economic crisis since late 2008 will to what extent affect the long-lasting high-speed economic growth in China. Both the Chinese leaders and the public, however, appear quite optimistic with that China will be the first country to extricate itself from this economic crisis and back to the 'normal-style' economic growth which means maintaining an economic growth rate around 10%.

Table 13.1 Some basic indicators on national economic development of China (1978–2005)

	Total				Average growth rate(%)		
	1978	1989	1997	2005	1979–2005	1990–2005	1998–2005
GDP (100 million Yuan)	3,645	17,001	77,653	183,956	9.6	9.7	8.9
Total investment in fixed assets (100 million Yuan)	–	4,410	24,941	88,774	–	20.8	14.6
Government expenditures (100 million Yuan)	1,122	2,824	9,234	33,930	13.5	16.8	17.7
Total energy consumption (10,000 tons of SCE)	57,144	96,934	137,798	223,319	5.2	5.4	6.2
Grain (100 million tons)	30,477	40,755	49,417	48,402	1.7	1.1	–0.3
Coal (100 million tons)	6.18	10.54	13.73	22.05	4.8	4.7	6.1
Crude oil (10,000 tons)	10,405	13,764	16,074	18,135	2.1	1.7	1.5
Natural gas (100 million cubic metre)	137	151	227	509	5.0	7.9	10.6
Rolled steel (10,000 tons)	2,208	4,859	9,979	37,771	11.1	13.7	18.1
Cement (10,000 tons)	6,524	21,029	51,174	106,885	10.9	10.7	9.6

Resources: State Statistics Agency (SSA), *Principal aggregate indicators on national economic and social development and growth rates*, http://www.stats.gov.cn/tjsj/ndsj/2006/html/L1201e.htm, accessed on March 18, 2008.

The real challenge for the future of China's ecology is not that to what extent the environment is now being polluted or contaminated, but the increasing dependence of Chinese economy and society upon economic growth itself. And as Saral Sarkar has explicated (Sarkar 1999: 154–157), without the exploitation and consumption of natural resources any real economic growth is impossible, and economic activity will necessarily to some extent bring about environmental pollution or ecological damage, no matter what kind of high and/or clean technology are employed. In other words, environmental/ecological quality in an economically growing society like today's China might be improved in certain areas (big cities, for example), or in terms of certain measuring indicators, but it is illogical to expect that a society based upon the growth economy can eliminate environmental problems – as we all know that the Western nations can only achieve the both goals through transferring much of their dirty economic sectors or even the poisonous wastes to the developing countries.

Table 13.2 Some basic statistics on environmental protection of China (1991–2006)

	1991	1996	2001	2005
Industrial waste air emission (100 million cubic metre)	113,000	–	160,863	268,988
Sulphur dioxide emission (10,000 tons)	1,844	1,946	1,947	2,549
Soot emission(10 00 tons)	1,615	1,751	1,070	1,183
Industrial solid wastes produced (10,000 tons)	59,000	66,000	88,840	134,449
Pollution accidents (times)	3,038	2,199	1,842	1,406
Investment in the treatment of environmental pollution (100 million Yuan)	111	–	1,107	2,388
Urban environmental noise (db[A])	55	56.8	47.2–65.8	47–62.7
Water use (100 million cubic metre)	–	–	5,567.4	5,633
Waste water discharge (100 million tons)	354	–	433	525
Big-seven rivers water quality	45% (I–II)	32% (I–II)	30% (I–III)	46% (I–III)
Forest coverage (%)	13.4	13.9	16.6	18.2

Resources: The State Environmental Protection Agency (SEPA), see http://www.zhb.gov.cn/plan/zkgb; The SSA, 'Basic statistics on environmental protection', http://www.stats.gov.cn/tjsj/ndsj/2006/html/L1201e.htm, accessed on March 18, 2008.

Indeed, Table 13.2 offers us an ideal case in this regard. On the one hand, key environmental indicators such as Industrial Waste Air Emission, Industrial Solid Wastes Produced, and Waste Water Discharge suggest that natural environment in China are facing ever stronger pressure from the high economic growth – the annual outputs of them have respectively increased 2.4, 2.3, and 1.5 times over the past 3 decades. A logical reasoning from these figures is that the urban and rural environment in China as a whole is still under a very serious situation and there will be a long way to go for a substantial change or 'turning point' (Friends of Nature 2008; Kriener 2009). For instance, of the ten or thirty dirtiest cities around the world in 2007, two (*Linfen* and *Tianying*) or six (together with *Wanshan*, *Huaxi*, *Lanzhou* and *Urumuqi*) are located in China (The Blacksmith Institute, 2007). On the other hand, if taking some selective variables such as Soot Emission, Pollution Accidents, and Forest Coverage, one probably draws a much brighter picture – all of them at least show a trend of favourable turn.

Major Political Ecologies Responding to Environmental Problems

Generally speaking, over the past 3 decades three major political ecologies are proposed or formulated and successively dominate the political thinking of China to respond to environmental problems. They are *environmental protection national policy*, sustainable development strategy (principle), and *scientific concept of development* (ecological modernisation) (The News Office of State Council 1996/2006).

Environmental Protection National Policy (1978–1991)

For a quite long time after the foundation of the People's Republic of China (PRC) in 1949, environmental pollution was not commonly recognised as a problem of socialist regime. China's participation in the Stockholm Conference on Human Environment in 1972 was to a large extent owing to the political insight of former premier Enlai Zhou. It is the Reform and Openness Policy – announcing that the Communist Party of China (CPC) shifts its political guideline from class struggle to economic construction – introduced in 1978 that reshaped the political thinking regarding environmental problems of both the political elites and the public rapidly. As a result environmental protection was adopted by the Chinese government as one of the two key national policies – together with family planning – in 1983.

With the impetus originating from this policy, a national legal and administrative system for environmental protection was established over the 1980s. Of the former aspect the most remarkable achievement is the revised *Environmental Protection Law* passed by the National People's Congress (NPC) in 1989, and in the latter the national administration was enhanced from the National Environmental Protection Bureau (NEPB) affiliated to the Ministry for City and Country Construction and Environmental Protection to National Environmental Protection Agency (NEPA) directly responsible to the State Council in 1988.

The core idea of *environmental protection national policy*, however, is that 'economic modernisation enjoys the priority' in terms of the relation between economic growth and environmental protection, without realising the inherent conflict between them. With the economic transition from the highly-centralised planning system to a market-oriented system, Chinese economy entered into a decades-long period of high-speed growth characterised by the transformation of state-owned enterprises and the proliferation of country- and town-invested business. Along with the strong motivation for individual wealth inherent in market economy, the uneven development among different provinces, regions and counties soon functioned as another stimulus for economic competition. As a result, a national policy for environmental protection becomes very difficult to be worked out and/or carried out. To make a rational assessment on this political ecology, though, we must keep in mind that economic modernisation process at that time was just at its stage of initiation, and accordingly, environmental pollution and ecological damage resulting from industrialisation and urbanisation are relatively insensible. Moreover, compared with the severe poverty problem throughout China then, certain negative environmental outcomes from economic growth seem to be bearable and/or forgivable for the majority of Chinese people.[4]

[4]Even from a perspective of sustainable development, we can not agree with Takis Fotopoulos' argument that introducing the reform and openness policy or adopting a market-oriented economy in China in 1978 is just the first step moving towards a wrong, capitalist, direction. See Takis Fotopoulos, 'Is sustainable development compatible with present globalisation' , *the International Journal of Inclusive Democracy* 4/4(2008).

Sustainable Development Strategy (1992–2001)

The concept of sustainable development was imported to China with the publication of the UN Commission Report on Environment and Development – *Our Common Future* (The UNCED 1987), which offered a good example of the impacts of international environmental discourses dominated by the advanced West upon the developing countries including China. This new strategy or principle for dealing with environmental problems was adopted by the Chinese government when preparing for and participating in the Rio Summit on environment and development in 1992, and soon received a very high popularity and public support. Throughout the 1990s, sustainable development enjoyed a very intensive media coverage and academic attention (Niu 1997).

Within the conceptual framework of sustainable development, quite a lot of achievements are made in China. To implement the international treaties on global environmental issues such as decreasing warm gas emission and protecting biological diversity, China formulated a series of new national policies and action strategies centering upon the *China Agenda for the Twenty-First Century*. In 1996, Chinese government issued its first white paper on environmental protection, which summarised the major progresses and challenges over the past decade. This document stressed that China will determinately stick to the strategy of sustainable development. Two years later, the NEPA was elevated to the State Environmental Protection Agency (SEPA) with ministerial status and more than 160,000 employees. More significantly, one by-product of choosing and propagating such a national discourse or political ecology is ecological education. There is an undeniable gap between the green imaginations and the ever deteriorating reality, and everybody can see and feel it. Thus a question even the common people may put to themselves is that, do we really move towards a sustainable future in a sustainable way?

The key idea of sustainable development, however, is the compatibility of environment protection and economic development – economic goals can be achieved in an environment-friendly way. Therefore, at best it can introduce a new dimension of environment into economic development, while at worst it might degenerate into an approach about how to make economic growth maintainable. The greenest version of sustainable development – 'ecological sustainability enjoys the priority' – can only be raised and recognised in rare cases, particularly in the arena of international environmental politics (Huan 2007a). Given the Chinese context of the 1990s – 'development is the top priority' (*fa zhan shi ying dao li*), sustainable development was defined and formulated to a large extent in the model of 'making the economic growth environment-friendly'. Such a formula of sustainable development, at least in theory, can promote and press for more attention to the environment in all the economic projects. In practice, however, without proper political, social and financial mechanisms, economic growth achieved under the guidance of such a light-green version of sustainable development is not necessarily sustainable in an ecological sense. This is probably the real reason, why environmental situation in China even became worse during an era of implementing a national strategy of

sustainable development. One can list a lot of factors to explain why China was unable to accept or practice a greener version of sustainable development, but it appears quite clear that a weak version of sustainable development can not offer great help to curb, let alone eliminate, environmental problems.

Scientific Concept of Development/Ecological Modernisation (2002–)

The Scientific concept of development represents another attempt of the Chinese political leaders to re-conceptualise the relationship of economic development and environmental protection when the economic modernisation process in China seems to enter into its mid to late stage. This term was first put forward by the CPC's secretary-general Jintao Hu in 2004, though it can reasonably go back to the CPC's 16th Convention in 2002, on which the CPC called for comprehensively constructing a well-being society. What underlie this new political ecology are at least two considerations. Firstly, Chinese economy has been growing up to the third largest economy of the world, but its competitiveness is still relatively low. And it is commonly believed that without a strong competitive Chinese economy, there will be not a really powerful China. Secondly, as far as natural resources provision and ecological environment support are concerned, the current high rate of economic growth is un-maintainable and unsustainable. Thus, a rational conclusion is that, in order to achieve a highly competitive and long-term maintainable economic growth, China has to make more efforts to carry out a systematic transformation of development, namely, 'scientific development'. According to this theory, the main features of scientific development include quality, competitiveness, and environment-friendliness. Or in one word, scientific development is a 'both good and efficient development' (Pang 2007).

In some senses, scientific concept of development is an improved version of sustainable development. It more willingly recognises the un-scientificness and unsustainability of conventional model of economic development – achieving high rate of economic growth at the same high cost of natural environment, and emphasises the crucial importance of environmental and ecological consideration in economic development, even for the growth rate itself. Moreover, championed by the CPC's most authoritative leader, this national policy can be expected with a more effective implementation, at least as far as the media coverage and academic research are concerned. In other words, scientific concept of development can offer, or can be used to provide, both powerful defense and strong impetus for a stricter environmental protection policy in China (Hu 2007). As a political ecology, however, scientific concept of development might not be able to provide a greener perspective than sustainable development for the relation of economic development and environmental protection. For instance, it also becomes easier for one region or company to defend their development policy or projects with scientific reasons, just like they claim that their policy or projects are sustainable.

If defining the major characteristics of scientific development as a qualitative, competitive, and environment-friendly development, we can easily find its similarity with the theory of ecological modernisation which is quite popular in the advanced Western countries, especially in Europe (Weale 1993; Jänicke 2000, 2007; Young 2000; Johnson 2004). They are aware of the seriousness of environmental problems resulting from the process of industrialisation and urbanisation, but both of them believe that economic growth is achievable and maintainable through an environment-friendly way. In other words, they claim that, with appropriate institutions such as a healthy market system, piecemeal adjustment of economic structure, and insightful technical investment, the seemingly unbeatable conflict for the environmentalists between economic growth or economic modernisation and environment protection is indeed resolvable in a 'win-win' manner. Noteworthily, both European and Chinese scholars now are inclining to the term of ecological modernisation when describing the progress in environmental protection of China (Mol 2006; He 2006), though as analysed in depth later, ecological modernisation is probably not an appropriate phase to frame the direction China is moving towards or should be headed for (Huan 2007b).

Then, what conclusions can be drawn from the foregoing review on the evolution of dominant political ecologies in China over the past 30 years? First, it seems that there is a clear correlation between the deteriorating environmental situation and the strengthening feature of its growth economy as identified in the first section. As discussed earlier, an accurate description of the reality of environmental protection in China today is that regional or partial improvements are always offset or exceeded by the newly created environmental pollutions or ecological damages. Nobody can deny the improvement of environmental quality which is being made mainly in the large cities, but the same is also true that the natural environment as a whole is bearing ever bigger burdens or risks. Second, these political ecologies have played a strengthening rather than a restraining role in establishing such a correlation. Why? Though environmental protection is receiving an ever more prominent status with the replacement of these political ecologies from one to the other, what remains unchanged is their positive attitude towards societal progress defined by the economic terms, or a 'growth ideology' (Fotopoulos 2005). And it is this unquestionable 'growth ideology' that underlies and dominates all the environment-friendly political thinking and policy approaches.

Building Socialist Ecological Civilisation: A More Radical or Greener Alternative?

Even if the following consensus can be reached – ecological situation in China at present is very severe or dangerous and both the theoretical and practical responses are not strong enough, there are still quite different paths or even directions to move forward. Based upon the analysis above that there is a correlation between the deteriorating environmental situation and the strengthening feature of Chinese growth economy, this last section will further explore whether or not building

socialist ecological civilisation can constitute a more radical or greener alternative as the leading political ecology in a foreseeable future.

Ecological civilisation or ecological civilisation construction is actually not a new term, at least for the scholars in this field (Morrison 1995; Yu 1996). What really new in the Chinese context, however, is that the CPC incorporated this word into the central commission's report to its 17th Convention in November 2007, and enhanced it as one of the key elements of the CPC's political guidelines, 'constructing/developing a socialism with Chinese characters'. As a result, this term is now receiving a very high popularity and academic attention comparable with scientific concept of development. It is too early to make any objective evaluation of the policy effects of this new discourse of political ecology. From an eco-socialist perspective, however, it is absolutely necessary at the very beginning to clarify that there are divergent approaches to define the contents of ecological civilisation, and only its socialist version can function as a real and fundamental solution to the environmental problems.[5]

Then, what is socialist ecological civilisation? Briefly speaking, it is a substantial transcendence over both the capitalist civilisation and the 'actually existing socialist' civilisation in at least three senses. First of all, people's well-being rather than the profits-making of capital becomes the fundamental purpose and motivation mechanism for economic activities. And accordingly, both the organisation of economic production and the distribution of societal wealth will be done in a more people-oriented or 'equality of unequals' manner (Bookchin 2005: 219). Market system may continue to exist, but people will have learned how to arrange their economic activities socially and democratically. As a result, economy will retreat to its historical status as a part of society, socially meaningful and socially controlled. Secondly, ecological sustainability will eventually replace the economic development as the first policy goal for the governments at different levels. Consequently, 'economic development enjoys the priority' will be replaced by 'ecological sustainability enjoys the priority'. Not because of the managed richness, but because of the fully recognised limits of nature, the ecologically awaked people (Sarkar 1999: 255–258) – both the social elites and the commons – will realise that without ecological sustainability any type of advanced human civilisation is unmaintainable. Thus, it will become least likely for those developing projects violating this principle to be put forward or to be approved. Thirdly, economic growth in general, and that generated by large-scale economic development projects and worldwide trade in particular, is no longer preferred or desirable. With recognising not only the negative effects of development projects, but the given limits of nature to human society, one can easily agree that unlimited economic growth is impossible, and the economic growth worship is questionable and should be abandoned.

[5]There are two possible explanations why the CPC Report used the term of 'ecological civilisation' instead of 'socialist ecological civilisation'. One is that the socialist nature of ecological civilisation in China is taken for granted and the other there is a strong suspicion among the elites as well as the public upon the legacy of the polarised division of 'socialism vs. capitalism'. See Yue Pan, 'On socialist ecological civilisation', *Green Leaf* 10 (2006), pp. 10–18; Qingzhi Huan, 'Socialist ecological civilisation: A terminological analysis', *Green Leaf* 2 (2008), pp. 96–102.

If ecologically necessary, economic growth can be slowed down or even reversed, and to achieve this large-scale economic development projects and the globalising trade should be first targeted.

These major features of socialist ecological civilisation clearly show that political thinking of the 'socialism vs. capitalism' division does not matter, on the one hand. Both the greening capitalism and the conventional socialism can not be expected or even imagined to take such a dramatic policy change or reorientation. On the other hand, political thinking of the 'socialism vs. capitalism' division does matter. To leave behind the 'growth ideology' which underlies and dominates even some of the green political ecologies, a new socialist political thinking is obviously necessary and urgent (Kovel and Löwy 2001).

Therefore, there is little doubt with that socialist ecological civilisation outlined above can constitute a more radical or greener alternative to the dominant political ecologies in China. But, an equal important question is that is this version of socialist ecological civilisation applicable or workable in the Chinese reality? Or to put it in another way, is it really possible for China to restraint and weaken the developing feature of growth economy as well as its supporting bases of marketlisation of economic activities and economicalisation of society? Indeed, quite a lot of favourable factors suggest that China can actively and effectively implement this political ecology and achieve such a green turn when its economy grows up to a certain size and before it become socially uncontrollable. Of all these factors, the most significant or relevant one is the CPC's political willingness and its capacity to make such a political choice, and the other is the stringent natural limits for China's economic development, especially in its modern capitalist model. As for the first factor, 'people-orientation' (*yi ren wei ben*) and/or 'serving the basic interests of the most majority common people' is still claimed by the CPC as its number one political principle in guiding all the economic and social developing policy and strategies (The CPC 2007), and there is no reason at the moment to doubt the CPC's capacity of implementing them, if it wants. As for the second factor, once a large enough number of leading politicians and social elites fully realise the harshness of natural limits to China, willingly or unwillingly, this tremendous challenge in the traditional sense may turn out to be a true opportunity of reorienting China's direction of development.

Of course, there are also certain factors to which we need to pay more attention or worry about from an eco-socialist perspective. Firstly, the severe unevenness of economic development around the world and within China itself offers the Chinese governments a very strong motivation, or a defending argument, to seek a high-rate or long-lasting economic growth. As a result, governments at different levels are increasingly undertaking a commercial role of attracting foreign investment or promoting the competitiveness of regional economy. Furthermore, both central and regional governments are carrying out many directly-invested large-scale projects often in the name of eliminating the poverty in certain areas.[6] The key question

[6] According to the up-to-date standard of Chinese government (annual income per capita lower than 1,300 RMB), there are still 80 million people who are living in poverty, see *Economic Reference Daily*, April 13, 2008.

arisen from this tendency is not that who is the real beneficiary of those grand programmes, but it will create a man-made scene: development is always necessary and possible (the necessity for further development is not the *needs* but the *wants* of people, because everybody is comparatively poor). Secondly, the total amount of idle or floating capital in the Chinese society is being accelerated very quickly. Up to the end of 2007, China's foreign exchange reserve amounted to $1,528 billion, and the total value of stock markets in Shanghai and Shenzhen was 32,700 billion RMB (The State Administration of Foreign Exchange 2008; Xinhuanet 2008) The life of capital lies in making profits, which implies that such a large size of capital has to find the channels of investment to realise its proliferation. And if any difficulty, capital will make its voices louder through its representatives in politics and societies, as the sessional debating of the NPC in 2008 has vividly demonstrated (Xiong 2008).[7] These two tendencies, together with other factors such as the stimulus of current world economic crisis, might eventually lead China into a new era of popular consumerism which will provide the further impetus for economic growth – the flourishingly-growing car industry and housing industry are only the harbingers. That maybe a piece of good news for most of the common Chinese people today, but it will definitely bury the ideal of socialist ecological civilisation.

As the main conclusion, China today is standing at a crucial crossroad: not very much in terms of the stages of its economic growth, but whether it can move forward to a green future or not. There is no guarantee that China will definitely choose the political ecology of building socialist ecological civilisation, and that would necessarily be a success if it eventually decides to do so. What we can surely say, however, is that such a choice will make China's future very differently, and more likely a greener one.

References

Bookchin, M. (2005). *The ecology of freedom: The emergence and dissolution of hierarchy*. Oakland: AK Press.

Fotopoulos, T. (1997). *Towards an inclusive democracy: The crisis of the growth economy and the need for a new liberatory project*. London: Cassell.

Fotopoulos, T. (2005). *The multi-dimensional crisis and inclusive democracy*. London: The International Journal of Inclusive Democracy.

Fotopoulos, T. (2008). Is sustainable development compatible with present globalisation. *The International Journal of Inclusive Democracy* 4/4. Retrieved February 10, 2008, from http://www.inclusivedemocracy.org/journal

Friends of Nature. (2008). *China's environmental crisis and its favourable turn*. Beijing: Social Science Document Press.

He, C. (2006). *Report on China's ecological modernisation: 2007*. Retrieved April 15, 2008, from China Environment and Ecology Network Web site: http://eedu.org.cn/article/ecology

[7]A more illuminating example in this aspect is the strategical measures for combating economic crisis taken by the Chinese governments since late 2008. Arguably, the huge plan which will cost more than 10 trillion RMB is not only to save the difficult enterprises and the poor people, but to find a proper channel of making money for the enormously accumulated national capital.

Hu, M. (2007). Reconstructing development views: Green GDP and scientific concept of development. *Green Leaf, 4*, 28–29.

Huan, Q. (2007a). *International comparison on environmental politics*. Jinan: Shandong University Press.

Huan, Q. (2007b). Ecological modernisation: A realistic Green road for China? *Environmental Politics, 16*(4), 683–687.

Huan, Q. (2008). Socialist ecological civilisation: A terminological analysis. *Green Leaf, 2*, 96–102.

Jänicke, M. (2000). *Ecological modernisation: Innovation and diffusion of policy and technology*. Berlin: FFU Report 8.

Jänicke, M. (2007). Ecological modernisation: New perspectives. In M. Jänicke, & K. Jacob (Eds.), *Environmental governance in global perspective: New approaches to ecological modernisation and political modernisation* (pp. 9–29). Berlin: Free University Berlin.

Johnson, D. (2004). Ecological modernisation, globalisation and Europeanisation. In J. Barry, B. Baxter, & R. Dunphy (Eds.), *Europe, Globalisation and Sustainable Development* (pp. 152–167). London: Routledge.

Kovel, J., & Löwy, M. (2001). *An eco-socialist manifesto*. Retrieved February 19, 2008, from the International Endowment for Democracy Web site: http://www.iefd.org/manifestos

Kriener, M. (2009). Ist China noch zu retten: Der ökonomische Triumpf der Volksrepublik droht zur Niederlage des Planeten zu werden, *ZEO2* 1, 16–25.

Mol, A. P. J. (2006). Environment and modernity in transitional China: Frontiers of ecological modernisation. *Development and Change, 37*(1), 29–56.

Morrison, R. (1995). *Ecological democracy*. Boston: South End Press.

Niu, W. (ed). (1997). *Green strategy: China's environment and sustainable development in the 21st century*. Qingdao: Qingdao Press.

Pan, Y. (2006). On socialist ecological civilisation. *Green Leaf, 10*, 10–18.

Pang, Y. (2007). On scientific concept of development. *Green Leaf, 11*, 14–15.

Qu, G. (2006, April 12). *High official of the SEPA talks about the environmental performance in the 10th Five-Year-Plan period*. Retrieved March 18, 2008, from Netease Web site: http://news.163.com/06/0413/2EIG98G00001124J.html

Sarkar, S. (1999). *Eco-socialism or eco-capitalism? A critical analysis of humanity's fundamental choices*. London: Zed Books.

Steve, P. (2008). Consumption will stimulate the continuing economic growth of China. *The Times*, 11 March.

Sun, D. (2007). Expert says: China can maintain the growth rate of 6%–10% for next 20 years. *Economic Times of China*, 1 June.

The, U. N. C. E. D. (1987). *Our common future*. New York: Oxford University Press.

The CPC. (2007, October 15). *The Central Commission's Report to the 17th Convention of the CPC*. Retrieved February 10, 2008, from its official Web site: http://cpc.people.com.cn/GB

The Blacksmith Institute. (2007). *The dirtiest cities in the world*. Retrieved April 15, 2008, from its official Web site: http://www.blacksmithinstitute.org

The News Office of State Council. (1996/2006). *White paper on China's environmental protection*. Retrieved March 10, 2008, from its official Web site: http://www.scio.gov.cn

The State Administration of Foreign Exchange. (2008). *China's foreign reserve exchange*. Retrieved April 12, 2008, from its official Web site: http://www.safe.gov.cn/model_safe

The value of share A increased 268% in 2007. Retrieved April 12, 2008, from Xinhuanet Web site: http://news.xinhuanet.com/fortune/2008-01/10 content_7396069.htm

Weale, A. (1993). Ecological modernisation and the integration of European environmental policy. In D. Liefferink, P. Lowe & A. Mol (Eds.), *European Integration and Environmental Policy* (pp. 196–216). London: Belhaven Press.

Xiong, J. (2008). *Debating the discourse rights of the rich*. Retrieved April 12, 2008, from Sohunet Web site: http://news.sohu.com/20080318

Young, S. C. (ed). (2000). *The emergence of ecological modernisation: Integrating the environment and the economy*. London: Routledge.

Yu, M. (1996). *A new century for culture: Theoretical explanation on ecological culture*. Changchun: Northeast Forest University Press.

Part V
Conclusion

Chapter 14
Prospects for Eco-socialism

Saral Sarkar

Abstract The analysis of the present-day crises and the development of productive forces driven mainly by the capitalist market-economy has clearly shown, the idea of socialism on the basis of a highly developed industrial society has no chance of being realised, and the traditional concept that a socialist regime's first task is to develop the productive forces and thus to increase production and labour productivity does not make sense any more. So socialists today must replace the concept of primacy of human needs and rights with the concept of primacy of environmental protection, and accept that the primary task of a new socialist regime will have to be to organise the transition to an economy based largely on renewable resources. To achieve or move towards such a type of socialism, i.e. *eco-socialism*, they should not focus so much on how to further prepare the *material conditions* for the transition as on how to create the *subjective readiness* of the majority of the people in the world for it.

Keywords The central source of prosperity • China • Eco-socialism • The present-day crises • The state of the productive forces

In Beijing, one of the listeners of my lecture on eco-socialism said after hearing me that he was fully convinced, but, he asked, 'when will eco-socialism come?' It was a very difficult question, a short answer to which was not possible. I only answered that I was not an astrologer. It was, however, an interesting question, though not exactly in this form. It is better to ask: what are the prospects for eco-socialism? Or, are there indications today that give us hope that the majority of the people of the world or of some countries would in the near future embrace eco-socialism and transform their capitalist society to an eco-socialist one? It is a question worth reflecting upon because, as the world situation is today, it cannot go on like this for long.

S. Sarkar (✉)
Blumenstrasse 9, 50670 Koeln, Germany
e-mail: saralsarkar@gmx.de

Q. Huan (ed.), *Eco-socialism as Politics: Rebuilding the Basis of Our Modern Civilisation*,
DOI 10.1007/978-90-481-3745-9_14, © Springer Science+Business Media B.V. 2010

For all who consider themselves to be a socialist, Marx's view on this question can well serve as a starting point. Marx wrote in his preface to *A Contribution to the Critique of Political Economy*:

> No social order ever perishes before all the productive forces for which there is room in it have developed; and new higher relations of production never appear before the material conditions of their existence have matured in the womb of the old society itself. Therefore mankind always sets itself only such tasks as it can solve; since, looking at the matter more closely, it will always be found that the task itself arises only when the material conditions for its solution already exist or are at least in the process of formation. (Marx and Engels 1977: 504)

I am not a socialist of the old type, for whom a quotation from Marx is always the last word in political wisdom. But these words are largely convincing and helpful for scientific/materialist socialists, who do not want to indulge in wishful thinking. They help us understand why the working class of the advanced capitalist societies disappointed Marx's expectation that they would overthrow capitalism. It was because, contrary to what Marx himself thought, all the productive forces for which there was room in capitalism had not fully developed yet. There was room for much more.

Now, immediately, the following questions arise: (a) Is *today*, in advanced capitalism, the room for further development of productive forces exhausted? (b) Have the material conditions for the appearance of the new higher relations of production, socialism, matured? (c) If we today set ourselves the task of creating an ecosocialist society, can we say that we can 'solve' (fulfil) this task? Do the material conditions for its 'solution' already exist?

The Present-Day Crises

Before we can answer the first of the above questions we must describe the more important and relevant aspects of the world situation today. If we see some problems and crises, then answering the question becomes easier. For then we can ask: can we expect that some upcoming further developments of the productive forces will be able to solve the problems and overcome the crises *within the framework of capitalism*? If we can answer the question in the affirmative, then we must also conclude that capitalism will not perish soon and that the material conditions for the appearance of socialism, which we socialists consider to be a better (let us ignore the term 'higher') kind of relations of production, have not yet matured. In other words, we must conclude that a transition to socialism is not *necessary* yet.

For the last one year or so the global media have been reporting on various crises that are much more serious than the ones on which they usually report, namely inflation, recession, crash in the share market, economic stagnation, rise in unemployment, crisis of the welfare state, foreign debt crisis in the developing countries, poverty, tensions or wars between states, etc. These crises are also there, but they are generally ephemeral, and are part of the usual state of things. For the capitalist social order they are harmless compared to the more serious ones mankind is facing at present.

Today, in many parts of the world, hunger has become very acute and more widespread than usual. Within a short time the price of rice, wheat, maize, etc. have skyrocketed, so that the poor in many countries cannot even afford the meagre meals they have been living on until recently. In 30 countries there have been food riots and mass demonstrations against rising prices. In Haiti there have been violent clashes between the demonstrators and the police, which resulted in a few deaths.

Then there is the energy crisis. The steep rise in the price of fuel and electricity is tormenting not only the poor countries, but also the rich ones. In Spain, Portugal, France and Great Britain truckers and fishermen are demonstrating against the high diesel price by blockading roads and ports, because, as they say, their profession has become uneconomic. There have even been clashes between the demonstrators and the police.

The energy crisis is only the most important part of the *general* resource crisis. Crude oil, the most important of the basic sources of energy and raw material for many other products, is becoming more and more difficult to find and extract and hence more and more costly. Even the price of coal is rising. One who thinks of nuclear energy as an alternative to fossil fuels should note that even uranium is getting ever scarcer and ever costlier. Same is the case with silicon, the basic raw material for producing photo-voltaic cells and electronic chips. Not only these very special resources, but also ordinary industrial metals like iron, copper, zinc, nickel, etc. are becoming ever costlier. Even the price of iron ore and scrap iron is rising sharply.

Everybody knows that cheap and abundant energy is the basis of industrial societies and their high living standards. The end of the era of cheap oil means, therefore, that the prosperity of such societies is in danger of evaporating.

The energy and resource crisis in general, and especially the rising price of natural gas is causing scarcity and rising costs of fertilisers. Population growth, growing industrialisation and large-scale urbanisation are resulting in shrinking availability of arable land and scarcity of fresh water. These factors – together with the foolish decision to transfer arable land from food production to bio-fuel production for motor vehicles – are behind the current food crisis.

Far more serious than the resource crisis is the danger of devastating weather catastrophes – storms, floods, landslides, etc. – caused by global warming and the rising sea level. Such catastrophes are, in fact, already taking place regularly in many parts of the world including China. And in future they are going to be increasingly frequent and intense.

And, moreover, we must not forget the protracted, ever worsening ecological crisis: the insidious, ever intensifying – visible and invisible – degradation of the quality of air, water and soil due to dust and chemical and radioactive pollution, and the dwindling bio-diversity of the planet due to extinction of species.

Apart from the resource and ecological crisis, the world today is suffering from some intractable social and political crises: hundreds of thousands of refugees fleeing their native land due to poverty, wars and environmental devastation; terrorist activities of religious and nationalist fanatics; ethnic conflicts and civil wars within states and across borders; failed states, where there is no recognised government and which are ruled by a multiplicity of warlords.

These crises, especially the underlying general resource crisis, will generate hitherto unknown kinds of inflation and recession. Until a year or two ago, generally, inflation used to be caused by high wage demands of trade unions and/or rapidly rising demand for consumer and investment goods, while supply could be raised only slowly. The remedy was simple: persuade the trade unions to make modest wage demands and/or reduce the tempo of rise in demand for consumer and investment goods by means of monetary and fiscal measures. From now onwards, however, prices will continue to rise even if labourers do not demand too high wages, even if demand for goods and services stops rising. It will be so because the given *geological and geographic conditions* under which today raw materials are being extracted are becoming ever more difficult entailing ever rising production costs. The cost of extracting oil from beneath the Arctic Ocean is simply much higher than that of extracting oil, say, from beneath the sands of Kuwait.

When raw materials become ever scarcer and all prices continue to rise, demand will not only stagnate, but begin to fall, because people will simply not be able to afford more. Moreover, processing less raw materials means less production. And when this happens, there will be a new kind of recession that will continue until sometime in the future the economy, now based mainly on renewable resources, reaches a steady state.

All these are *fundamental* crises, unlike the harmless ephemeral ones mentioned earlier, which in the past could be overcome more or less easily by changing the relevant policies. The present-day crises are fundamental in the sense that their roots lie in the *essentials* of the system – the capitalist *and industrial* system – and overcoming them calls for *radical* changes in the *system*: in the way we live and produce goods and services, in our numbers, in our economic and political system, in our resource use pattern, in the way we react with nature, in the way we organise our social relations, etc. In other words, these crises cannot be overcome in the framework of the present social, economic and political systems, i.e. in capitalism.

The State of the Productive Forces

Let us now examine the *current* state of the productive forces together with the developments thereof that have either recently taken place or are expected by many to take place soon. And then let us examine whether they can help us overcome the fundamental crises within the framework of capitalism. In my book *Eco-Socialism or Eco-Capitalism?* (Sarkar 1999/2008). I have dealt with this question in great detail. A revised and updated Chinese version of the book was published in 2008. So the arguments for my positions need not to be presented here in detail. Here I shall deal with the question in short and with reflections based on more recent data.

The most important task facing capitalism today is to find new sources of energy that (a) will not emit, or emit very little, greenhouse gases into the atmosphere and (b) will be sufficiently abundant and cheap, so that they can replace the fossil fuels that (a) are non-renewable and are being rapidly depleted and (b) that emit large

quantities of greenhouse gases. In other words, the task is to find new sources of energy (and also other resources) that will allow us to sustain economic *growth* without degrading the environment and are renewable.

Ever since scientists and engineers became aware of the seriousness of the twin problems of exhaustibility of resources and environmental degradation – that was in the middle of the 1970s – a lot of research and development have been done in many relevant areas, especially in the area of resources that are allegedly not only renewable but also non-polluting. But, unfortunately, no solution to the problems has yet been found.

Great hopes had been put especially on the energy of sunshine and wind, both of which are renewable and available in enormous quantities. The quantity of energy that we receive from the sun everyday is 15,000 times as much as the daily total world consumption of commercial energy. So it was hoped that with the development of solar energy technologies alone the problem of sustainable growth could be solved.

But these hopes have until now failed to materialise. Neither solar nor wind energy technologies are yet able to commercially compete with the conventional, CO_2-emitting, and fossil fuel burning technologies. And it seems they will never be able to. They are and, it seems, will always remain dependent on subsidies. But the subsidies come from the economy at large, by far the greater part of which is powered by the fossil fuels, the very source of energy which the renewable sources are supposed to replace. That means the renewable energy technologies are not viable, they can exist only as long as the fossil fuels are available.

That this dependence is not diminishing is shown by the fact that, in Germany, *Eurosolar*, a large lobby organisation of the renewable energy industries, recently demanded an increase in the guaranteed (and subsidised) kilowatt-hour price for wind energy on the grounds that raw-material costs are rising (*Süddeutsche Zeitung*, 30 May 2008). The most important among the raw-materials needed to build wind-driven power stations is, of course, energy from the fossil fuels, the costs of which are indeed rising rapidly. The German government acceded to the demand and did increase the guaranteed price (*Süddeutsche Zeitung*, 7 June 2008). *Eurosolar* did not demand any increase in the guaranteed price for (photovoltaic) solar electricity, although rising raw-materials costs are also causing the production costs of the photovoltaic industry to rise. High grade silicon, from which wafers for photovoltaic cells are produced, is becoming ever scarcer and its price is rising. (*Süddeutsche Zeitung*, 12 June 2008) But the guaranteed price for solar electricity had already been so much higher than the price of conventional electricity that the government decided to reduce it a little. The point here is not to judge whether the guaranteed subsidised prices are too high or reasonable, but to demonstrate the economic dependence of the allegedly renewable energy technologies on income generated mainly by using non-renewable and CO_2-emitting fossil fuels. To describe the situation in technical terms, neither solar nor wind energy technologies can reproduce *themselves*. That is, the entire equipment needed for these technologies is manufactured by using conventional (largely fossil fuel) energy. The *net energy* they produce (energy return on energy invested = EROEI) is either too little or even negative.

Another renewable source of energy that has been promoted is bio-mass, in two forms: (a) fuel crops and (b) waste products from agriculture and forestry. None of them is actually a new development. Bio-diesel produced from vegetable oil had been considered as fuel for automobiles before petroleum became abundantly available. Bio-gas from waste bio-mass had been widely used in the 1950s–1970s. Nowadays it is used to generate electricity at a small scale. That this actually ancient source of renewable energy has been revived in modernised forms – especially in the forms of bio-ethanol and bio-diesel –, and is being strongly subsidised, is a reflection of the hidden disappointment of policy makers with solar and wind electricity.

Modern industrial societies need not only electricity but also liquid fuels for many purposes, particularly for driving automobiles. To get a liquid fuel from solar and wind electricity – and also to store these irregularly and intermittently available energies for making them available at all times – it is necessary to produce with their help liquid hydrogen from water through electrolysis. But this is a very costly process. Not only the monetary costs but also the energy costs of producing liquid hydrogen from solar or wind electricity is so high that driving a motor vehicle with this fuel is totally nonsensical. That is why one came upon the idea of using bio-ethanol from sugarcane, maize, etc. and bio-diesel from rape-seed oil, palm oil, etc.

But bio-fuels have a great disadvantage: they need fertile land. So one must either take over land hitherto devoted to food crops or destroy rain forests – as is happening for many years now in Brazil, Indonesia and Malaysia – in order to get land for fuel crops. Both are bad ideas. To reallocate farmland to bio-fuel production is even a dangerous idea at a time when the current world population of 6.5 billions is still growing and about 800 million people are suffering from hunger. The current food crisis referred to above has been attributed in a World Bank report to the extent of 75% to this phenomenon (*The Guardian*, 4 July 2008). Destroying rainforests for this purpose is a bad idea because (a) they are themselves a large part of nature's own system of absorbing CO_2 and (b) because they are the space where the greatest bio-diversity on earth exists. Moreover, even bio-fuels, although they are not very high-tech products like solar electricity, must be subsidised, so that they can compete with the fossil fuels. There are even strong doubts that the net energy gained from them (their EROEI) is at all positive (see e.g. *Wall Street Journal*, 5 December 2006).

In view of their strong dependence on fossil fuels, it is totally unconvincing that promoting so-called renewable energy technologies would have the effect of containing global warming. The International Energy Agency (IEA) recently presented a packet of recommendations for halving the global emission of greenhouse gases by 2050. Promotion of allegedly renewable energies is to contribute 21% of this reduction goal. The IEA recommends that for this purpose, by 2050, 46% of the global electricity demand should be met through renewable energies. It recommends that 17,500 wind turbines should be built every year, and the use of bio-mass for energy generation should be quadrupled. The IEA also estimated the amount of money that would be needed for making all the investments it recommends (which include also

investments in new nuclear power plants): in all, 45 trillion US-Dollars till 2050 (*Süddeutsche Zeitung*, 7 June 2008; Schrader 2008). But how will these funds be generated if, simultaneously, the contribution of fossil fuels to the gross world product (world GDP) has to be drastically reduced? And if due to continuous rise in the price of fossil fuels, especially oil and gas, a world-wide recession sets in, then it will be difficult even to maintain the present level of necessary expenditures.

The IEA also recommends in its packet the construction of 32 nuclear power plants every year, a total of 1,300 new ones by 2050. The revival of nuclear power as a major source of energy is not being presented as a development of the productive forces. It is an old technology which was, against the background of the hopes put on the rise of renewable energies, considered to be too dangerous and dispensable. Now, since the so-called renewable energy technologies have disappointed these hopes, policy makers are willing to revive this old technology. But, even if people are prepared to accept the risks and even if the risks are lowered through technical improvements, uranium is a non-renewable resource and is already becoming ever costlier. According to estimates of experts, at the present rate of consumption of the currently operating 439 nuclear reactors in the world, uranium ore will be available at the most for another 60 years. Moreover, according to the *World Nuclear Association*, global uranium production already peaked in 1981. That means, its availability is gradually declining (Meacher 2006). In September 2006, the price of uranium was more than six times as high as in 2001 (*International Herald Tribune*, 5 September 2006). What prevents the closure of some of the existing nuclear power plants due to lack of uranium is the use of nuclear weapons material made available through the mutual reduction of the nuclear weapons arsenal of the USA and the former Soviet Union.

Because of these problems with the presumptive alternatives to fossil fuels, hard-headed realists in the energy industries are thinking of some other solution of the energy and global warming problem based on coal, which is still abundantly available and comparatively cheap. Coal is not as versatile as oil, but it can be gasfied and liquefied. The problem that has to be solved is how to burn it and yet not emit too much CO_2 into the atmosphere. The solution that is being advocated and experimented with at present is the *Carbon Capture and Storage* (CCS) technology. The idea is to industrially separate the CO_2 from the other exhaust gases of the coal-burning power plants, capture and liquefy it under high pressure and then pump it down into caverns that result from the exhaustion of oil and gas fields. Then – here the idea becomes a bit unclear – either the caverns would be sealed off or the liquefied CO_2 would be absorbed by the rocks around the cavern. Geologically suitable caverns with chemically suitable rocks will, of course, have to be found.

The strongest advocacy of this solution of the problem came in 2006 from the report of a commission appointed by the UK government and presided over by Sir Nicholas Stern. The report estimates the costs to be incurred for limiting global warming to a safe level by this and some other methods to be very modest, yearly 1% of the global GDP up to 2050 (Stern 2006). But some economists have strong doubts about this optimistic estimate. Robert J. Samuelson writes:

> The notion that there is only a modest tension between suppressing greenhouse gases and sustaining economic growth is highly dubious. Stern arrives at his trivial costs .... by essentially assuming them. His estimates presume that .... technological improvements will automatically reconcile declining emissions with adequate economic growth. .... To check warming, Stern wants annual emissions 25% below current levels by 2050. The IEA projects that economic growth would by 2050 generate more than double emissions. At present we can't bridge the gap ...*We need more candour*. Unless we develop cost-effective technologies that break the link between carbon-dioxide emissions and energy use, we can't do much. Anyone serious about global warming must focus on technology – and not just assume it. Otherwise *our practical choices are all bad*: costly mandates and controls that harm the economy, or costly mandates and controls that barely affect greenhouse gases. Or possibly both. (Samuelson 2006 Emphasis added)

The Central Source of Prosperity

Nowadays, in Europe one often hears that we are now living in a *Wissensgesellschaft*. The English equivalent of this German term is presumably 'knowledge society'. Recently, in a high-level discussion on the various crises of today, the moderator asked an intellectual, who had been an adviser to the Finance Minister of France, what the Western societies should and can do to overcome the crises. The adviser said, in the general sense, the material resources are inexorably becoming scarcer and costlier, and there is competition at the world market from low-wage countries like China, India, etc. The way to overcome the crises is therefore fast progress towards a *Wissensgesellschaft.* I checked in an internet encyclopedia and found there that many Western thinkers believe that 'theoretical knowledge is the most important resource of the post-industrial society', that 'production, use, and organisation of knowledge are the central sources of productivity and growth' (Wikipedia, German edition).

A few years ago similar thoughts used to be expressed in simpler terms, namely scientific and technological development. Some people in Germany used to say: let the Chinese, the Indians, the East Europeans, etc. produce all the ordinary goods, we shall sell the blueprints, or we shall sell the highly sophisticated products and know-how. But how much of all these beliefs has a solid basis?

Ever since modern science began, knowledge production has continued uninterruptedly. In our times, we hear from scientists that knowledge is, so to speak, exploding. But then, if knowledge is the most important resource and the central source of growth, why there are these crises that I have referred to in the beginning? Obviously, these beliefs are not well-founded.

Production, use, and organisation of knowledge have *always* been *an important* (let us use the terms) resource and source of growth in productivity and production. However, they have *not* been *central* to the origin and explosive growth of the Industrial Civilisation. But is there at all something we can call *the central* source of growth in prosperity in the last 200 years? Yes, it is the *fossil fuels*.

As we all know, the steam engine made the Industrial Revolution possible. And high pressure steam could be produced by burning coal. It is not as if coal was essential for producing steam. One could have done that also by burning wood or charcoal.

But wood had become scarce much before the Industrial Revolution began in England, which is why coal, a very dirty fuel, started being used in place of wood. The difference between wood and coal was that, firstly, coal was – at least in the countries, in which the Industrial Revolution was made – immensely abundant; it appeared to be inexhaustible. And, secondly, the energy content (energy density) of coal is much higher than that of wood. A study made in 1996 found that whereas the EROEI of US-American plantation wood amounts to 2.1 (i.e. a return of 2.1 units of energy can be had by investing one unit of energy), the EROEI of coal (from Wyoming USA) amounts to 10.5. The EROEI of US-American onshore natural gas and that of Alaska oil are, according to the same study, 10.3 and 11.1 respectively (cf. Heinberg 2003: 153). In its early days (1901–1920), the EROEI of Texas oil was 20 (Kunstler 2005: 107). It is as if 'fossil fuels provided for each person in an industrialised country the equivalent of having hundreds of slaves constantly at his or her disposal' (ibid: 31).

When one generation of scientists and engineers, the providers and practitioners of knowledge, die, they are replaced by the next generation of scientists and engineers. They and their knowledge are, so to speak, renewable resources that are, in highly developed countries, not scarce. But not so the fossil fuels. The huge leaps in inventions and productivity that took place in the past two centuries were, of course, the work of creative scientists and engineers. But the platform, so to speak, on which they had worked was provided in the final analysis by the abundantly available cheap fossil fuels. The invention of, e.g., aeroplane could not even have been imagined without the availability of cheap oil. And automatic machines that replace manpower and thus enhance productivity cannot be manufactured and operated without the use of fossil fuels. They enhance productivity because they are able to replace human energy with some or other form of fossil-fuel energy.

This platform is nowadays becoming ever weaker. Oil extraction has (almost) peaked. Its price is rising inexorably and supply cannot be increased anymore. The end of the golden age of oil is looming on the horizon. Many airlines are mothballing planes, giving up routes, raising prices. Americans and Europeans are being compelled to drive less and buy smaller cars. There is a crisis in US and European automobile industry.

Nicholas Georgescu-Roegen, a pioneer in ecological economics, calls the deposits of fossil fuels and other important non-renewable minerals in sufficiently high degree of concentration 'the limited dowry of mankind's existence on earth'. A dowry is not only limited but also a once-only gift. That is why he comes to the conclusion:

> Even with a constant population and a constant flow per capita of mined resources, mankind's dowry will ultimately be exhausted if the career of the human species is not brought to an end earlier by other factors. (Georgescu-Roegen 1971/1981: 296)

Under the expression 'other factors' we may understand all kinds of wars, especially those over resources, pandemics (like AIDS, bird-flu, etc.), to fight against which mankind would not have enough resources, the devastations caused by the effects of global warming, etc.

Georgescu-Roegen wrote these lines in 1971, when the focus was more on the resource question. In 2006, James Lovelock – another great scientist-thinker – was compelled to focus more on the ecological health of the planet Earth. He had earlier compared it with a living organism and called it *Gaia* (the name of the ancient Greek Earth-goddess). Referring to the great dangers coming from global warming, Lovelock (2006) wrote in a very pessimistic mood:

> We have given Gaia a fever and soon her condition will worsen to a state like a coma. She has been there [i.e. in a state like a coma] before and recovered, but it took more than 100,000 years. We are responsible and will suffer the consequences: as the century progresses, the temperature will rise 8 degrees centigrade [Celsius] in the temperate regions and 5 degrees in the tropics.

But, despite being very pessimistic, he gives a call for action:

> So let us be brave and cease thinking of human needs and rights alone, and see that we have harmed the living Earth and need to make our peace with Gaia. We must do it while we are still strong enough to negotiate, and not a broken rabble led by brutal warlords.

The New Tasks

If we want to heed Lovelock's call, then we must give ourselves some very new tasks. The problem is not just global warming. It is actually more general. There is, undeniably, a contradiction between ecology and economy as we know it today. Because, generally speaking, the more resources we consume, the more we pollute/degrade the environment. This is true even if resource consumption is increased in order to limit some particular case of pollution somewhere. And almost all measures to protect the environment in the interests of the general public, peoples of other countries, and the future generations result in increasing costs and losses to some people and some enterprises of the present generations, and that jeopardises economic growth. The only convincing way to achieve *overall* reduction in pollution and degradation of nature – that includes limiting global warming – is to reduce *overall* resource consumption. That entails overall economic contraction. In my book (1999 and 2008) I have argued in detail for these propositions.

Whether we like it or not, the expositions in the second and third section lead undisputedly to the conclusion that the idea of socialism on the basis of a highly developed industrial society has no chance of being realised. Also the traditional concept that a socialist regime's first task is to develop the productive forces and thus to increase production and labour productivity does not make sense any more. These ideas and concepts have become obsolete, and they must be replaced with ideas and concepts that are appropriate to the problems and crises we are facing *today*. Thus, today, socialists must replace the concept of primacy of human needs and rights with the concept of primacy of environmental protection. And the primary task of a new socialist regime will have to be to organise the transition to an economy based largely, if not exclusively, on renewable resources. Marx wrote: 'The philosophers have only *interpreted* the world, in various ways; the point, how-

ever, is to *change* it'. Following him, we should today say: till now, we, including socialists, have changed the world in various ways; the point today is, however, to *protect* it. Also Marx's vision of a communist society as one in which the first rule of distribution is 'from each according to his ability, to each according to his need', must be revised. The second part of the rule should read: ... to each an equal share of what we can take from nature without degrading it.

Let us go back to the Marx-quotation at the beginning. He wrote: '.... higher relations of production never appear before the material conditions of their existence have matured in the womb of the old society itself'. Here Marx seems to say that socialism, the higher relations of production, will *appear* by itself (automatically) when the material conditions for its existence have matured. I do not believe that it would appear by itself, it has to be *created*, and Marx himself also spoke in the same quotation of the '*task*' that arises. Now the question is: have the material conditions for the existence of socialism matured?

Under 'material conditions' Marx and his followers understood a situation in which, in a highly developed industrial society, capitalism has become *a fetter* to the further development of productive forces. Capitalism, they thought, would perish because of this. However, when we observe the capitalist economies of today, we do not see any sign of capitalism having become a fetter to the further development of productive forces. On the contrary, capitalism is developing the productive forces so much and so rapidly that this itself has become a great threat to both human societies and the global environment. The task today is, therefore, not to smash any non-existent fetters, but, on the contrary, to fetter the productive forces, which under capitalism, driven by market forces, have developed a dynamism independent of any considerations of good or bad for human societies and nature. But that would not suffice. The task today is rather to *organise an orderly retreat* from today's growth madness, to *wilfully scale down* humanity's economic activities.

These are the tasks, for which we need socialism with a planned economy. There is no room for these tasks in capitalism, because in its very logic there is an in-built growth compulsion. That is why it must be overcome. These are very different, very new grounds for advocating socialism. This is a very new conception of socialism's tasks. To make the difference between old socialism and this new socialism clear it is better to call it eco-socialism.

Prospects for Eco-socialism

Marx wrote: 'mankind always sets itself only such tasks as it can solve; ... the task itself arises only when the material conditions for its solution already exist ...' (see quotation above). Do the *material* conditions for successfully fulfilling the *new* tasks, the tasks as understood in the concept of *eco-socialism*, already exist? I believe they do. For, unlike in the old Marxist concept of socialism, no rapid and difficult-to-achieve development of productive forces is necessary, no highly industrialised society has to be built up from scratch as the Soviet communists had to do.

The *material* conditions that are needed for fulfilling the new socialist tasks defined above exist since long: *adequate* renewable resources and *intermediate*, labour-intensive technologies.

I would like to add here that even the *objective necessity* for eco-socialism exists. Large sections of humanity have realised that the crises and their sufferings referred to in the first section cannot be overcome in Capitalism; they are crying for an alternative. At least in Germany, where I can observe the developments personally, the antipathy to socialism is melting down. In opinion surveys, about half of the Germans say that socialism is a very good idea, only its implementation in the past had been bad. However, one very important condition that does not exist yet is the *subjective readiness* of the majority of the people of the world to really set itself the tasks defined above and, generally speaking, to accept the vision of eco-socialism. The expression 'adequate renewable resources' is, unfortunately, still understood as enough to maintain the present-day average standard of living of, say, a middle class family in the USA or Germany.

Old Marxist socialists understood the psychological dimension of their task as creating, after the revolution, the *New Man*, a character type that has overcome selfishness, is ready to sacrifice personal interests in favour of the welfare of the collective, is ready to accept material equality as a social goal. What is new in eco-socialism in this respect is that the majority of the people must be subjectively ready, *now*, to accept a much lower material standard of living in the near future. Whereas in old socialism the selfish man was to become the *New Man* in the context of the promise of rising prosperity of the collective, in eco-socialism there will definitely be no promise of rising prosperity. For – unlike e.g. today's Brazil, that is rapidly destroying the Amazon rainforests – an eco-socialist society must not strive to use all the country's renewable resources for the benefit of human beings. Much fertile land must be left unused by humans so that it can be the habitat of the other animal and plant species. An eco-socialist society must not dam all its rivers to produce hydroelectricity.

What then are the prospects of eco-socialism replacing capitalism? At first it seems to be bleak. Lovelock uses the term 'we'. But who are these 'we'? Lovelock, I am sure, would say: why, the whole mankind. But mankind is not united in this matter. At the G8-summit of 2008 in Japan the participants did not announce any agreed middle-term action plan aimed at retarding global warming, although they agreed in principle on the long-term goal of halving the emission of greenhouse gases by 2050. China and India, whose leaders had also been invited to take part in this part of the deliberations, flatly refused to undertake anything in this regard. Their argument is essentially the same as that put forward until 2 years ago by the US president Bush II for withdrawing from the Kyoto Protocol process, namely that it would harm the US economy. In 1992, at the so-called Earth Summit in Rio-de-Janeiro, the then US president Bush I had said categorically that the American way of life could not be a matter of debate. All this confirms Samuelson's assertion that 'the notion that there is only a modest tension between suppressing greenhouse gases and sustaining economic growth is highly dubious'. All this also means that the prospects of reducing emissions of greenhouse gases and protecting the environment

in general are, at least at present, very dim. Economic growth is still the topmost priority of the leaders of all nations. Even the leaders of the EU, which poses to be the pioneer in this matter, back down from their promises when it comes to taking concrete measures that might harm particular economic interests. Bush II was at least honest when he withdrew from the Kyoto Protocol process.

Although the prospects today are bleak, we can still speculate on the prospects in future. All the crises we are experiencing today will further intensify in course of time. Chaos, disorder, conflict may lead to the breakdown of the prevailing political regime in one country after the other. Of course, as of today, there is not much hope that eco-socialist regimes will take their place. But there is no compelling reason to be pessimistic either.

Today, of course, there are very few eco-socialists in the world. And even many who call themselves eco-socialists or eco-Marxists still harbour many illusions about alleged wonderful possibilities of renewable resources and non-polluting technologies that will allow all of humanity to enjoy a middle-class standard of living. But that may change soon or perhaps later. The various crises of today, especially global warming and the resource crisis, may themselves educate the masses quickly. We eco-socialists may add our own efforts to that. The number of eco-socialists may rise rapidly and they may become more realistic in their thoughts. It depends largely on us, today's eco-socialists, on our commitment and on how intensively and intelligently we work for our cause.

In the highly developed industrial societies I can also see some signs of hope. Firstly, for reasons other than ecological, the population of these countries is going down (e.g. in Russia and Germany) or stagnating. And for spiritual, moral and/or ecological reasons many people are voluntarily living a modest life. There are many who have given up using a private car and generally reduced their consumption. In theoretical writings on the ecology and resource problems I have often come across a quotation in which the nineteenth century economist John Stuart Mill advocates 'a stationary state' economy. Daly's (1977) advocacy of 'a steady-state economy' is fairly well known among environmentalists. In the English and German speaking world, recently several books and articles have appeared that warn the highly industrialised societies of the coming unavoidable downscaling of their economies (see e.g. Heinberg 2003; Kunstler 2005). People who have accepted such views are, of course, still a small minority. But the majority of people is worried and has started thinking seriously about life beyond the Oil Age and amidst global warming.

However, unfortunately, all these writers and other people who are worried, envisioning the future, and thinking of solutions to the problems are thinking only within the framework of capitalism. They are not asking whether their ideas can at all be implemented in capitalism. But I think it is possible that after some time, when the governments would be compelled to tell the people that substantial sacrifices are necessary, the people, who would have become highly politicised by then, would demand that the sacrifices and burdens are distributed equitably, that some kind of rationing of the more essential goods and services and jobs are introduced. We may hope that in the highly developed countries, when the planned downscaling of the economy begins, people would not accept extreme inequality as their forefathers

did in the pre-industrial ages. That could be a step towards an eco-socialist society. In my book on this subject (1999/2008), I have discussed in great detail the main features of an eco-socialist society.

The prospects for eco-socialism, I guess, are better among the peoples of the poor Third World countries. The distance between an ideal sustainable way of life and their present real way of life is not as great as that among the peoples of Western Europe and North America. In the Third World, many of us still remember having lived without electricity and motor vehicles. In India, even today about two thirds of the population do not have access to electricity. But one very depressing aspect of the situation there is the unabated population growth.

Nowadays, among socialists one can observe quite a lot of enthusiasm over the recent developments in Latin America. In some countries there, those who call themselves socialists have been elected as president, in some others left leaning Social Democrats. Especially the developments in Venezuela and Bolivia have raised hopes. But such feelings only reflect old socialist thinking. The redistribution of the nation's oil and gas wealth in favour of the poorer strata of society that is taking place in these two countries is, of course, highly laudable. But this may be called 'petro-socialism'. This policy has no future. When the oil and gas wealth starts to decline, what will the socialist presidents have to distribute? They are raising hopes without caring for the future. We should therefore focus on countries that are not so well endowed with oil and gas or some other valuable minerals, the limited onetime-only 'dowry' Georgescu-Roegen spoke of.

China immediately comes to mind as an example. The economy of this most populous country of the world is booming for quite a few years. It is rapidly becoming industrialised. China is, moreover, ruled by an all-powerful communist party. So, following the ideas of old socialism, one might think that the foundation of a socialist society is being built there, albeit largely through an economic policy that allows and encourages capitalist enterprises in a sort of market economy. When a BBC journalist asked a member of the Communist Party of China, whether he found it alright that capitalist entrepreneurs were making large profits at the expense of the working people, the latter replied: 'The goal remains the same, only the path and the tempo can vary'. I think, the leaders of the CPC would say the same in reply to the question.

But they cannot ignore the ecological and resource crisis any more. They are fully aware of the enormity of environmental pollution in China. The Chinese National Bureau of Statistics estimated that in 2004 the economic damage caused by environmental pollution amounted to 3% of the GDP of that year. It further estimated that to clean up or repair the [accumulated] environmental pollution/damage would cost the nation €106 billion, which is equivalent to 7% of the GDP of 2004 (*Financial Times*, 8 September 2006). The leadership is also aware of the basic cause of this high level of pollution. Responding to the world-wide negative reports on the state of China's environment, a high level member of the national government said: you cannot want China to be the 'factory of the world' and then complain about pollution! As regards the energy and resource crisis, China is, through its accelerating demand, as much a cause of the crisis as a sufferer from it.

For the average Chinese, the recent 18% hike in the price of petrol is much more difficult to bear than it would be e.g. for the average German. According to recent reports, there is now even power shortage in China, because coal production cannot keep pace with demand (*Frankfurter Rundschau*, 11 July 2008). The shortfall in coal production resulted inter alia from the closure of many small and/or illegal coal mines where every year hundreds of miners lost their life through accidents, which happened because mine owners had refused to invest enough in safety measures (*International Herald Tribune*, 14 July 2008).

Leaders of the CPC also cannot ignore the negative social and political effects of such disregard of the interests of the working class. And there are also reports of hundreds of protest demonstrations on various issues and grievances, and reports of numerous cases of violent clashes between the police and the aggrieved people.

Against this background, one is compelled to ask, can the goal remain the same, i.e. socialism on the basis of a highly developed industrial economy?

At present, it does not appear that the Chinese leadership is prepared to revise its goal. At an international conference on 'Environment and Socialism' held in May 2008 in Jinan (I took part in it) almost all Chinese speakers said, in the general sense, they knew that the state of the environment in China was very bad, that this could not be allowed to continue and that measures to protect the environment must be taken. But why? because otherwise development would be halted. There was no mention of the resource crisis. The remedy was seen in the development and use of environment-friendly technologies. And I heard very often the avowal of eco-socialism as the goal (at least of the speakers). But this is not what I consider to be true eco-socialism. I am afraid, if the Chinese leadership does not change course soon, if it continues, like the rest of the world, to pursue the goal of maximising the GDP, then it would lead China to economic and social collapse (And that may happen in India too).

But if the leadership embraces true eco-socialism, then China has a better chance of success than any other country. Because, firstly, in China the Communist Party still has considerable control over the economy and society at large. Although much of the economy is now functioning as a capitalist market economy, not much is left totally at the mercy of anonymous market forces. If it decides to change course, the leadership can take over complete control of the economy and organise an *orderly* (instead of a chaotic) retreat from today's growth madness. Secondly, with its one-child policy the leadership has already taken an important step towards eco-socialism. And thirdly, unlike in rich industrial countries, the masses still have not forgotten how to live a happy life without much material wealth.

However, there is also a danger: the corroding effects of capitalism on the moral fabric of society, of the masses as well as of the leadership. To allow capitalists to become a member of the Communist Party was not a good idea. Through them greed can (or it has already) become a dominating force in human behaviour. And greed is not only an anti-socialist, but also an anti-ecological trait of character. As Gandhiji said, 'Earth provides enough to satisfy every man's needs but not for every man's greed'.

References

Daly, H. (1977). *Steady State Economics*. San Francisco: W. H. Freeman.
Georgescu-Roegen, N. (1971/1981). *The Entropy Law and the Economic Process*. Cambridge: Harvard University Press.
Heinberg, R. (2003). *The Party is Over*. Forest Row: Clairview.
Kunstler, J. H. (2005). *The Long Emergency*. London: Atlantic Books.
Lovelock, J. (2006). The Earth is About to Catch a Morbid Fever. *The Independent*, 16 January.
Marx, K., & Engels, F. (1977). *Selected Works in Three Volumes, Volume One*. Moscow: Progress Publishers.
Meacher, M. (2006). On the Road to Ruin. *The Guardian*, 7 June.
Samuelson, R. J. (2006). The Worst of Both Worlds? *Newsweek*, 13 November.
Sarkar, S. (1999). Eco-Socialism or Eco-Capitalism? A critical analysis of humanity's fundamental choices. London: Zed Books (2008; Chinese translation of ditto. Jinan: Shandong University Press).
Schrader, C. (2008). Große Töne, Kleiner Beitrag. *Süddeutsch Zeitung*, 10 June.
Stern, N. (2006). *Stern Review: Der Wirtschaftliche Aspekt des Klimawandels (Zusammenfassung)*. London: Internet.

Index