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## In this issue:

- **Greatest Twentieth-Century Economists Poll**
- **Towards a Concrete Utopian Model of Green Political Economy**  
John Barry.....5
- **Economics Is Structured Like a Language**  
William Kaye-Blake .....25
- **Errata** ..... 34
- **Comment on "Some Primitive Robust Tests of Some Primitive Generalizations"**..... 35
- **Web-linked index of *pae review* articles in 2005**....38
- **Submissions, etc**..... 40

## Results of the *post-autistic economics review's* **Greatest Twentieth-Century Economists Poll**

Subscribers to this journal were asked:

**Who were the greatest economists of the 20th-Century?**

“Greatest” here means not who most influenced the economics profession or ideology, but rather who most added to our understanding of economic phenomena. Vote for your top five. The economist who is your first choice will be credited with five votes, your second choice with four, your third with three, your fourth with two and your fifth with one. You may vote for fewer than five if you wish. Only subscribers to the *post-autistic economics review* are eligible to vote. The votes of subscribers who submit more than one set of votes will not be counted.

**1,249 subscribers voted. The results are as follows.**

- 1. John Maynard Keynes 3,253**
- 2. Joseph Alois Schumpeter 1,080**
- 3. John Kenneth Galbraith 904**
- 4. Amartya Sen 708**
- 5. Joan Robinson 607**
- 6. Thorstein Veblen 591**
- 7. Michal Kalecki 481**
- 8. Friedrich Hayek 469**
- 9. Karl Polanyi 456**
- 10. Piero Sraffa 383**
  
- 11. Joseph Stiglitz 333**
- 12. Kenneth Arrow 320**
- 13. Milton Friedman 319**
- 13. Paul Samuelson 319**
- 15. Paul Sweezy 268**
- 16. Herman Daly 267**
- 17. Herbert Simon 250**
- 18. Ronald Coase 246**
- 19. Gunnar Myrdal 216**
- 20. Alfred Marshall 211**

21. Albert Hirschmann 208
22. Nicholoas Georgescu-Roegen 205
23. Kenneth Boulding 174
24. Wassily Leontief 153
25. Nicholas Kaldor 141
26. Douglas North 138
27. Raul Prebisch 102
28. John Hicks 97
29. Ernest Mandel 87
30. Ludwig von Mises 78
  
31. John R.Commons 76
32. Richard R.Nelson 72
33. George Akerlof 71
34. E. F. Schumacher 67
35. Paul Krugman 64
36. Daniel Kahneman 60
37. Gary Becker 58
38. Robert Heilbroner 57
39. Hyman Minsky 54
40. Thomas Schelling 53
41. Arthur Lewis 52
42. John Nash 51
43. Samir Amin 49
43. James Buchanan 49
45. Celso Furtado 48
45. John von Neuman 48
47. Irving Fisher 43
48. Jan Tinbergen 42
49. Maurice Dobb 41
49. Simon Kuznets 41
  
51. Robert Solow 40
52. Michel Aglietta 38
52. Nancy Folbre 38
54. Silvio Gesell 37
54. Rosa Luxemburg 37
56. Vernon Smith 35
57. Mason Gaffney 34

- 58. Robert Lucas 32
- 58. Oliver Williamson 32
- 60. Paul Baran 31
- 61. François Perroux 28
- 62. George Shackle 27
- 62. Rudolf Steiner 27
- 62. James Tobin 27
- 62. Vladimir Lenin 27
- 66. Luigi Passinetti 26
- 67. Brian Arthur 24
- 67. Deirdre McCloskey 24
- 67. Tony Lawson 24
- 70. Clarence Ayres 23
- 70. Knut Wicksell 23
- 72. Mancur Olson 22
- 72. Maurice Allais 22
- 72. Ha-Joon Chang 22
- 72. Christopher Freeman 22
- 72. Max Weber 22
- 78. Hernando de Soto 21
- 78. Samuel Bowles 20
- 78. George Stigler 20
- 78. Anwar Shaikh 20
- 78. Amos Tversky 20
- 82. Geoffrey Hodgson 19
- 82. Frank Knight 19
- 82. Vilfredo Pareto 19
- 82. Lance Taylor 19
- 86. Andre Gunder Frank 18
- 86. Immanuel Wallerstein 18
- 88. Louis O. Kelso 17
- 88. Janos Kornai 17
- 90. Robert Boyer 16
- 90. Paul Davidson 16
- 90. William Kapp 16
- 90. Abba Lerner 16
- 94. William Baumol 15
- 94. Diane Elson 15
- 94. Pierangelo Garegnani 15
- 94. Roy Harrod 15
- 94. Franco Modigliani 15
- 94. Richard Thaler 15
- 94. William Vickrey 15

**For people receiving less than 15 votes go to**

<http://www.paecon.net/PAERReview/issue36/furtherresults.htm>

**Editor's Note**

The exact geographical distribution of the voters in this poll is unknowable. However it is reasonable to assume that it resembles the distribution of visitors to [www.paecon.net](http://www.paecon.net) during the voting period. The site statistics for the month of January 2006, showing the distribution of visitors between the top 30 of a total of 127 countries, are available at <http://www.paecon.net/PAERReview/issue36/VisitorStatistics36.htm>

**Thanks to all of you who voted. EF**

## Forum on Economic Reform

In recent decades the alliance of neoclassical economics and neoliberalism has hijacked the term “economic reform”. By presenting political choices as market necessities, they have subverted public debate about what economic policy changes are possible and are or are not desirable. This venue promotes discussion of economic reform that is not limited to the one ideological point of view.

## **Towards a Concrete Utopian Model of Green Political Economy: From Economic Growth and Ecological Modernisation to Economic Security**

John Barry (Queen’s University Belfast, UK)

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### **Abstract**

Much of the thinking about the appropriate ‘political economy’ to underpin sustainable development has been either utopian (as in some ‘green’ political views) or ‘business as usual’ approaches. This article suggests that ‘ecological modernisation’ is the dominant conceptualisation of ‘sustainable development’ within the UK and other ‘developed’ Northern polities and most corporate/business interests, and illustrates this by looking at some key ‘sustainable development’ policy documents from the UK Government. While critical of the reformist ‘policy telos’ of ecological modernisation, supporters of a more radical version of sustainable development need to also be aware of the strategic opportunities of this policy discourse. In particular, the article suggests that the discourse of ‘economic security’, which can be attached to a radicalised notion of ecological modernisation, ought to be used as a way of articulating a radical, robust and principled understanding of sustainable development, which offers a normatively compelling and policy-relevant path to outlining aspects of a ‘green political economy’ to underpin sustainable development.

### **Introduction**

One of the weakest and less developed areas of broadly green/sustainable development thinking has been its economic analysis. What analyses there are within the green political canon are largely utopian – usually based on an argument for the complete transformation of modern society and economy as the only way to deal with ecological catastrophe, often linked to a critique of the socio-economic failings of capitalism that echo a broadly radical Marxist/socialist or anarchist analysis – or underdeveloped – due, in part, to the need to outline and develop other aspects of green political theory and the challenge of sustainability. However, this gap within green thinking has recently been filled with a number of scholars, activists, think tanks, and environmental NGOs who have outlined various models of green political economy to underpin sustainable development political aims, principles and objectives, of which ecological modernisation is pre-eminent.

The aim of this article is to offer a draft of a realistic, but critical, version of green political economy to underpin the economic dimensions of radical views of sustainable development. It is written explicitly with a view to encouraging others to respond to it in the necessary collaborative and interdisciplinary effort to think through this political economy ‘bottom line’ of sustainable development. The combining of realism and radicalism marks this article which takes as its starting point that we cannot build or seek to create a sustainable economy *ab nihlo*, but must begin from where we are, with the structures, institutions, modes of production, laws, regulations and so on that we have. This does not of course mean simply accepting these as immutable or

set in stone - after all, many of the current institutions, principles and structures underpinning the dominant economic model are the very causes of unsustainable development – but we do need to recognise that we must work with (and ‘through’ – in the terms of the original German Green Party’s slogan of ‘marching through the institutions’) these existing structures as well as changing and reforming and in some cases abandoning them as either unnecessary or positively harmful to the creation and maintenance of a sustainable economy and society.

Equally, the realism that this article promotes also recognises that an alternative economy and society must be based in the reality that most people (in the west) will not, under current political and economic conditions, democratically vote for radical changes to how society and the economy operate, especially if those changes are viewed as involving ‘sacrifice’ and a diminution in life chances or a narrowing of aspirations for a better life for them and their children. Realism and strategic considerations suggest that we must accept that any putative ‘green or sustainable economy’ *must be* one that is recognisable to most people and indeed safeguards and guarantees not just their basic needs but their aspirations (within limits). That is, the realistic character of the thinking behind this article accepts that consumption and materialistic lifestyles are here to stay (so long as they do not transgress any of the critical thresholds of the triple bottom line) and indeed there is little to be gained by proposing alternative economic systems which start from a complete rejection of consumption and materialism.<sup>1</sup> The appeal to realism is in part an attempt to correct the common misperception (and self-perception) of green politics and economics as requiring an excessive degree of self-denial and a puritanical asceticism (Goodin, 1992: 18; Allison, 1991: 170-8). While rejecting the claim that green political theory calls for the complete disavowal of materialistic lifestyles, it is true that the politics of sustainability does require the collective re-assessment of such lifestyles. But it does not mean that we need necessarily require the complete and across the board rejection of materialistic lifestyles. It must be the case that there is room and tolerance in a green economy for people to live putative ‘ungreen lives’ so long as these do not ‘harm’ others, threaten long-term ecological sustainability or create unjust levels of socio-economic inequalities, or that the socio-economic and ecological costs of such lifestyles are paid by those who choose to live them. Thus, realism in this context is in part another name for the acceptance of a broadly ‘liberal’ or ‘post-liberal’ (but certainly not anti-liberal) green perspective.<sup>2</sup>

At the same time, while critical of the ‘abstract’ and ‘unrealistic’ utopianism that peppers green and radical thinking in this area, I do not intend to reject utopianism. Indeed, with Oscar Wilde I agree that a map of the world that does not have utopia on it, isn’t worth looking at. The spirit in which this article is written is more in keeping with framing green and sustainability concerns within a ‘concrete utopian’ perspective (Hayward, 1995) or what the Marxist geographer David Harvey calls a ‘utopianism of process’ (1996), to be distinguished from ‘closed’, blueprint-like and abstract utopian visions. Accordingly, the model of green political economy outlined here is in keeping with Lukes’ suggestion that a concrete utopianism depends on the “knowledge of a self-transforming present, not an ideal future” (1984: 158).

It accepts the current dominance of one particular model of green political economy – namely ‘ecological modernisation’ (hereafter referred to EM) – as the preferred ‘political economy’ underpinning contemporary state and market forms of sustainable development, and further accepts the necessity for green politics to positively engage in the debates and policies around EM from a strategic (as well as a normative) point of view. However, it is also conscious of the

limits and problems with ecological modernisation, particularly in terms of its technocratic, supply-side and reformist 'business as usual' approach, but nevertheless seeks to explore the potential to radicalise EM or use it as a 'jumping off' point for more radical views of 'greening' the economy in a more thorough manner.

The article begins by outlining EM in theory and practice, specifically in relation to the British state's 'sustainable development' policy agenda under New Labour. While EM as currently practised by the British state is 'weak' and largely turns on the centrality of 'innovation' and 'eco-efficiency', it then goes on to investigate in more detail the role of the market within current conceptualisations of EM and other models of green political economy. In particular, a potentially powerful distinction (both conceptually and in policy debates) between 'the market' and 'capitalism' has yet to be sufficiently explored and exploited as a starting point for the development of radical, viable and attractive conceptions of green political economy as alternatives to both EM and the orthodox economic paradigm. In particular the role of the market in innovation and as part of the 'governance' for sustainable development in which eco-efficiency and EM of the economy is linked to non-ecological demands of green politics and sustainable development such as social and global justice, egalitarianism, democratic regulation of the market and the conceptual (and policy) expansion of the 'economy' to include social, informal and non-cash economic activity and a progressive role for the state (especially at the local/municipal level). Here, the argument is that the 'environmental' argument or basis of green political economy in terms of the need for the economy to become more resource efficient, minimise pollution and waste and so on, has largely been won. What that means is that no one is disputing the need for greater resource productivity, energy and eco-efficiency, even as current production systems are woefully ecologically inefficient in reality. Both state and corporate/business actors have accepted the environmental 'bottom line' (often rhetorically, but nonetheless important) as a conditioning factor in the pursuit of the economic 'bottom line'.

However, what has been less remarked upon is the social 'bottom line' and the centrality of this non-environmental set of principles and policy objectives to green political economy. In particular the argument for lessening socio-economic inequality and redistributive policies to do this have not been as prominent within green political economy and models of sustainable development as they perhaps should be. One of the reasons for focusing on the 'social bottom line' is to suggest that the distinctiveness and critical relevance of a distinctly 'green' (as opposed to 'environmental' or 'ecological') political economy will increasingly depend on developing a political agenda around these non-environmental/resource policy areas as states, businesses and other political parties converge around the EM agenda of reconciling the environmental and economic bottom lines, through an almost exclusive focus on the environmental bottom line.<sup>3</sup> It is in developing a radical political and economic agenda around the social and economic bottom lines that green political economy needs to focus, which enables an acceptance of an eco-efficiency view without constraining the focus on eco-efficiency to a 'business as usual' agenda.

It is for this reason that the final part of the paper looks at the long-standing green commitment to re-orientate the economy towards enhancing and being judged by 'quality of life' and 'well-being'. The more recent discourse around 'economic security' is then discussed as building upon and related to the quality of life perspective, and is viewed as a potentially important driver and policy objective for green political economy in practice, in succinctly presenting the green economic case for a new type of economy, in which redistribution and

reducing socio-economic inequality is central. The model of green political economy presented here is defined in part by its commitment to 'economic security', which has the strategic political advantage of presenting a positive and attractive discourse for sustainable development arguments, unlike the (still prevalent) negative and often disempowering discourse of 'limits to growth', which does not of course mean denying the biophysical reality of limits, which are not just ecological, but include social, cultural and psychological and biological dimensions. The point is that using the language and analysis of economic security is a more attractive and compelling way of arguing and presenting the case for a less growth-orientated economy and consumption-orientated society and one that aims for putting quality of life at the heart of economic thinking and policy.

### **Ecological Modernisation in Theory and Practice in Britain**

The New Labour government is clearly committed to an EM approach to sustainable development. In a speech on sustainable development Tony Blair stated that, "tackling climate change or other environmental challenges need not limit greater economic opportunity...economic development, social justice and environmental modernisation must go hand in hand" (Blair, 2003).

This 'win-win' logic has also been echoed by the deputy Prime Minister John Prescott who in a speech to the Fabian Society held that:

There is a widespread view that environmental damage is the price we have to pay for economic progress...Modern environmentalism recognises that...an efficient, clean economy will mean more, not less economic growth and prosperity...Treating the environment with respect will not impede economic progress, it will help identify areas of inefficiency and waste and so unleash whole new forces of innovation. (Prescott, 2003)

Like EM discourse, New Labour sustainable development policy rhetoric adopts the language of business and orthodox economic growth, emphasising the business case for sustainability by linking environmental management with greater resource efficiency, innovation, cost reduction, enhanced competitiveness and 'moving up the value chain'. Typical of this is the Department for Trade and Investment, which notes that, "The environment is a business opportunity...there are economic benefits in reducing waste, avoiding pollution and using resources more efficiently...Reducing pollution through better technology will almost always lower costs or raise product value/differentiation" (DTI, 2000: 7).

This business case for rendering orthodox neo-classical economic growth compatible with environmental considerations can also be found outside Westminster in the devolved administrations in the UK. In Scotland, the Scottish Executive's Enterprise Minister Jim Wallace has recently announced a 'Green Jobs Strategy', stating that:

Economic growth and job creation can and should go hand in hand with promoting Scotland's natural environment and, through exports, sustaining good environmental practice overseas. A Green Jobs Strategy will focus our efforts on delivering sustainable growth, which will generate employment while improving our environment and raising

living standards across the country. As well as creating new business opportunities, better waste management and more efficient use of resources benefits the bottom line - raising productivity and making a big contribution to environmental targets. (Scottish Executive, 2005)

The notion that orthodox economic growth, employment investment patterns and the cross-sectoral goals of sustainable development might be in serious tension is excluded from the government's rhetoric on the environment and the 'greening of the economy'; it is certainly not presented as a possibly problematic issue for industrial production processes or for global capitalism or the new orthodoxy of export-led growth. Instead, environmental protection and economic growth are portrayed as a positive-sum game, a 'business opportunity', suggesting that EM is indeed the basis upon which current debates on environmental and sustainable development policy in the UK are founded (Barry and Paterson, 2004).

EM as the principle 'policy telos' (Levy and Wissenburg, 2004) for environmental and sustainable development policies within the UK (but also in other states) stresses innovative policy tools such as market-based incentives and voluntary agreements that 'steer' businesses towards eco-efficient practices, which do not undermine 'competitiveness' and ideally should create new markets, employment, investment opportunities and technological advances.<sup>4</sup> This does not rule out legislative sanctions, but EM strongly emphasises voluntary action and 'partnership' forms of environmental governance, which is in perfect keeping with not just New Labour's view of the role of the self-limiting role of state *via-a-vis* the market and market actors, but with other governments in Europe, North America and international institutions such as the IMF and World Bank. Having established the imperative for environmental improvement with its policies, the state also plays a key role in improving the capacity of industry to respond to that imperative *via*, for instance, public investment in clean technology and research and development programmes and provision of information on environmental best practice, such as the recently announced 'Environment Direct' initiative contained within the latest sustainable development strategy, or funded programmes in energy efficiency such as the Energy Savings Trust, or programmes to encourage clean technology innovation, such as the Green Technology Challenge and the Sustainable Technology Initiative. Other EM initiatives include the state establishing or supporting new 'network organisations' tasked with promoting and encouraging 'win-win' environmental solutions to business, such as the WRAP (Waste and Resources Action Programme) aimed at pump priming the market for recycled materials, or other agencies charged with informing and helping businesses (especially the small and medium sector) in respect to environmental legislation (particularly European Union directives), or other dissemination initiatives such as the Environmental Technology Best Practice Programme and the Energy Efficiency Best Practice Programme within the DTI.<sup>5</sup>

Market-based solutions have become a favoured policy tool to encourage eco-efficiency in the UK, and various environmental taxes have been introduced such as the climate change levy, congestion charging in inner London, the landfill tax, aggregates tax and the fuel duty levy. These market-based approaches based on a voluntary and partnership approach are hall-marks of the EM portfolio of 'policy drivers' of UK sustainable development, in comparison to the more legalistic approach of other European countries such as Germany.

One important element of such innovation is to create 'closed-loop' production, whereby waste materials are minimised and wastes themselves then become inputs to other industrial processes – central aspects of the emerging interdisciplinary science of 'industrial ecology'. The development of new markets, new commodities and services are crucial to creating the possibility of continued capital accumulation and the imperative to attract foreign direct investment (FDI) while other markets are being restricted. This efficiency-oriented and supply-side approach to environmental problems is central to understanding how EM is both attractive to state and business elites and managers, and some environmental NGOs.<sup>6</sup>

But it is importance to point out that EM processes tend to require significant state intervention, even if it is that the state 'steers' rather than 'rows'. For some EM writers, there is a reliance on a notion of an 'environmental Kuznets curve', whereby the ecological impacts of growth go through a process where they increase but beyond a certain point of economic output start to decline.<sup>7</sup> For most, this is not likely to occur, except in relation to certain measures of environmental quality, without significant state intervention to enable shifts in economic behaviour (Ekins, 2000). It is thus perhaps not an accident that EM discourse has arisen principally in social democratic countries in continental Europe where corporatist policy styles are still well established. EM as a 'policy ideology' has largely been developed in government programmes and policy styles and traditions, particularly those of Germany, The Netherlands, Sweden, Japan and the European Union (Weale, 1992: 76-85; Dryzek, 1997, pp. 137-141). And while in the European countries where some of the policy outcomes associated with EM strategies, notably voluntary agreements or public-private partnerships, are often regarded as elements in a 'neo-liberalisation' of those countries, nevertheless their development still occurs within a style of policy development and implementation which is corporatist.<sup>8</sup>

Corporatist arrangements are therefore usually regarded to be the most conducive political conditions for successful environmental policy reform (e.g. Young, 2000; Dryzek 1997; Scruggs, 1999). On this view the state policy-elites act as brokers and prime movers in encouraging interest groups, trades unions, industry, consumer groups and sections of the environmental movement, to accept the agenda of EM. What then becomes interesting in the UK case we develop below, is the way that globalisation acts to create potential for EM strategies in the absence of corporatist political arrangements. One argument similar to EM but couched in language more common in neoliberal countries such as the UK and US was popularised in an influential article by Porter and van der Linde (1995). They argue that the assumption of an economy-environment contradiction is premised on a static account of costs and fails to account for the dynamic effect which innovation has on the costs to firms of implementing environmental regulations. Thus policies can be pursued which promote competitiveness for firms while reducing the environmental impacts of those firms' operations. Porter and van der Linde emphasise regulation – that state regulation can create a dynamic of technical innovation by firms which is a 'win-win' scenario in economy-environment terms – but nevertheless the presumed relationship between states and firms is neoliberal rather than corporatist. However, one may posit that the lack of corporatist arrangements in the UK may partly explain why EM within the UK is almost exclusively concerned with resource efficiency and technological and supply-side solutions and has little in the way of the political and social aspects of EM one can find in more corporatist states such as Austria or Germany.

EM of course has its critics. Critics of EM in general suggest that the reliance on a set of technological fixes to solve what are widely seen as political problems is often seen as a key weakness, and one of its principal limitations when compared to its sister discourse of sustainable development which has explicit political bargains about limits and global justice built in, even in its relatively conservative versions (WCED, 1987; Langhelle, 2000). The focus on efficiency gains is often seen as wildly optimistic where all current experience suggests that in most areas, efficiency gains per unit of consumption are usually outstripped by overall increases in consumption and resource and energy use. This is another way of saying that the notion of an environmental Kuznets curve, which underpins claims for the potential compatibility of growth and environmental sustainability, is implausible; drawing as such arguments do on a narrow set of processes and measures of environmental quality (Ekins, 2000). But EM discourse is explicit about not attempting to limit overall levels of consumption. Indeed, one of the main points of this article is to suggest that if EM is to be used as basis for developing a realistic but critical model of green political economy, EM needs to be integrated with a model of sustainable political economy in which consumption is also addressed within the context of a far more radical economic vision which focuses on economic security, sufficiency and quality of life, rather than orthodox economic growth, and associated policies to increase formally paid employment, attract foreign direct investment and fully integrate local and national economies into the global one.

### **Ecological Modernisation and the UK's Sustainable Development Strategy**

The recently launched New Labour's sustainable development strategy, *Securing the Future: Delivering the United Kingdom Sustainable Development Strategy* (DEFRA, 2005), a follow-up to the 1999 strategy document, *A Better Quality of Life* (DEFRA, 1999) is a timely publication to take stock and assess the role of EM within official government thinking on the transition to the a more sustainable economy and society.

Of particular interest in Chapter 3 of the Strategy, 'One Planet Economy: Sustainable Production and Consumption'. While containing some positive features, not least the overarching idea of living within a sustainable 'ecological footprint'; greater support for ecological innovation and resource productive technologies; enabling us to 'achieve more with less'. In relation to the key but challenging issue of consumption, the report while woefully inadequate, does at least place the issue of tackling and addressing consumption alongside the more long-standing productive focus of United Kingdom sustainable development strategy. The strategy document studiously avoids what many would see as the real issue with consumption – i.e. how to reduce it rather than simply focusing on making it 'greener' or lessen its environmental impact. The report notes that "there will also be a need for households, businesses and the public sector to consume more efficiently and differently, so that consumption from rising incomes is not accompanied by rising environmental impacts or social injustice. The challenge is big. But so too are the opportunities for innovation to build new markets, products and services" (DEFRA, 2005: 51). At no point in the report is the question of reducing or maintaining consumption discussed, or relating consumption and patterns of consumption to quality of life or well-being. That is, there is no discussion which views consumption as a means to some other end, rather than an end in itself.

The extent of government action or policy in respect to consumption amounts to a series of 'processes' such as

- "building an evidence base around the environmental impacts arising from households and how patterns of use can be influenced
- working on a new information service – 'Environment Direct'...
- through a refocused Environmental Action Fund...
- delivering a large-scale deliberative forum to explore public views on sustainable consumption and lifestyles...
- the new Round Table on Sustainable Consumption" (DEFRA, 2005: 52).

Of these, perhaps most hope lies in the deliberative forum and the Round Table in raising the central but complex and difficult issue of reducing consumption and not simply changing current patterns of consumption per se. Before going on to look at the way in which the document articulates an EM view, it is worth briefly looking at the role of consumption both within EM as the dominant view of sustainable development within government thinking.

One of the limitations with EM as many authors and critics have pointed out (Barry, 2003) is its focus on the production side of economic activity and its impact on the environment – leading to its main focus on finding ways of increasing resource efficiency. What is missing from the EM agenda is a concern with sustainable consumption to balance with sustainable production patterns and technologies. Indeed, I would suggest that the integration of serious consideration as to how to tackle consumption into the EM framework holds out the possibility of a positive and more robust model of green political economy which is more consistent with basic green political and normative goals (particularly, as indicated in the concluding sections of this paper, EM can be framed within an overarching policy approach to sustainable development aimed at producing economic security, sufficiency and 'well-being' rather than orthodox 'economic growth').

The thinking behind Tim Jackson's recent report for the Sustainable Development Research Network entitled *Motivating Sustainable Consumption* (Jackson, 2005) seems to have influenced the Strategy's focus on the need for innovative deliberative and participative mechanisms for policy making around regulating consumption as well as the need for government leading by example in terms of public procurement, as the main policy contribution towards addressing sustainable consumption.

The conclusions of his report are as follows:

Changing behaviour is difficult. The evidence in this review is unequivocal in that respect. Overcoming problems of consumer lock-in, unfreezing old habits and forming new ones, understanding the complexity of the social logic in which individual behaviours are embedded: all these are pre-requisites for successful behaviour change initiatives. But in spite of all appearances this complex terrain is not intractable to policy intervention. Policy already intervenes in human behaviour both directly and indirectly in numerous ways...a genuine understanding of the social and institutional context of consumer action opens out a much more creative vista for policy innovation than has hitherto been

recognised. Expanding on these opportunities is the new challenge for sustainable consumption policy.

In following up on these possibilities, Government can draw some clear guidance from the evidence base. In the first place, leading by example is paramount. The evidence suggests that discursive, elaborative processes are a vital element in behaviour change – in particular in negotiating new social norms and ‘unfreezing’ habitual behaviours. This shift from ‘deliberation’ to ‘elaboration’ as a working model of behavioural change can be seen as a key message of this study. (Jackson, 2005: 132-3)

He goes on to point out that there is perhaps some hope to be found in more participatory community-based approaches to changing patterns of consumption. According to him,

In particular, the relevance of facilitating conditions, the role of lock-in and the critical importance of the social and cultural context emerge as key features of the debate. The role of community in mediating and moderating individual behaviours is also clear. There are some strong suggestions that participatory community-based processes could offer effective avenues for exploring pro-environmental and pro-social behavioural change. There are even some examples of such initiatives which appear to have some success. What is missing from this evidence base, at present, is unequivocal proof that community-based initiatives can achieve the level of behavioural change necessary to meet environmental and social objectives. (Jackson, 2005: 133)

This does seem to suggest that there is a role not just for deliberative, community-based processes (as indicated in the DEFRA strategy document) as enabling processes to overcome the obstacles to more sustainable patterns of consumption, but also of the possible role of community-based initiatives for delivering sustainable consumption itself. Here, the role of the social economy and community-based enterprises and the wider informal economy, can be seen as important loci for sustainable consumption as well as sustainable production, suggesting a happy marriage between the three bottom lines of sustainable development within this sector (Barry and Smith, 2005).<sup>9</sup>

Jackson concludes that,

It is clear from this that behaviour change initiatives are going to encounter considerable resistance unless and until it is possible to substitute for these important functions of society in some other ways. In this context, motivating sustainable consumption has to be as much about building supportive communities, promoting inclusive societies, providing meaningful work, and encouraging purposeful lives as it is about awareness raising, fiscal policy and persuasion. This is not to suggest that Government should be faint-hearted in encouraging and supporting pro-environmental behaviour. On the contrary, a robust effort is clearly needed; and the evidence reviewed in this study offers a far more creative vista for policy innovation than has hitherto been recognised. (Jackson, 2005: 133-4).

Whether or not the British state’s existing EM approach to sustainable development (with its focus on resource efficiency and greening production within a conventional economic model which seeks to promote economic growth and competitiveness within an orthodox neo-classical view of globalisation) can be integrated with a focus on sustainable consumption remains to be

seen, and the current DEFRA sustainable development strategy can be seen as indicating some tentative steps in that direction. However, I suggest that the government's approach to sustainable consumption as a whole will probably be a version of its approach to private car transport – encouraging people to buy (and manufacturers to produce) more fuel-efficient and more ecologically responsibly produced cars, while doing little to regulate their use or provide attractive public transport alternatives to reduce their over-use (Barry and Paterson, 2004).

A clear indication of the EM approach adopted in the DEFRA report is the linking of economic competitiveness, innovation and the environment, building on the Government's previous 2003 Innovation Review which identified the environment as a key driver of innovation (DEFRA, 2005: 44). This focus on innovation, resource efficiency and so-on should be welcomed and is a key part of the EM agenda in general, and the ecologically modernising state in particular (Barry, 2003).

A central aspect of the state in EM is its 'enabling', co-ordinating and supporting role, in terms of encouraging technological innovation and greater economic and ecologically efficient use of resources and energy. Through subsidies and research and development assistance for renewable energy, or investment in fuel cell technology, to forms of environmental regulation, setting emissions standards, environmental taxes and other regulatory mechanisms: "Regulation can be used to drive the process of industrial innovation with environmental and economic gains realised as a result" (Murphy and Gouldson, 2000, p. 43). Indeed, much of the 'modernisation' aspect of EM rests on the central emphasis on innovation, both technologically as well in production processes and management and distribution systems.<sup>10</sup> Smart production systems, 'doing more with less', applying novel scientific breakthroughs (for example in renewable energy, biotechnology and information and communication technology, such as nanotechnology) and developing and utilising 'clean' technologies, are all hallmarks of the modern, dynamic, forward-looking, solutions-focused character of EM. While the state 'enables' and supports innovation, it is left to the private sector to develop, test and market these new ecologically efficient innovations and production methods.

However, while the issue of consumption is not (yet) integrated within EM thinking, a related and perhaps more damning critique from a robust or radical conception of sustainable development, is that EM is explicitly viewed as contributing to rather than challenging or changing the orthodox economic policy objective of growth in the formal economy as measured by GNP/GDP. In short, EM – at most – deals with the effects rather than the underlying causes of unsustainable development.

### **From Economic Growth to Economic Security**

The critique of conventional economic growth has been a long-standing position of green thinking and more radical conceptions of sustainable development. Indeed, I would suggest that for any plausibly 'green' model of political economy to be classed as 'green', this critique of conventional, neo-classical economic growth as the main economic policy objective of any state or society is a *sine qua non*. Now while there are many debates as to understandings and measurements of 'economic growth' (does growth refer to increases in monetary value or does it refer to physical/resource measures?), a 'post-growth' economy is one that has featured

prominently within green political and economic discourse, most usually associated with the environmental benefits of a less growth orientated and programmed economic system.

A major report by the International Labour Office *Economic Security for a Better World* (ILO, 2004) found that economic security coupled with democracy and equality and not economic growth per se, were key determinants of well-being and social stability. According to this report

People in countries that provide citizens with a high level of economic security have a higher level of happiness on average, as measured by surveys of national levels of life-satisfaction and happiness...The most important determinant of national happiness is not income level – there is a positive association, *but rising income seems to have little effect as wealthy countries grow more wealthier*. Rather the key factor is the extent of income security, measured in terms of income protection and a low degree of income inequality. (ILO, 2004: emphasis added)

Such findings give empirical support to long-standing green arguments stressing the need for policies to increase well-being and quality of life, rather than conventionally measured economic growth, rising personal income levels or orthodox measures of wealth and prosperity.

In particular, the report confirms the long-standing green critique of economic growth as necessarily contributing to well-being. It states that, “there is only a weak impact of economic growth on security measured over the longer-term. In other words, rapid growth does not necessarily create better economic security, although it sometimes can do if it is accompanied by appropriate social policies” (ILO, 2004). Of particular note is that many of the policies the ILO recommends to accompany an orthodox growth objective go against the neo-liberal/Washington consensus model – premised on increasing the openness national economies to one another, integrating them into the global market and prioritising trade and Foreign Direct Investment as the main determinants of domestic economic growth. The ILO report makes the point that:

For developing countries national level of economic security is inversely related to capital account openness, implying that it would be sensible for developing countries to delay opening their capital accounts until institutional developments and social policies were in place to enable their societies to withstand external shocks. In other words, countries should postpone opening their financial markets until they have the institutional capacities to handle fluctuations in confidence and the impact of external economic developments. (ILO, 2004)

At the same time, that a democratic political system has no necessary connection with ever increasing levels of material consumption is a touchstone of green democratic arguments (Barry 1999), and indeed democratic and egalitarian principles are at the heart of sustainable development (Jacobs, 1999). More important to a democratic polity is a well developed ‘democratic culture’, a shared sense of citizenship, plurality and socio-economic and political equality. Plurality and equality are more significant than prosperity as preconditions for an ongoing and vibrant democracy. In other words, a shift away from ‘economic growth’ and orthodox understandings of ‘prosperity’ should be taken as an opportunity to redefine basic political and economic concepts. It asks us to consider the possibility that human freedom and a well organised and governed polity does not depend, in any fundamental sense, on increasing levels of material affluence. Indeed, there may be a trade-off between democracy and orthodox

economic growth and a related government policy heavily or exclusively focused on improving material well-being.

According to a study by Lauber (1978) in the late 1970s, there is evidence to show that the relatively democratic and liberal, and consequently less powerful, British state was an important determinant of the stagnation and decline of its economy since the second world war. Relying on the comparative studies of Schonfield (1965), he states that, “the governments that have been most successful in the pursuit of the new [economic] goals have been those which had few doubts about the extensive use of non-elected authority, for example, France. The more ‘timid’ governments were less successful” (Lauber, 1978: 209). Having ‘modernisation’ and the pursuit of orthodox economic growth as one’s highest goal can lead to non-democratic, illiberal forms of state action, or policies and styles of governance that at the very least are at odds with a pluralist and liberal democratic system.

It needs to be recalled that the ‘free market’ revolution ushered in by the likes of Thatcher in the United Kingdom and Regan in the US were also accompanied by a centralisation and strengthening of the state, and an redrawing of the relationship between state and civil society which privileged the former over the latter. The ‘free market and strong state’ are both still with us, increasingly integrated under economic globalisation and those governments – such as New Labour – that embrace and promote a broadly neo-liberal version of globalisation (Barry and Paterson, 2004) .

The ILO report quoted earlier provides other evidence of the dangers of economic growth policies that undermine economic (and communal) security. The report finds that

the global distribution of economic security does not correspond to the global distribution of income, and that countries in South and South-East Asia have a greater share of global economic security than their share of the world’s income...By contrast, Latin American countries provide their citizens with less economic security than could be expected from their relative income levels. Indeed, being insecure has resonance in people’s attitudes, which at times can be detrimental to their ideas of a decent society. In a recent survey taken by the Latino barometro in Latin America, 76% of the people surveyed were concerned about not having a job the following year, and a majority said that they would not mind a non-democratic government if it could solve their unemployment problems (ILO, 2004).

So, not only states, but citizens can contemplate and act in non-democratic ways in pursuit of orthodox economic modernisation and economic growth objectives. If one values democracy and its values of pluralism, freedom, equality and so on, then one has to seriously question any putative or enforced connection between its maintenance and further development and orthodox policies aimed at economic growth.<sup>11</sup> The ILO report goes on to note that “economic insecurity fosters intolerance and stress, which contribute to social illness and ultimately may lead to social violence” (ILO, 2004).<sup>12</sup>

An economy less geared towards universalising and promoting materially affluent lifestyles and consumption may be consistent with enhanced democratic practice since the decrease in complexity, social division of labour, inequality and hierarchy, allows the possibility of

greater participation by individuals in the decisions that affect their lives and that of their communities. For example, a shift away from economic growth as a central social goal would undermine the justification of socio-economic inequalities on the grounds that they are necessary 'incentives' to achieve economic growth. At the same time, as early proponents of the steady-state economy pointed out, the shift from a society geared towards economic growth, to a society where material growth is not a priority may lead to more extensive redistributive measures, a point made many years ago by forerunners of green economic thinking such as Herman Daly (Daly, 1973). This redistributive aspect to the sustainability critique of excessive material development echoes the socialist critique of the disparity between formal political equality and socio-economic inequality within capitalism. Indeed, the findings of the ILO report not only strengthen sustainability arguments concerning the non-democratic and non-well-being contribution of economic growth policies, but also the dangers of authoritarian positions.

Over 150 years ago Alexis de Tocqueville suggested that, "General prosperity is favourable to the stability of all governments, but more particularly of a democratic one, which depends upon the will of the majority, and especially upon the will of that portion of the community which is most exposed to want. When the people rule, they must be rendered happy or they will overturn the state: and misery stimulates them to those excesses to which ambition rouses kings" (de Tocqueville, 1956: 129-30).

This assumption of the positive correlation between material affluence and the stability of a democratic political order is one which is closely associated with 'modern' political traditions such as liberalism and Marxism.<sup>13</sup> In this section it is the negative corollary of this assumption, i.e. that material scarcity creates the conditions for political instability and a shift to authoritarianism that will be examined. What can be called a 'Hobbes-Malthus' position underpins the 'eco-authoritarian' school of green thought (Barry, 1999), which in the literature is most closely associated with Ophuls (1977), Hardin (1968, 1977) and Heilbroner (1980). The eco-authoritarian implication of the link between scarcity and political arrangements has been forcefully made by Ophuls. He begins from the assumption that,

The institution of government whether it takes the form of primitive taboo or parliamentary democracy...has its origins in the necessity to distribute scarce resources in an orderly fashion. It follows that assumptions about scarcity are absolutely central to any economic or political doctrine and that the relative scarcity or abundance of goods has a substantial and direct impact on the character of political, social and economic institutions (1977: 8).

Calling the affluence experienced by western societies over the last two hundred years or so 'abnormal', a material condition which has grounded individual liberty, democracy and stability (1977: 12), he concludes that with the advent of the ecological crisis, interpreted as a return to scarcity (following 'the limits to growth' thesis), 'the golden age of individualism, liberty and democracy is all but over. In many important respects we shall be obliged to return to something resembling the pre-modern closed polity' (1977: 145).

These eco-authoritarian arguments can be countered if one focuses not on economic prosperity or growth as the main connection between democracy and individual freedom and social and political stability, but on economic security. In part, what this implies is that economic growth policies to be effective in promoting the goal of economic security need to be connected to

redistributive and other policies. In particular, as well as supporting policies promoting job security (and job/skill satisfaction)<sup>14</sup>, and ones promoting income security within employment (such as minimum wage legislation), greens have also been long-standing advocates for income security outside the formal employment sphere, through a universal, rights-based provision of a basic citizen's income, and also promoting the basic claim that 'work' (socially useful, necessary but often in the non-monetised and informal economy) should not be either conflated with nor deemed to be less socially valued than formally paid employment.<sup>15</sup>

### **Conclusion: Integrating Ecological modernisation, Innovation and Economic Security?**

While viewed by itself EM is a reformist and limited strategy for achieving a more sustainable economy and society, and indeed questions could be legitimately asked as to whether the development of a recognisably 'green' political economy for sustainable development can be based on it, I nevertheless contend that there are strategic advantages in seeking to build upon and radicalise EM. While there are various reasons one can give for this, in this conclusion I will focus on two – one normative/principled the other strategic.

From a strategic point of view, it is clear that, as Dryzek and his colleagues have shown (Dryzek et al, 2003) , if green and sustainability goals, aims and objectives are to be integrated within state policy, these need to attach themselves to one of the core state imperatives – accumulation/economic growth or legitimacy (Barry, 2003a). It is clear that the discourse of EM allows (some) green objectives to be integrated/translated into a policy language and framework which complements and does not undermine the state's core imperative of pursuing orthodox economic growth. Therefore if (in the absence of a Green Party forming a government or being part of a ruling coalition, or even more unlikely of one of the main traditional parties initiating policies consistent with a radical understanding of sustainable development), the best that can be hoped for under current political conditions is the 'greening of growth and capitalism' i.e. EM.

On a more principled note, the adoption of EM as a starting point for the development of a model/theory of green political economy does carry with it the not inconsiderable benefit of removing the 'anti-growth' and 'limits to growth' legacy which has (in my view) held back the theoretical development of a positive, attractive, modern conceptualisation of green political economy and radical conceptualisations of sustainable development. Here the technological innovation, the role of regulation driving innovation and efficiency, the promise that the transition to a more sustainable economy and society does not necessarily mean completely abandoning current lifestyles and aspirations – strategically important in generating democratic support for sustainable development, and as indicated above, important if the vision of a green sustainable economy is one which promotes diversity and tolerance in lifestyles and does not demand that everyone conforms to a putative 'green' lifestyle. Equally, this approach does not completely reject the positive role/s of a regulated market within sustainable development. However, it does demand a clear shift towards making the promotion of economic security (and quality of life) central to economic policy. Only when this happens can we say we have begun the transition to implementing the *principles of sustainable development* rather than fruitlessly seeking for some 'greenprint' of an abstract and utopian vision of *the* (as opposed to *a*) 'sustainable society'.

## Endnotes

1. Indeed, critiquing consumption on moral grounds as somehow 'ethically impoverishing', is a strategic distraction from aligning a vision for a more sustainable economy and society with the aspirations of people for a better life.

2. On the relationship between 'liberalism' (and liberal democracy) and green politics and sustainability, see Eckersley (1992), Barry and Wissenburg (2001), Hailwood (2004), Wissenburg (1998), Bell (2002).

3. By distinguishing 'green' from 'environmental' and 'ecological', I am indicating that we need to place non-ecological and non-environmental considerations of social and global justice, democracy, human rights, gender equality and so on at the heart of sustainable development, rather than narrowly focusing on ecological or socio-ecological issues.

4. For a survey of ecological modernisation in non-Northern states, see Mol and Sonnenfeld (2000).

5. US President George Bush's 2006 state of the union address in which he explicitly focused on technological solutions to reducing America's addition to oil is a good example of a narrow ecological modernisation approach.

6. A graphic illustration of the unrealistic assumptions made for technological improvements as the way to 'innovate' ourselves out of unsustainability is given by Jacobs with his 'sustainability equation' (1996: 27) . The relationship between environmental impact and human activity can be expressed as follows:

I = Environmental Impact

P = Population,

C = Consumption per person

T = Environmental Impact per unit of consumption (measure of how efficiently the economy is using environmental resources and producing wastes).

$I = P \times C \times T$

To decrease I, either P has to fall, C has to fall or T has to fall (implying an increase in environmental efficiency). T is therefore a measure of 'environmental efficiency of production'.

Thus, to decrease I by 50% over the next 50 years while the world economy grows by 2-3% per annum (implying a four-fold increase in consumption and a doubling of world population), T would have to be one-sixteenth its present level by 2050. *That is, technologies and living patterns would have to be 91% more environmentally efficient than they are now.* To think that such levels of technologically-induced efficiency is possible is wishful thinking, but this is precisely the way in which sustainable development is viewed by central government, since it does not question growth in consumption, energy use, air travel, car and road building etc. Hence the UK's government's commitment to building a new generation of nuclear power stations fits perfectly into a ecological modernisation view of sustainable development in that, from the government's point of view:

- it requires technological innovation – the new generation of nuclear power stations will be better than previous models;
- it will create new markets and (hopefully) can be left to the private sector
- it does not require policies to manage energy demand, but is a supply-side policy response
- it does not fundamentally challenge the orthodox economic growth model underpinning government policies.

7. The 'environmental Kuznets curve' (EKC) approach is the principal site where an attempt is made to demonstrate (rather than assert) the potential to combine environmental improvements with economic growth (Ekins, 2000; Cole, 1999). The basic assumption of the EKC analysis is that continued economic

growth passes a point beyond which environmental degradation begins to decrease (Ekins, 2000, pp. 182-3).

8. By 'neo-liberalism' I mean the ideology which promotes the deregulation of markets, the rolling back of the state, and the progressive dismantling or 'hollowing out' of the welfare state, the opening of domestic markets to the world economy and the creation of the 'competition state' (Sklair, 2001). By corporatism, I mean institutionalised regimes and procedures within a society whereby the elites and representatives of the state/government of the day, dominant market interests and actors and organised labour together 'corporately' set the framework of public policy.

9. Indeed, the role of the social economy within any realistic but radical conception of green political economy is something that needs to be recognised and deserves more space than I can give it here. For further analysis of the potential role of the social economy and social enterprises as a central aspect of a sustainable economy see Korten (1995), Mayo and Moore (2001) as well the work of the New Economics Foundation.

10. 'Innovation is central to ecological modernisation of production because it is through innovation and change that environmental concerns can begin to be integrated into production' (Murphy, 2001, p. 9).

11. At this point the 'liberal/post-liberal' character of the model of green political economy outlined here needs to be again stressed, particularly in the way that, as I have argued elsewhere (Barry, 2001), this green, post-liberal model of green political economy requires a separation of a) liberalism from capitalism and b) the separation of democracy from currently liberal democratic forms.

12. A full analysis here would involve examination of the ways in which the privatising of the commons and the undermining of welfare state provided public services and goods, fosters economic security as a necessary not a contingent aspect of 'modernisation' and 'restructuring' (such as Structural Adjustment Programmes). A provocative account of the link between the erosion of public welfare provision and socio-economic insecurity and inequality as well as ecological unsustainability is the work of McMurtry (1996). According to him, "the inner logic of the global market system is not to solve debt crisis, but to keep governments indebted on a permanent and rising basis, while continuing to selectively feed on and dismantle social sectors" (1996: 78). He goes on to point out that, "Everywhere market 'restructurings' and 'adjustments' have escalated social inequalities, consistently increased real unemployment rates and part-time jobs without benefits, eliminated or reduced minimum wages, and reduced the lifelines of funding to every public form of social security, learning, health-care, culture, and transportation which societies have achieved over half a century or more of social development" (McMurtry, 1996: 148).

13. Classical liberals such as Tocqueville assumed a relationship between an affluent economy and political democracy. One aspect of Tocqueville's thought turns on the idea that "a flourishing economy is essential to the stability of democracy, since it gives defeated politicians an alternative, which makes them more likely to accept defeat rather than attempt to illegally to hold on to office" (Copp et al, 1995: 3). Classical Marxism, on the other hand, assumed a connection between 'emancipation' and material abundance. The roots of the different understandings of the connection between the two may lie in the inter-relationship between the logics and legacies of the Industrial and French Revolutions, understood as expressing the core values of modernity, one relating to economic abundance and the other to political democracy.

14. Another of the ILO report's findings was that one of the seven forms of work-related security, skills security was "inversely related to well-being when jobs are poorly attuned to the needs and aspirations of people, especially as they become more educated and acquire more skills and competencies. At present, too many people are finding that their skills and qualifications do not correspond to the jobs they have to perform, resulting in a 'status frustration' effect" (ILO, 2004). One of the clear implications of this is that the mantra that job creation per se is all that matters is one that does not necessarily support economic security and the promotion of well-being. From a purely economic and orthodox position promoting economic growth, employment creation is completely indifferent to the quality or the types of jobs that are being created. On this orthodox economic view, short-term, low-paid, low-skilled jobs ('McJobs' or jobs in call-

centres for example) are to be judged as the same as skilled, highly-paid jobs with high levels of job satisfaction and job security.

15. In this way it is clear that the model of green political economy outlined here necessarily goes beyond the conventional understanding of the 'economy' and moves in the direction of an expansive view of the economy which includes the unpaid gendered caring work of women and others, and non-market contributors to human well-being and quality of life. Here the work of ecofeminist political economy is significant (Shiva, 1988, Mellor, 1997; Barry, 1998).

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# Economics Is Structured Like a Language

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## Introduction

The title of this paper is a rip-off of Lacan's pronouncement that 'the unconscious is structured like a language' (Lacan, 1981). It is meant to carry two meanings. First, it is an ontological statement. It asserts that a 'study (or a theory) of being or existence, a concern with the nature and structure of the "stuff" of reality' (Lawson, 2003) that employs insights from the study of language can provide insights into those human activities labelled 'economic'. This paper discusses the implications of a linguistically-inspired conception of economic phenomena and contrasts this ontology to those of Lawson (2003) and Ruccio (2005).

The title is also a nod to McCloskey's work on how economists do economics. She emphasised that, as much as economists are interested in incontrovertible facts and solid logic, they are also constantly using models/metaphors to tell compelling stories about economic behaviour. Economists are story-telling creatures and they use all the tools of language and rhetoric to tell their stories. This paper, for example, relies on the metaphor that economic activity is in some way similar to language. It also, for better or worse, appeals to the authority of dead white men, such as Lacan, Saussure, and Freud, another rhetorical device. Mostly, though, it attempts to tell a compelling story in hopes of persuading the reader.

## Two ontologies: Lawson and Ruccio

Lawson's *Reorienting Economics* (2003) is to be commended because of the discussions it has stirred up regarding the philosophical underpinnings of economic research. It has been extensively reviewed and discussed in this journal, so the discussion here is brief. Lawson suggests that mainstream economics is unhealthy because it relies on mathematical-deductive explanations of economic phenomena. These are closed-system explanations, in which the same initial conditions lead (with some probability, including 1.0) to the same results. He conceives of social reality, including economic phenomena, as an open system, as processual or emergent, and as depending on 'transformative human agency' (p. 16). Thus, an economics based on critical realism is more appropriate.

Lawson is advocating that economists be explicit about the ontologies motivating their research. He is also advocating his preferred ontology, critical realism, which appears to be as follows. Social reality is layered and structured. Regularities that are observable at the surface of social reality may be used to identify principles that are operative at some deeper level. Social reality is also open, because 'events are determined by a multitude of shifting causes' (p. 42). According to critical realism, economists can observe surface human actions or human doings. Taking into account the social rules and positions that structure society, it is then possible to reveal or locate similarities or patterns or regularities.

There are significant issues with Lawson's ideas that economists can (a) all agree on some set of specific regularities as important and typical of economies, and (b) use transcendental analysis to move from these observed phenomena to explanations of their underlying causes. The discussions of Hodgson (2004), Caldwell (2004), and Vromen (2004) are particularly insightful about the weaknesses in Lawson's ideas, and their arguments need not be repeated here.

What is at issue here is the specific ontology that Lawson advocates. As Vromen (2004) asks, 'What grounds does Lawson have for believing that his ontology provides some sort of impeccable neutral ground...?' (p. 18). This point is emphasised by the alternative ontologies that Ruccio (2005) discusses – Marxism, postmodernism, and their synthesis – which provide well-developed and solidly grounded theories of the nature of reality generally and economics specifically. It is the postmodernist ontology that this paper would like to address, recognising that Marx's writings have a complex status for postmodern theory. Marx's analysis of alienation and exploitation are important to postmodern theory, which nevertheless tends to reject the metanarrative of dialectical materialism (Tweeten & Zulauf, 1999).

Ruccio (2005) explains that postmodern theory views social reality as constructed through discourses. This means first that economists from different schools rely on 'different concepts and conceptual strategies' (p. 44). However, there is no external measure against which to compare the different discursively produced conceptions of economic reality, and thus no standard to use to validate (or, in a more Popperian vein, invalidate) any particular discourse. This is the classic problem that Derrida pronounced: '*il n'y a pas de hors-texte*', everything is text (Tweeten & Zulauf, 1999). Even social interactions can be viewed and read as texts (Hirschman & Holbrook, 1992). The second implication of the discursive construction of social reality is that discourse is performative: 'the economy ... will be affected by which discourses are present' (Ruccio, 2005). What gets to be discussed and how it is discussed affect the social 'reality' that is being analysed, a sort of socio-economic Heisenberg uncertainty principle.

As a result, postmodern ontology is very different from Lawson's. Most importantly, it asserts that there is no 'depth' to social reality, no influence of lower-level metaprinciples on higher-level actualities or surface. Instead, there is only surface: 'Nothing behind, nothing underneath; no levels of ontological priority or causation' (Ruccio, 2005). This ontology is that of Foucault and Deleuze and Guattari. It is a 'flat' vision of 'the nature and structure ... of reality'. Each phenomenon is the product of forces acting on each other, and each meaning is created by a play amongst different discourses (Massumi, 1992). These forces are constantly acting and interacting, so that social reality is constantly making and remaking itself. Importantly, people are free to choose their own identities, e.g., as consumers (Hirschman & Holbrook, 1992), by combining the forces that act on them (and on which they act) in new ways (Massumi, 1992). Social reality is open, as Lawson maintains, but for a different reason. It is not that multiple principles operative at a deeper level than the surface of economic phenomena are at work, making regularities sometimes difficult to perceive. Instead, the interplay of forces is happening right at the surface, in the different discourses that are constructing the social reality.

These are the ontological perspectives that Lawson and Ruccio have provided, which have hopefully been faithfully re-presented. An ontology based on the insights of linguistics is

somewhat different. The next section describes a linguistic economics, and explores the challenge that it makes to a key concept from Lawson and Ruccio: openness.

### **A different ontology: linguistic economics**

The study of language, linguistics, is in part concerned with semiology, the study of signs and signification. In language, words are signs or *signifiers* that point to, represent, or stand for *signifieds*. The relationship is arbitrary, in that any signifier could be used for a certain signified. In addition, the signifiers have no positive content, but their meaning is based on the differences between signifiers (Saussure, 1916 [2004]). Meaning is therefore determined by a chain of signifiers, because these relative differences between signifiers can be altered by the presence of other signifiers (Copjec, 1994; de Saussure, 1916 [2004]).

Saussurian linguistics underpin the postmodern ontology of Ruccio, in which meaning is created by the interplay of the differences of the signifiers or the interplay of the discourses present in a specific moment. However, Saussurian linguistics also inform Lacanian ideas, which have led to a certain strand of cultural theory. It is this strand that this paper picks up. To understand this different ontology, the notion of openness is examined below.

Openness is a key concept for Lawson. He perceives that social reality is open and proposes that critical realism is faithful to this openness, while mainstream economics uses closed mathematical-deductive techniques. Two things should be noted. First, it is not at all clear that critical realism can be both analytical and open: all analysis requires some closure conditions (Hodgson, 2004). Secondly, the extent to which mainstream economists have a closed ontology (as opposed to closed analyses) is debatable (Vromen, 2004). Those caveats aside, openness is key for Lawson. He explains it as follows:

We can make best sense of such variability [such as differences in prices for different consumers] by recognising that there is not a cessation of the underlying causal structures and mechanisms where a pattern does not strictly hold, but that countervailing mechanisms are also typically in play affecting the actual outcomes. This is consistent ... with the social world in general being *open* (events are determined by a multitude of shifting causes). (p. 42)

By contrast, he maintains that, '[f]or the deductivist, analysis requires that underlying powers, etc. are always reflected fully in predictable behaviour, i.e. are actualised, and in ways where events could not have turned out otherwise' (p. 26).

The postmodern view of openness is slightly different. Postmodernists 'emphasize the randomness of causation and effectivity of chance, the indeterminacy of events' (Ruccio, 2005). For Deleuze and Guattari, this openness is the result of the potential present in each present moment, in which multiple forces come to bear but amongst which individual have some choice: 'Becoming must keep on becoming, in an indefinite movement of invention opening wider and wider zones of autonomy populated by more and more singularities' (Massumi, 1992).

There is a problem with both of these formulations of openness. They reflect *complexity*: multiple forces acting either on the surface of society or surging up from its depths; they are still *deterministic*. These forces, many though they be, determine the present phenomena. They are thus in fact *closed*, although complex. The methodological solution for social scientist is to develop better models that account for all the variables and forces, not to respect some notion of openness. This was the problem that Heinlein grappled with in *The Moon is a Harsh Mistress*: if a computer could gather up more information and make more calculations of potential futures than mere humans could, it could plot a lunar rebellion much more effectively and be better prepared for contingencies. Predicting a complex system of forces requires more information, but it is in theory no different from predicting a simple system. *Savoir pour prévoir, prévoir pour pouvoir*.

The root of this problem is that Lawson and the postmodernists are looking at the past: they theorise that prior forces/operative principles cause the present and push it into the future. The insight of linguistics is that the present is not determined until the future has already happened. Meaning depends on a chain of signifiers, each of which is capable of modifying the meaning of a *previous* signifier. The present is open not because (or not only because) so many different pasts can lead to it, but also because the unknown future can change the meaning of the present. Saussure was aware of this problem, and attempted to resolve it by fixing meaning at the moment of understanding, when 'the open-ended diachrony of the system was bracketed and a synchronic closure was supposed to be operative' (Copjec, 1994). The problem is two-fold: first, that subsequent events can alter that synchronic closure, and second, we as users of language are aware of this possibility.

Two examples from economics may clarify the issue. The first example is from Caldwell (2004), who described the problem that econometricians have in extrapolating policy recommendations from their empirical modelling results. 'How is [an economist] to make believable inferences from such a literature, when results may have already been, or in the future be, challenged and even conceivably overturned?' (Goldfarb, quoted in Caldwell, 2004, p. 23). That is, current understanding or meaning of economics is contingent on future results, just as current meaning of signifiers is contingent on the future chain of signifiers. The second example is from Robinson (1962), who explained that Pigou reconciled Marshall's notions of capital with those of Walras and Jevons by modelling the end state when accumulation had ceased. At that time, capital has a demand price and a supply price. But, Robinson notes, the point when accumulation has ended does not help very much in understanding the present. Thus, to make sense of capital, Pigou had to imagine a time when the chain of signifiers had ended, when the last signifier slid into place and fixed the meaning, the price, of all the priors.

Economics is structured like a language. Every day, people use language to communicate even though the meaning of their utterances cannot be fixed until the end of time. We manage in spite of this linguistic indeterminacy. It is the same in economic behaviour: the value of the products one buys or the goods one produces is contingent. The product might not perform as advertised, it could break, it could be superseded tomorrow by something that works better and costs less. The goods produced might not command a high enough price to cover the cost of production, or demand could exceed projections and profits would be less than they could have been. Certainly, economic tools have been developed to deal with these uncertainties, such as demand management (Galbraith, 1967) and insurance. However, economics is fundamentally open because the future is unknown; it could surprise us (Earl, 1983).

The next section presents a less theoretical and more 'grounded' discussion of linguistic economics. Its motivation is Lawson's comment that he is often asked to apply his theory, that he is often asked to provide a critical realist account of some phenomena (Lawson, 1999, cited in Davidsen, 2005). The example is consumer reactions to genetically modified food, an analysis of which could benefit from reference to a linguistic model of economic activity.

### **The value of genetically modified food**

Genetically modified food is a contentious topic on several levels. First, there is a scientific debate over what the potential impacts of GM crops and GM food could be on the environment (Benbrook, 2001; CEC, 2000; Firbank et al., 2003; Gianessi, Silvers, Sankula, & Carpenter, 2002). GM food is also politically contentious, raising issues such as control of the food supply, consumers' rights to be informed and to choose, and liability regimes (Caswell, 1998; Thompson, 1997; Wright, 2000; Wynne, 2003).

Finally, GM food is contentious within the economics discipline: the push to describe consumer reactions contends with the push to prescribe what those reactions ought to be. The tension between *is* and *ought* is clear in the literature on consumer willingness to pay for GM food. Throughout this literature, there are respondents who refuse to accept GM food at the prices offered (e.g., Burton & Pearse, 2002; James & Burton, 2003; McCluskey, Ouchi, Grimsrud, & Wahl, 2001). Yet, because consumers ought to accept GM food (because scientists say that it is safe and several governments say that it is substantially equivalent to non-GM food (Huffman, 2003; Tegene, Huffman, Rousu, & Shogren, 2003)), the reactions of such consumers are set aside. They are excluded as irrational, not for economic analysis, outside the bounds of economics and under the purview of some other discipline (Earl, 1986).

GM food is also problematic from an economic perspective because reactions are unpredictable. Socio-economics categories that economists use for describing people tend to be ineffective for describing willingness to pay for GM food. Income, education, age are all inconclusive. Gender has consistently been used, but some suggest that it may not be important (Kaye-Blake, Bicknell, & Saunders, 2005; Rigby & Burton, 2003). The result is that economics is largely impotent at predicting the willingness to pay of different consumers, and cannot claim much more than that consumers are different because they are different.

A linguistic economics is also not baffled by the fact that people react differently. Meaning is contingent; this is what linguistics demonstrates. What a person says now has meaning based on what has been said in the past AND what will be said in the future. But members of a linguistic (economic) community must communicate (exchange) before the future fixes the meaning (value) of the utterances (transactions). Two different reactions to GM food can be seen as two different ways to cope with the contingent nature of the value of GM food.

One way to cope with this uncertainty is to act as though the important aspects of the commodity are already known. This is the nature of the argument that GM food is substantially equivalent to non-GM food. Consumers know what food is and what it does because of their life-long association with food. Substantial equivalence suggests that consumers can accept that GM

food is just like non-GM food in all the ways that matter. GM food is no differently contingent than non-GM food and no special precautions or activities need to be undertaken. It is thus not surprising that individuals with greater trust in institutions have greater acceptance of GM food (Grice & Lawrence, 2003; Shoemaker et al., 2001; Verdurme & Viaene, 2002). They believe that governments and corporation 'know': *savoir pour pouvoir, pouvoir pour prévoir*. Because these institutions can know and predict, the future is not uncertain and the present is therefore not contingent.

The second way to cope with this uncertainty is to act as though meanings and values in the present are radically contingent on an uncertain future. Thus, present actions should be robustly appropriate under a range of different futures. This is the nature of the arguments that GM technology requires a *precautionary principle*: future impacts will not be known until the future arrives, so people should choose present actions with desirable outcomes under a range of different possible futures. These consumers believe that past events have been surprises – BSE was caused by a mechanism that scientists said could not happen – and that present decisions need to be made with an eye for the potential for surprises (echoes of Shackle here).

GM food thus provides an example of how a linguistically-informed economics can better understand economic behaviour. Faced with the uncertainty caused by the contingent nature of present transactions, people may choose to discount the potential uncertainties or to focus on the potential for unforeseen consequences. Importantly, neither response is demonstrably 'right' or rational, in that the value of GM food cannot be known until the future has already happened.

## **Conclusion**

Lawson's critique stresses that the mathematical/deductive ontology that mainstream economists use is incorrect for their subject matter, the economy. He suggests the ontology of critical realism as a better approach. Ruccio, in turn, provides a postmodern ontology as a different alternative. A central idea for these ontologies is that of openness. Both Lawson's openness, based on underlying operative principles, and postmodern openness, based on multiple forces interplaying on the social surface, are argued here to be not so much open but complex. The present is viewed as the culmination of knowable principles or past forces. The present is therefore a product of the past and thus closed.

Making Lawson's ontological turn into a sort of philosophical roundabout, this paper offers another ontological exit. It suggests that it may be useful to understand economics linguistically. Linguistics demonstrates that meaning is produced by differences between signifiers. Until the chain of signifiers ends, the differences and therefore the meanings are not fixed. The present is thus open not because of the past but because of the future. It is the same with economics: the value of what consumers buy or producers create or traders exchange is not fixed in the present. Certainly, the moment of exchange establishes a price, but the value of goods and services in terms of utility or satisfaction or future profit streams is unknown until the future happens.

The discussion on the 'appropriate' ontology for economics, sparked in this forum by Lawson's writings, is welcome. This paper presents and, yes, advocates a specific ontology, one

informed by linguistic ideas of Saussure by way of Lacan and Copjec. It is not intended to be read as a rejection of others' ontologies, however; it is an offering of a different perspective in the hope of widening the discussion. It is also meant to be contingent, a thinking that never finishes realising itself. Only when someone has had the final word can the meaning of this paper be fixed.

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## Errata

In my paper “Some Primitive Robust Tests of Some Primitive Generalizations” in issue 35 of this journal some serious errors have occurred. Table 2 should be replaced by the following Table

TABLE 2

2.1		2.2
INFLATION Annual % changes of CPI		UNEMPLOYMENT Annual rates in %
Switzerland		Switzerland
Germany		Austria
Austria		Norway
Netherlands		Sweden
Belgium		Portugal
France		Germany
Denmark		Netherlands
Norway		Denmark
(3.1% - 5.6%)		(2.0% - 6.3%)
Finland		Greece
Sweden		United Kingdom
United Kingdom		Finland
Ireland		France
Italy		Belgium
Spain		Italy
Portugal		Ireland
Greece		Spain
(5.9% - 12.9%)		(6.7% - 13.5%)

Finally in Table 6: “GNP GROWTH” should read “GDP GROWTH”

Kurt Rothschild

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<http://www.paecon.net/PAEReview/issue36/Rothschild36.htm>

## **Comment on "Some Primitive Robust Tests of Some Primitive Generalizations"**

I am writing to comment favorably on "Some Primitive Robust Tests of Some Primitive Generalizations" (Kurt Rothschild, *post-autistic economics review*, issue no. 35, 5 December 2005, article 1, pp. 2-10, <http://www.paecon.net/PAERReview/issue35/Rothschild35.htm>)

Rothschild argues that not one of the central points of the neo-liberal paradigm {viz. (1) Low inflation promotes economic growth (2) Low inflation promotes low unemployment (3) Low government expenditure (slim states) promotes GDP growth (4) Low Trade Union Density (TUD) is favourable for GDP growth (5) Low TUD promotes low unemployment (6) Low corporatism favours high GDP growth } is supported by the last 35 years of Western European experience.

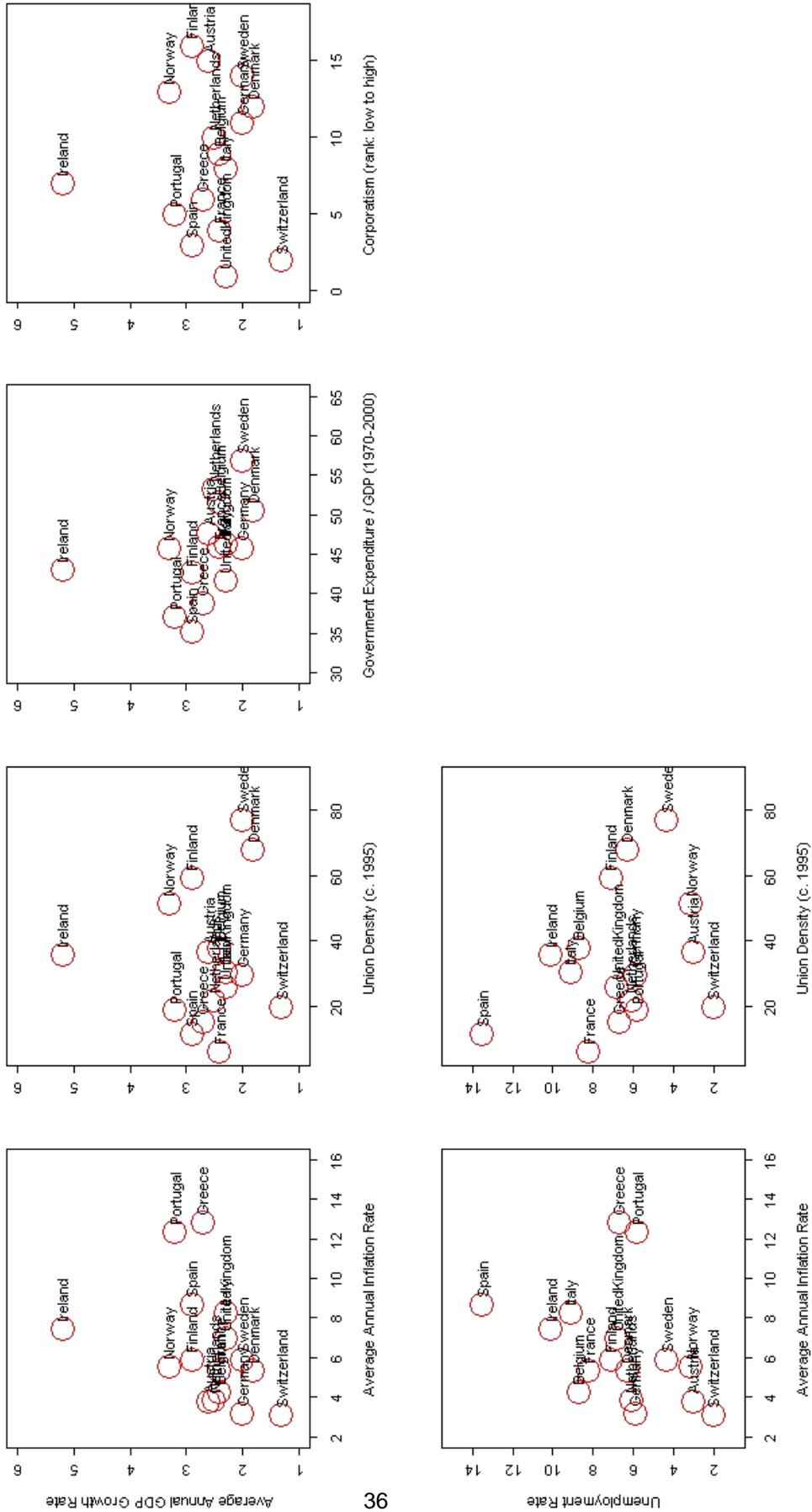
Rothschild examines the EU15 less Luxembourg and adds Switzerland and Norway. For each neoliberal claim, which pairs a "good behavior" with a good outcome, Rothschild compares the list of countries in the top half and bottom half in each part of each pair. He finds little correspondence between the lists.

I am writing with an alternative exploratory data analysis that largely confirms Rothschild's results and may have some advantages with respect to elegant and parsimonious display of the data and the ability to identify outliers and special cases.

The attached graphic, a matrix of scatterplots of the data in Rothschild's Country Table, addresses all six neoliberal claims. In five of the six cases, the scatterplots provide no support or outright contradiction of the neoliberal claims. GDP growth versus inflation and unemployment versus union density provide particularly noteworthy counterevidence against the neoliberal claims.

In one case, claim (3), government expenditure appears to have a slight negative correlation with GDP growth. However, the graphs also illustrate and support Rothschild's observation about the catch-up countries, Greece, Ireland, Portugal and Spain. In the case of claim (3), if the catch-up countries are excluded, the relationship between government expenditure and GDP growth becomes tenuous indeed. I, for one, would not cashier my welfare state on the dubious promise of 0.3 percentage points of GDP growth from converting Sweden into the U.K.

The Very Limited to Negative Benefits of Neoliberalism  
16 Western European Countries, 1970-2005



Furthermore, graphical analysis flags the exceptional Irish case as a clear outlier in the GDP growth; the exceptionalism is most likely a mixture of catch-up from a particularly disadvantaged position and the effectiveness of a developmental state (see, for example, O Riain 2000). In any case, the simple graphical approach makes the exceptionalism obvious.

In conclusion, the scatterplot matrix provides confirming evidence for Rothschild's findings, and the method is more accessible than the comparison of top halves with bottom halves in the original paper.

Sincerely,  
Michael Ash  
University of Massachusetts Amherst

### Notes

1. The data for the plots come directly from the Country Table in Rothschild's paper, <http://www.paecon.net/PAERReview/issue35/Rothschild35.htm>)
2. The plots were produced with the R statistical language and application, a free/libre open-source application available from <http://www.r-project.org>
3. The short script used to produce the plots is available from Michael Ash, [mash@econs.umass.edu](mailto:mash@econs.umass.edu)

### Reference

O Riain, Sean (2000) The flexible developmental state: globalization, information technology and the "Celtic Tiger". *Politics and Society* 28(2):157-193.

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## **Web-linked index of post-autistic economics review articles in 2005**

### **Issue no. 30, 21 March 2005**

*Forum on Economic Reform (Part I)*

[Development and Social Goals: Balancing Aid and Development to Prevent 'Welfare Colonialism'](#)

Erik S. Reinert

[Game Theory: a Refinement or an Alternative to Neo-classical Economics?](#) –

Matthew McCartney

*Symposium on Reorienting Economics (Part III)*

[Towards a Framework for Pluralism in Economics](#)

Jeroen Van Bouwel

[Finding a Critical Pragmatism in Reorienting Economics](#)

Bruce R. McFarling

### **Issue no. 31, 16 May**

*Forum on Economic Reform (Part II)*

[The Malaria Gap](#)

Jeffrey Sachs, Pia Malaney and Andrew Spielman

[Greed \(Part I\)](#)

Julian Edney

[Teaching Heterodox Microeconomics](#)

Frederic S. Lee

*Symposium on Reorienting Economics (Part IV)*

[Reorienting Economics Through Triangulation of Methods](#)

Paul Downward and Andrew Mearman

[Comment on McCartney](#)

Peter Dorman

### **Issue no. 32, 5 July 2005**

*Forum on Economic Reform (Part III)*

[The Reform of Intellectual Property](#)

Dean Baker

[Greed \(Part II\)](#)

Julian Edney

*Replies to Edney*

[Tackling greed while recognizing ecological limits](#)

Tom Green

[Adam Smith – the Father of Post-Autistic Economics?](#)

Andrew Sayer

*Two Movements*

[The Rand Portcullis and PAE](#)

Edward Fullbrook

[Perestroika in American Political Science](#)

Kurt Jacobsen

### **Issue no. 33, 14 September**

*Forum on Economic Reform (Part IV)*

[Can the World Bank Be Fixed?](#)

David Ellerman

[The Rise and Demise of the New Public Management](#)

Wolfgang Drechsler

[People's Choices Affect One Another: Power Laws, Weblogs, and Inequality](#)

Clay Shirky

*Symposium on Reorienting Economics (Part V)*

[Critical Realism in Economics – a different view](#)

Bjørn-Ivar Davidsen

### **Issue no. 34, 30 October 2005**

*Three papers on pluralism:*

[Whither Heterodoxy?](#)

Robert F. Garnett, Jr.

[Pluralist Integration in the Economic and Social Sciences:](#)

[The Economy of Conventions](#)

François Eymard-Duvernay, Olivier Favereau, André Orléan, Robert Salais, Laurent Thévenot

[Can There Be An Economics Based on Religion?](#)

[The Case of Islamic Economics](#)

Mohamed Aslam Haneef

### **Issue no. 35, 5 December 2005**

*Forum on Economic Reform (Part V)*

[Some Primitive Robust Tests of Some Primitive Generalizations](#)

Kurt Rothschild

[Economic Reform For Whom? Beyond The Washington Consensus](#)

Jomo K. S.

[Sen, McCloskey, and the Future of Heterodox Economics](#)

Robert F. Garnett, Jr.

[Criticizing Dow and Chick's Dualism:  
The case of the duals "rational – irrational" in the stock market](#)  
Gustavo Marqués

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