

**The Poverty of Environmental Economics:  
Towards a New Research Agenda**

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**Abstract**

The world is in the middle of a massive global financial crisis. However, the main policy science – economics – has failed to predict or adequately explain the crisis. Nonetheless, no real questioning of the fundamentals of economics has occurred.

This paper uses the Foucauldian concepts of discourse, power and discipline to both examine this lack of reflection, and to move towards an alternative Green political economy. The paper outlines an archaeology of economics to reveal the hidden ruptures within economics, and to detail how attempts to reconcile these schisms have rendered economic concepts nonsensical. Consequently it is unable to adequately consider issues of environment or poverty.

The paper then sketches possible components of an alternative political economy based on the concept of allocation. The paper shows how understanding the legal basis of economic transactions can help a model of a political economy based on market control and other traditional Green notions of de-centralization, the eradication of wasteful production and sustainability, and provides suggestions for transformative action.

## **The Poverty of Environmental Economics: Towards a New Research Agenda**

Jon Mulberg<sup>1</sup>

The future is by no means secure. We have not yet seen whether the rest of the capitalist world could weather a serious recession in the United States; we cannot foresee how the trading nations in general and this country in particular will muddle themselves out of the international monetary system they have muddled themselves into. But there is good reason to hope that nothing quite so stupid as the great slump will be allowed to occur.

Joan Robinson, *Economics: An Awkward Corner*, 1966

It is easy to see why the conventional wisdom resists [...] change. It is a far, far better thing to have a firm anchor in nonsense than to put out on the troubled sea of thought

J K Galbraith, *The Affluent Society*, 1958

### **I: INTRODUCTION – THE POLITICS OF ECONOMIC TRUTH**

At the time of writing, the west is living through the curse of ‘interesting’ times. We have witnessed an unprecedented global financial crisis, which has bankrupted firms and cost the jobs of millions of workers worldwide. We also have seen the spectacle of major financial institutions falling over like dominos on a global scale. At one point U.S. President George Bush – hardly a liberal – had committed more money to the US banking system than any other president had ever placed in its economy. The total amount spent on the financial bailout worldwide was astronomical.

It might be imagined that an economic catastrophe of this scale would trigger some reflection upon the adequacy of an economic science that suffered a collective failure to offer any cohesive account of the crisis. Markets did not clear, adjust or reach equilibrium, but rather brought down entire economies. This might, it would be thought, lead to questioning of the legitimacy of orthodox economic explanation. However, no such questioning has occurred, either within Western party politics or within the discipline itself. While there have been calls for the improvement of macro-economic modelling to enable predictions to be better, there is little consideration that the entire discipline itself might contain fundamental faults.<sup>2</sup>

This issue will form the subject-matter of this paper. The paper will outline an alternative research agenda – a political economy of allocation – that it is hoped will synthesise a wide range of heterodox research into a cohesive critique and alternative to the current orthodoxy.

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<sup>1</sup> I do need to thank Gill Leighton (my wife), who insisted I read Foucault (and discussed much of the theory with me), thereby changing the entire direction of the project. I would also like to thank Shirley Dobson, who typed up the manuscript at an amazing speed. This paper has benefitted from discussions in the Cambridge Ontology Group and the 2012 AHE/IPPE conference, and I owe thanks to the participants.

<sup>2</sup> This question has been a constant topic within the Cambridge Ontology Group. For an alternative view to that of this paper see Lawson (2012)

This will be rooted in a methodological critique of orthodox economics, an economics that has not only failed to identify the current crisis, but has also been criticised from many quarters for failing to deal adequately with issues such as environmental degradation and global poverty.

However, a major part of this critique will be the activity of the discipline of economics itself. We will see that far from being a neutral, problem-solving science, the discipline is actually part of a power practice that is itself a main determinant of the issues it purports to be studying. The paper will employ Foucauldian concepts, such as power, discipline and discourse to show that, far from being unreasonable or obdurate, the lack of reflection by economists is a constituent part of disciplinary practice. The discipline is unable to change because, the paper will suggest, it is itself a major player in the political economy, legitimising the main political decisions and shaping the behaviour of economic actors.

The reader should not expect a thorough discussion of the ideas of Foucault in this short paper<sup>3</sup>, which are anyway seldom clearly articulated and often contentious. Rather, the emphasis will be on drawing parallels between the concepts used by Foucault and the approaches of heterodox political economists, and to show these can be channelled into a counter-discourse.

We will therefore begin with the question of why, after a spectacular repudiation of the main principles of orthodox economics, no self-reflection is taking place. For followers of Foucault this would come as no surprise, since the issue of what questions would be raised within the discipline was precisely Foucault's point of departure [Foucault 1972, see also Kologlugil 2010.p. 2]. He claims that, regardless of whether the practitioners of a discipline see themselves simply as earnest seekers after truth, it is not this endeavour which confers the privileged status of 'science' to a discipline [Kologlugil 2010 p. 3]. Rather, the acceptance of a discipline as 'true' is the result of discursive rules that determine what is accepted as falsity or truth, what will constitute the objects of analysis and what we say and think about these objects of analysis at a given time. That is, there are no universal criteria for obtaining 'true' or 'scientific' knowledge, and in this sense no (or possibly a critical) epistemology, in that the issue is to understand how a particular discourse obtains the status of a 'science', how the discipline comprises what is to count as truth, rather than how scientific practice should be conducted [Kologlugil 2010 p.6]. The Foucauldian use of the term 'discourse' should therefore not be confused with notions concerning communication or language. While these elements may form a part of discursive practices, these practices have a far wider compass. They define objects of study and the rules of engagement, as it were; they define as to what is to count as evidence and what questions can be asked in the investigation the discipline undertakes. That is, the focus is upon ontology. All claims to truths are, for Foucault, historically situated [Kologlugil 2010 p.9; Amariglio 1988 p. 587], the discursive rules are 'policed' by a variety of institutional practices. Indeed, the discourse is so pervasive that eventually it is self-policed.

The Foucauldian concept of discourse is therefore tightly bound up with power [see for example Foucault 1976]. Foucault distinguishes between power, governance and domination. The latter is what is usually called power, an 'asymmetrical relationship of power in which the subordinated persons have little room for manoeuvre' [Foucault 1998 cited Lemke 2000 p. 5]. However, these are not the primary power source. The discourse is the primary source of power, in that it replaces coercion with processes, which construct or modify the self [Foucault 1988, cited Lemke 2000 p.6].

The discourse is therefore the root of power in modern society, in that it is ubiquitous and structures thought and action. Power is, however, not totally controlled, and may even be

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<sup>3</sup> For a discussion of Foucauldian views on political economy, see Amariglio [1988].

emancipatory or beneficial. Foucault is suspicious of claims of ‘emancipation from power’, since power will always exist. We will return to this issue later.

Foucault’s analysis is therefore an expressly political ontology; indeed he describes it as a ‘politics of truth’. What is to count as truth, and what we believe and act upon, will be contested in the social arena. We can think of two meanings of the word ‘discipline’. On the one hand it is used to refer to a body of ‘knowledge’, on the other to refer to control, obedience and order. The discourse concerns the relations between bodies of knowledge and forms of social control and possibilities. The politics of truth will determine the belief-systems we employ as guides to action, and in turn create a social order, that is ‘the operation of power in society and social control... is an integral element of claims to knowledge and of the historical production of truth’ [Kologlugil 2010 p. 10].

For Foucault, power is a network that continually flows along a multitude of paths [Foucault 1976]. To investigate power, it is often necessary to look for ‘resistance’ to that power. This is often at the periphery, rather than the centre of power [Foucault 1976], and it can take a multitude of forms [Foucault 1979]. The development of a counter-discourse does not therefore follow a particular trajectory, but rather emerges from the specificity of the dominant discourse. In this sense (unlike, to an extent, Marx), one can treat Foucault more as a pathfinder than as an alternative emancipatory political theorist. It is for resistant movements themselves to find their own politics to promote their own truth; they must produce a ‘genealogy’.

They may, however, usefully seek help from the past. The discursive rules of a discipline change over time. Foucault therefore suggests that an ‘archaeology’ of the history of ideas will uncover the hidden schisms within the discourse, and lay bare the historical specificity of the claims to truth [Kologlugil 2010 p. 7], which Foucault often refers to as an *episteme*. This is similar to Kuhn’s conception of paradigmatic shifts, but is somewhat more about the unconscious rules of discourse, in that the issue is not about explicit claims to have ‘solved’ previously un-solved issues. There is no claim to progression here. The notion is rather to bring out the political underpinnings of a claim to truth for open scrutiny.

This approach does have links to post-modern approaches to economics and the commentaries on the textual natures of economic arguments<sup>4</sup>. While Foucault is not expressly post-modern, there are overlaps with the modernist critique of economics. The modernist economics discourse – which Foucault dates back to Ricardo – is based upon the faith in the universal scope of human reason, and the particularity of the individual [Screpanti, 2000 p. 87]. Screpanti outlines four main threads of modernist economics:

1. *A humanist ontology of the social being* “the conviction that economics is a social science dealing with a being called a ‘rational agent’ that is an active subject of social action”
2. *A substantialist theory of value* “a theory accounting for value as an expression of the economic subject”
3. *An equilibrium approach to the social structure*. “an economy is the result of the activity of many subjects, and its structure reflects social actions and relations ... The concept of a rational social equilibrium implies that human action is able to produce social order.”
4. *A metanarrative of humankind*—“a theory of history and politics accounting for the ability of the human subject to mold the world according to a positive and universal goal conceived as the product of reason”

[Screpanti 2000 pp. 88/89]

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<sup>4</sup> See e.g. McCloskey [1985].

So interaction among social agents brings about equilibrium, and also the motion of the economy is conceived as being caused by the actions of these agents. The modernist approach is therefore concerned with three dichotomies – centering/ de-centering, order/ disorder and certainty/ uncertainty [op cit. p. 89].

We will begin by examining how Foucault deals with the first two of these dichotomies. He claimed that ‘a profound historicity penetrates into the heart of things [...] and imposes upon them the forms of order implied by the continuity of time’ [Foucault 1994b in Kologlugil 2010 p. 14]. For Foucault, economics was essentially linked with issues of governance and order. Modernist economics also placed humans – the body – at the centre of its investigations. Foucault discusses two strands of this focus upon the human body as the locus of economics in general and economic value in particular. What has come to be known within the history of economics as the classical period – broadly from Smith<sup>5</sup> to Mill – centred upon the labouring body as the source of economic value, whereas the marginalist (or non-classical) school located value in the desiring body. In this sense there is no discontinuity between the schools (although we shall see later the move creates a considerable rupture within the modernist economic programme).

Later on he considered American neo-liberalism and the replacement of labouring human with desiring human. Nonetheless, the human body has replaced nature as the locus of economical value, be it psychological desire or physical labour. We will return to these questions shortly.

The employment of the Foucaudian conception of social order therefore takes both our consideration of the discipline of economics, and our consideration of feasible alternatives, in a new direction. The discipline itself can be seen as part of a social order, which not only confers legitimacy on political decisions concerning economic well-being, in the guise of scientific ‘truth’, but also shapes economic behaviour by altering our consciousness, our wants and our beliefs about ourselves and about others.

It is therefore not surprising that the discipline of economics is not prepared to engage in a reconsideration of its foundations, or that the main political parties are not proposing alternatives to the orthodox solutions. They only know their ‘truth’, and are unable to seek after other ‘truths’ outside of their discourse.<sup>6</sup>

It is precisely the search for alternatives that this paper will consider below. The next section will look at one particular example of resistance to orthodoxy – the Green movement – and see how some of the concepts in this discourse overlap with those of Foucault. This will be followed by a brief recap of the archaeology of economics I considered some years ago, which will inform the final section, which is a new proposal for a political economy of allocation.

## **II: RESISTANCE TO ECONOMIC ‘TRUTHS’: THE GREEN MOVEMENT**

In order to begin this task, we might start by looking at where resistance to power has occurred. Two such areas of resistance immediately come to mind, the feminist movement and the Green movement. While the two discourses are linked, the focus in this brief paper will be the latter of these<sup>7</sup>. We will see how the emergent counter-discourse shares similar concerns with those raised by Foucault. In particular, we will see how parts of the Green

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<sup>5</sup> Although Foucault claims that economics started with Ricardo.

<sup>6</sup> For a description of institutional discipline strategies used to block dissemination of heterodox Green economics see Spash [2011].

<sup>7</sup> In addition, there is already an extensive literature on feminism and Foucault.

movement have either challenged or rejected the orthodox economic discourse, and have also challenged the centrality of the human body as the source of economic value.

We can readily identify a split in the approaches to the economic issues concerning the environment. Recently effort has been expended on adapting orthodox economic analysis to accommodate environmental concerns [Spash 2011 p.341 ff], and we will have more to say about this in the following sections. However, a large part of the Green movement has rejected many, if not all, of the tenets of dominant economic discourse, and calls for a ‘new economics’ are common.<sup>8</sup>

Amariglio [1988] outlines four principles that he believes a Foucaudian economics would be based upon:

1. Economics would need to displace the human body from the centre of the discipline. Economics would cease to be a purely human science. This would involve de-centring economic value theory and the rejection of motives and behaviour as inner economic principles.
2. There would be a rejection of the centrality of ‘scientific’ analysis, a denial of the distinction between subject and object, and a rejection of rationalism and imperialism.
3. There would be a replacement of the history of ideas with Foucaudian-style archaeology of discourse. In economics, this would involve an analysis of discontinuities and ‘ruptures’, rather than the accumulation of knowledge and continuity of objects of investigation.
4. There would be an acceptance of the role of power and politics within the new economics. There would be no fact/ value or positive/ normative split, and there would be a recognition of systems of exclusion in the discourse, and of the exercise of power.

[Amariglio 1988 pp. 609-12]

The first of these principles has been a live debate within the Green movement for many years, with much ink spilled on the debate between anthropocentrism – science based exclusively on human values – and non-anthropocentrism, which rejects the notion that nature only has value in so far as it serves human interest.<sup>9</sup> Non-anthropocentric approaches often advocate both radical social change, incorporate ethical issues, and are suspicious of movements of sustainable development.<sup>10</sup> There is also a long tradition of critiquing the notion of economic science by placing it within the discourses of physical science, where it clearly does not stand scrutiny.<sup>11</sup> This might be seen as an example of broadening the concepts of a discipline beyond their limits, thereby exposing their limitations. [Foucault 1977 cited Özveren 2007]. However, such a strategy can easily violate the second of Amariglio’s principles, and it is notable how some of the more populist approaches fail to derive a clear strategy beyond a fairly simple reformism.<sup>12</sup>

Green thought has also acknowledged the existence of power within economic activity and the de-centering of power (e.g. “think globally and act locally”) has been one of the clarion

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<sup>8</sup> See for example Söderbaum [2011]. Mearman [2007] and Kronenberg [2010] suggest employing the heterodox school of Post-Keynsianism.

<sup>9</sup> [McShane 2007 p. 170, cited Seghezzi 2009 p. 541]

<sup>10</sup> [Ibid]

<sup>11</sup> The classic text is Georgescu-Roegen [1971]

<sup>12</sup> Contemporary well-known examples are Al Gore [qv Gore 2006] and even HRH The Prince of Wales [2009]. It was particularly interesting to hear the latter describing the limitations of closed-system science as “testing to destruction”.

calls since its inception. There have also been constant calls for the inclusion of values within the new economics [Myrdal 1929, Söderbaum 2011].

*An Archaeology of Economics*<sup>13</sup>

Following Foucault, we should begin an analysis of the present by employing an archaeology of the past. We will briefly sketch the outline of such an archaeology here. It will involve a deconstruction of economics, involving

not so much criticizing and bringing to light its internal contradictions and analytical inconsistencies as tearing out its hidden and forbidden assumptions with the intention of dismantling its metaphysical bases .... This is done by showing they are not so objective and universally true as they pretend.

[Rosenau 1992 p.67, cited Screpanti 2000 p.88]

While we could follow Foucault in his view that anthropocentric economics forms a continuous discourse from Ricardo onwards,<sup>14</sup> it is important to bring out the ruptures within the discipline. In fact, the notion of a positive economic science, which is the main justification for the discipline, as never sat too easily within economics. Economics has always had dual objectives, aiming for both neutrality and claiming to inform policy. However, following the Foucaudian schema, an economics of ‘the body’ would necessitate a methodological individualism. As pointed out in Mulberg [1995] this leaves economics to try and hold three simultaneous propositions.

1. That economic knowledge is only known to individuals.
2. That this knowledge can be aggregated.
3. From this we can arrive at the best overall outcome.

The trajectory of the discipline was driven by the problem that the objective measures of human economic proposed by both the classical economists (Smith, Ricardo *et al*) and the early marginalist and neo-classics, invariably force them to drop proposition one, as Marx showed for the labour value theory of classics, and as the market socialist and the post Keynesians showed for the neo-classical school. As Joan Robinson pointed out, the Marshallian use of utility

points to egalitarian principles, justifies trade unions, progressive taxation, and the welfare state, if not more radical means to interfere with an economic system that allows so much of the good juice of utility to evaporate out of commodities by distributing them unequally.

But on the other hand the whole point of utility was to justify *laissez faire*.

[Robinson 1962 p. 53]

It was this issue that drove the development of the marginalist school. There were two ways in which later developments were affected. Firstly, the issue of growth was pulled firmly into the economic mix, since growth would avoid the issues of (re)distribution which the objective measure of utility raised. It is worth noting in this regard how the idea of what economic

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<sup>13</sup> This section draws heavily from [Mulberg 1995].

<sup>14</sup> Tellman notes Foucault’s reluctance to engage in political economy, but the creation of a counter-discourse will involve such an undertaking [Tellman 2009 p.8].

science was and the role it was to play differed throughout the development of the discourse. Indeed Marshall was dismissive of ‘pure economics’, he viewed it as a waste of time.<sup>15</sup> Economics was to be applied, and this application had a definite (Victorian) moral component. However, Marshall put these in asides, and they are for the most part ignored by contemporary authors. Marshall would probably have viewed them as vital though – the moral and ethical component of economics was the point of the mathematical ‘shorthand’ economists employed. Growth theory was needed in order to assert that re-distribution was not ‘economical’; long-run growth of production would over-compensate for distributional inequalities, provided extreme poverty was emoliated [Mulberg 1995 chap.2]. The issue of re-distribution also led to a constant weakening of the concept of utility. It began with a denial of the concept the inter-personal comparison of utility – one person’s ‘unit’ of utility was not the same as another’s. This made the notion somewhat pointless though; utility was designed for interpersonal comparison. [Myrdal 1953 p. 90]. Later, it led to the employment of ordinal utility, and to behavioural approaches. However, these approaches to value then ran into vast aggregation problems (point 3 above). There are numerous studies which ‘embarrassed’ economics, including the theory of second best, and the impossibility theory of Professor Arrow [Mulberg 1995 chap. 2; Screpanti 2000 p.94]. These arise, as Sen points out, the because of the paucity of information now allowed into economic reasoning. Sen suggests that it is the ‘informational restrictions’ of welfare economics that cause the impossibility of transitivity. Sen argues that this ‘can be seen as resulting from combining a version of welfarism ruling out the use of non-utility information with making the utility information remarkably poor (particularly in ruling out interpersonal utility functions)’ [Sen 1979 p. 539]

However, in spite of the fact that these analyses have the potential to be fatal to the economic discourse, none of these authors can bring themselves to suggest the abandonment of the discipline.

One of the main problems in the logic, and one of the major ruptures within the discipline, was the employment of Robbins’ definition of economics. While this has now become ubiquitous it was not the same as that of Marshall, and it is important to stress Robbins and Marshall were not attempting to investigate the same things<sup>16</sup>. Marshall believed he was investigating ‘the material requisites of well-being’, which was “is on the one side a study of wealth; and on the other, and more important side, a part of the study of man (sic).” [Marshall 1920 p. 1]. This was, furthermore, a real human not as abstraction, or *homo oeconomicus*, we deal ‘with man as he is: not with an abstract or “economic” man; but a man of flesh and blood’ [Marshall 1920 pp. 26-7]. This is because for Marshall, acting within markets moulds people into economic characters [Mitchell 1969 p. 158, cited Mulberg 1995 p.52]

However, the Marshallian approach is unable to exclude political issues. His approach does not hold to our proposition (1) above – that economic data was known only to individuals. If economic data was objective, it would be known to central planners, as well as entrepreneurs – there would be not need for entrepreneurs in fact. Similar observations apply equally to other marginalist formulations, such as the shortage / surplus market adjustment procedure of Menger.<sup>17</sup> Such market socialist models were developed during the 1920’s and 1930’s. As Taylor pointed out (to the American Economic Association, it should be noted) if disequilibrium prices had an objective, shortage / surplus feedback mechanism, it was far from clear why a centrally-run market economy could not directly adjust market prices.

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<sup>15</sup> Coase [1975 p. 29].

<sup>16</sup> Robbins says this on page one of his *Essay* [Robbins 1935].

<sup>17</sup> This was the straightforward notion that price adjusts until markets clear. An above equilibrium price will result in a surplus, a below-equilibrium price in a shortage.



It was this that gradually led to a distinctive neo-Austrian school of thought. It is important to note though, that this school totally rejected the neo-classical approach. They adopted Lionel Robbins 'choice' definition of economics, first published in 1932:

But when time and the means for achieving ends are limited *and* capable of alternative application, *and* the ends are capable of being distinguished in order of importance, then behavior necessarily assumes the form of choice.

[Robbins 1935 p.14]

Foucault correctly associated Robbins definition of economics with what he called 'neo-liberalism', that breaks entirely from the notions of positivist science, which has been the dominant rationalisation of the discourse of economics [Lemke 2000 p.6]. Robbins is clear on the origins and direction of his definition. He locates it within the 'scientific' framework of Weber and employs the Weberian concepts of ideal types and *verstehen* to justify his approach. He is quite clear that 'valuation is a subjective process, we cannot observe valuation'. [Robbins, 1935 p. 87 original emphasis]. Rather, he claims that 'we do in fact understand terms such as choice, indifference, preference and the like in terms of inner experience' - Ibid, original emphasis]. His is clearly not a positive science. Citing Weber, Robbins claims that 'It is really not possible to understand the concepts of choice, of the relationship of means and ends, the central concepts of our science, in terms of observation of external data.' [op.cit pp. 89-90]. Furthermore, rational homo oeconomicus is simply an ideal type:

If this were commonly known, if it were generally realised that Economic Man is only an expository device – a first approximation used very cautiously at one stage in the development of arguments which, in their full development, neither employ any such assumption nor demand it in any way for a justification of their procedure – it is improbable that he would be such a universal bogey.

[op.cit. p.97].

However, this is not the way in which the ideal type was used, either by Robbins (who *defined* the discipline in terms of an ideal type), or by later economists. It was not employed as an expository device. It was misemployed by the orthodoxy as explanation of *observable* economic activity, leading to a positive economic science, a science which claims to be about 'what is', rather than 'what ought to be', and teaches this to school children.<sup>18</sup> A corollary of this is that economic variables are objective and measurable, which leads us directly to the market socialist models we discussed earlier.

The neo-Austrian approach was to break with the orthodoxy. They also employed the ideal type of Robbins, directly as a fully realisable type human, but they made no claim to positive science. Whereas, Marshall claimed that

whereas Ricardo & co. maintain that value is determined by cost of production, & Jevons & (in a measure) the Austrians that it is determined by utility, each was right in what he affirmed but wrong in what he denied.'

[Dasgupta 1985 p. 104].

the neo-Austrians' joined demand and cost together. Their notion of opportunity cost – of cost as opportunities foregone – was central to the new direction. Buchanan was clear on this:

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<sup>18</sup> See for example Richard Lipsey *An Introduction to Positive Economics*. I confess to not having read all the editions, but Söderbaum [2011] references similar titles.

There are specific implications to be drawn from this choice-bound definition of opportunity cost:

1. Cost must be borne exclusively by the person who makes decisions; it is not possible for this cost to be shifted to or imposed on others.
2. Cost is subjective; it exists only in the mind of the decision-maker or chooser.
3. Cost is based on anticipations; it is necessarily a forward-looking or *ex ante* concept.
4. Cost can never be realized because of the fact that choice is made; the alternative which is rejected can never itself be enjoyed.
5. Cost cannot be measured by someone other than the chooser since there is no way that subjective mental experience can be directly observed.
6. Cost can be dated at the moment of final decision or choice.

[Buchanan 1973 pp.14-15].

This conception of cost takes economics away from observation and measurement. Costs cannot be seen and cannot be measured:

In any general theory of choice cost must be reckoned in a utility rather than in a commodity dimension. From this it follows that the opportunity cost involved in choice cannot be observed and objectified and, more importantly, it cannot be measured in such a way as to allow comparisons over wholly different choice settings.

[Ibid].

This conception also permeates throughout neo-Austrian theory, to concepts such as profit and indeed areas such as anti-trust legislation.<sup>19</sup>

The Robbins definition therefore takes economics on an entirely different path, towards an interpretive and expressly *political* direction, something Hayek was quite clear about. He denounced what he called ‘scientism’, the use of physical science methods in social science [Mulberg 1995 p.95].

Furthermore, as Foucault points out, this definition actually leaves economics without a subject [Foucault 1979]. He also claims it is far from being a description of “what is”, but actually ‘It is also a sort of utopian focus which is always being revived’. Moreover, he sees American neo-liberalism as

a whole way of being and thinking. It is a type of relation between the governors and the governed much more than a technique of governors with regard to the governed.

[Foucault 1979 p. 218]

That is, the constant claims to separate out the political are contradictory, in that the State is very much a part of the economic calculus. [ibid.] In fact, the idea is to extend

economic analysis into a previously unexplored domain, and second, on the basis of this, the possibility of giving a strictly economic interpretation of a whole domain previously thought to be non-economic.

[Foucault op. cit p. 219].

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<sup>19</sup> Since excess profits are held to result in new entrants into any cartel.

In fact the Robbins definition has many corollaries. The first one which Foucault discusses is the displacement of analysis of production processes with an analysis of ‘internal rationality, the strategic programming of individual activity’ [Foucault op. cit p. 223]. This ‘de-generalisation of the non-economic form of the market’ involves an explanation of all forms of social activity [op. cit. p.243]. That is, there is no difference between a firm and a family. All political and governmental activity is subject to the scrutiny of individual choice [op.cit. p. 243].

What was originally proposed by Robbins as an ideal type is now being employed as a universal axiom of governance by the neo-liberals, and as the basis for a mathematical policy science by the orthodox. However, the attempt within the economic discourse to separate nature from the human body and de-centre it then poses huge problems concerning environment. Bringing nature back into the centre of economics is going to prove difficult, if not impossible.

The response invariably involves the commodification of environmental resources [Jacobs 1994 p.68]. In fact, the rupture in the discipline of economics has actually led to two distinct strands of policy. Jacobs outlines a property-rights strand (which seems more neo-Austrian) and an orthodox (‘neo-classical’) strand, which he suggests relies on state intervention, either in the form of taxation (first suggested by Pigou) or by estimating the ‘value’ of proposals (such as building projects) by elaborate surveys, or calculations based on other existing markets. [ibid].<sup>20</sup>

The neo-Austrian analysis is that the issue is precisely that environment resources ought to be traded. They therefore propose a variety of cap-and-trade schemes, in order to attempt a commodification of these resources. Many of the international agreements, such as that generated in Kyoto, are of this character.<sup>21</sup>

Jacobs point out that the commodification of environmental resources is usually justified by reference to environmental protection, that unless these resources are priced, they will be overused [e.g. Pearce 1996]. Actually both the strands, neo-classical and neo-Austrian, could be criticised for not taking environment seriously, in spite of their professed regard for environmental protection. In particular, both strands presume a considerable environmental surplus that is capable of being priced and traded (a point made by Galbraith). Indeed, *commodities which have no surplus are explicitly excluded from the choice definition of economics*. Robbins is quite clear on this point.

Nor is the mere limitation of means *by itself* sufficient to give rise to economic phenomena. If means of satisfaction have no alternative use, then they may be scarce, but they cannot be economised.

[Robbins 1935 p.13 original emphasis]

While this issue may not have been of paramount concern in 1932, it certainly is a major concern in the 21<sup>st</sup> century. Aside from well-known issues around global warming, and carbon emissions, we also have the possibility of fuel shortage (‘peak oil’), fish depletion, acid rain, and a range of other pollution and depletion problems (even, on a global scale, food and clean water). The range of economic activity affected by this is such as to virtually take all production and consumption out of the sphere of economics.

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<sup>20</sup> A literature search would also reveal a number of descriptions of possible or probable governmental negotiations employing game theory.

<sup>21</sup> Many of these schemes are still justified by a misunderstanding of the work of Coase. The so-called ‘Coase theorem’ was simply a *reductio ad absurdum* to illustrate how daft economics is unless we consider transaction costs [Coase 1988 p. 14].

A common response to this is to reach for some variation of ‘technology-fix’, that efficient markets will provide sufficient incentives for new, clean production technologies to be developed<sup>22</sup> Little of this has occurred in the last half-century, and the decision of whether to wait for these technologies, and the risks and uncertainties this wait involves, seems to be firmly outside the discourse of economics.

The employment of Pigouvian-style ‘green’ taxation also does not take environment particularly seriously. If it did, the level of taxation would probably be so high as to trigger severe shortages and disruption to every day life for most of the world’s population, and this would in turn, would trigger a need for unprecedented environmental intervention and vast re-distribution policies, which would themselves alter the nature of world governance. Recall that the reason growth of production was central to the economic discourse was to ensure questions of distribution were pushed to the periphery. When environmental issues are brought to the centre, questions of distribution will also be central. If we were to be serious about environmental taxation, the discourse of economics would soon burst its river banks.<sup>23</sup>

There are other bizarre effects of the employment of the Robbins’ definition of economics, particularly if it is employed in a neo-classical manner. One of the collieries of the neo-Austrian concepts of opportunity cost was not only are they not measureable (and consequently, macro-economic measures are also invalid), but we also lose any real measure of efficiency, since costs are defined in terms of wants forgone. Maximum efficiency, for the neo-Austrians, is simply the end product of economic activity, hence there is no need to measure it. This results in the usual measures of the efficiency of economic policies being contradictory; both environmental damage caused by production and environmental cleanup add to GDP. New, cleaner technology that also saves money would actually lower GDP<sup>24</sup>.

The inadequacy of GDP was noted by Hirsch in his seminal *Social Limits to Growth* [Hirsch 1977]. He uses the concept of intermediate goods to break down the orthodox national accounting mechanisms. Intermediate goods are goods or services consumed as a means to satisfy wants for other goods or service. Few goods, Hirsch claims, are consumed as means in themselves. I therefore consume petrol to obtain food from the supermarket. However, the end is the consumption of food, not the travel<sup>25</sup>. Hirsch refers to these as *defensive expenditures*. These defensive expenditures are hidden by the means-end schema, since costs are defined in terms of benefits. However, under such conditions aggregate measures, such as GDP will no longer function adequately. Economics no longer ‘adds up’ [Hirsch 1977].<sup>26</sup>

There is another strand to the inadequacy of the end-means dichotomy. Writers such as Veblen and Galbraith have long been critical of the manipulation of wants by those of economic power. Galbraith famously compared modern economies as being like a squirrel on a wheel, running fast but going nowhere [Galbraith 1958 p. 152]. He pointed to the vast expenditure on advertising and promotion as evidence of the triviality of modern production.<sup>27</sup> Veblen employed the notion of ‘conspicuous consumption’, that many goods

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<sup>22</sup> For a sociological variation on technology-fix, see the literature on ecological modernisation, e.g. [Mol and Spaargaren 2000]. For a critique see Barry [1999] and Benton [1994].

<sup>23</sup> I still recall the present British Prime minister, when in opposition, explaining how he would finance the country by green taxation. This cannot be done for any length of time; you cannot obtain revenue from an activity you have stopped.

<sup>24</sup> The UK Office of National Statistics, for example, reported that the good April weather in 2011 reduced the use of heating fuel, and therefore lowered GDP. [ONS 2011]

<sup>25</sup> This seems to be an extension of the orthodox economics concept of factor markets.

<sup>26</sup> For a fuller application of Hirsch’s ideas to the critique of market-led political systems see Carvalho and Rodrigues [2006].

<sup>27</sup> For Hayek’s reply to Galbraith see Hayek [1961].

were consumed only for the purpose of relative status, and as such most production was actually wasteful [Veblen 1899].

The element of this that Hirsch takes up is how this relates to the end-means formulation. For Hirsch the essential element is that the goods are positional; their value is defined by a relativity to other consumers. They are not valued 'in themselves'. This makes them *socially scarce*, by definition these positional goods cannot be supplied to everyone.

There is another strand to social scarcity though; goods which affect *distribution*, and also, as Benton has pointed out (Benton 1994) goods which have a *physical scarcity*, are also socially scarce. These cannot be supplied to everyone, and must therefore be allocated [Hirsch 1977].

To deal with the latter first. Hirsch's point was that the employment markets, or services such as education, are examples of defensive expenditures, in that they are often a cost as much as a benefit, and are positional, in that their value depends on the exclusivity of consumption. Indeed, it was the attempt of neo-liberalism to bring such areas into the realm of the economic, that Foucault claimed as one of the defining points as neo-liberalism; he outlines the neo-liberal approach to human capital and education [Foucault 1979 pp.215 ff]. But, as Hirsch points out, the means-end distinction breaks up under the conditions of social scarcity which occur when education becomes a positional good. Cost can no longer be measured in terms of benefit. The socially scarce goods cannot adequately be dealt with by market forces. The discourse is contradictory, and the logic a failure.

### III: THE POLITICAL ECONOMY OF ALLOCATION

The ruptures within the discourse of economics have therefore been opened up. The attempts, both to present a unified economic science and to centralise that science on 'the body', have rendered it unable to cope with the realities of environmental degradation, and generated a nascent counter-discourse from the Green movement.

Before moving on to consider the possible components of such a counter-discourse, a few points need to be made about the project. Firstly, it is obviously not the case that environmental resources cannot be allocated by a price mechanism, indeed Hirsch refers to this as 'auction'. The point is that it is now far from clear that such an auction is optimum. Price, in the new political economy of allocation, would not be jettisoned, but would become one of four mechanisms of allocation. Following the strictures of Foucault, the political economy of allocation does not promise 'emancipation from power', and attempts to remove markets have not proven viable in the past.<sup>28</sup> Neither does it promote an Edward Goldsmith-style "return to nature" [Goldsmith *et al* 1973 ]. Power can be emancipatory also.

Neither is allocative political economy to be a replacement modernist science. That would be to jump out of the frying pan into the fire. In this respect, the attempts to provide new 'improved' economic indexes, which remove defensive expenditures or measure 'happiness', and so on, might be viewed as misguided.<sup>29</sup> Rather, the eventual aim of the project is to generally outline the direction that a Green political economy might take, in order to give practitioners something of a start in winning over hearts and minds.

A good starting point might be Brian Fay's outline of the components of radical social science:

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<sup>28</sup> qv Hodgson [1984]. For a brief survey see Mulberg [1995].

<sup>29</sup> Some of the work of my good friends in the New Economics Foundation might be viewed in this light. The UK Office of National Statistics is attempting to compile a "well-being" index at the time of writing.

**I: A theory of false consciousness** which<sup>30</sup>

1. Demonstrates the ways in which the self-understandings of a group of people are false or incoherent
2. Explains how these came about and are maintained
3. Contrasts them with a superior self-understanding

**II: A theory of crisis** which

4. Spells out what a social crisis is
5. Indicates how a particular society is in such a crisis (involving examination of felt dissatisfactions, showing they threaten social cohesion and that these cannot at present be alleviated)
6. Provides an historical account of the crisis' development (in terms of false consciousness and societal structure)

**III: A theory of education** which

7. Offers an account of the necessary and sufficient conditions for self-enlightenment
8. Shows that these conditions are occurring

**IV: A theory of transformative action** which

9. Identifies which aspects of society require change to resolve crisis and dissatisfactions
10. Details a plan of action, including change agents and a general idea of how change will be accomplished

(Adapted from Fay [1987] pp.31-32)

The Green movement certainly has a theory of crisis, and ironically can even mobilise much 'scientific' discourse to its aid. As Yearley points out, environmentalists have long had an ambiguous relationship with positive science, on the one hand distrusting the scientific establishment, and on the other using the outcomes of positive science to inform and justify their claims. We can now see that this ambiguity occurs simply as the result of the politics of truth. The notion of science, and the politicisation of scientific discourse, is (for a change) being played out in the public arena. The ambiguity of the Green movement regarding positive science is understandable in this light – not all power is bad. The further claim of the Green movement, which was outlined above, is that the crisis is one of poor consumption that it is caused by a power network, which wastes environmental resources in an unjust manner that adds little to most people's quality of life.

In addition, this paper began by pointing to a financial crisis, which affects the livelihoods of even the richest of nations. At the time of writing therefore, the sense of crisis is twofold and ubiquitous.

This last element also forms part of the theory of false consciousness, which Fay mentions (and which provides some of the links within his ten point plan that he suggests a fully critical social science will require). The faith in the governing institutions, which formed such

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<sup>30</sup> It has been suggested in other conferences that this postulate may be contradictory with the Foucauldian analysis; indeed Foucault rejects the concept of 'ideology'. Comments on this would be welcome.

a part of the modern discourse, has been shattered. The notion that governments, the financial institutions and the economists which are employed to justify their decisions, can actually predict and control the events surrounding our livelihoods has been shown to be palpably false. The belief that the governing institutions know what they are doing has been irreparably damaged. It would also be hoped that the sort of archaeology of knowledge, and the contradictions of economics presented here and elsewhere will contribute to this.

In addition, we have outlined the Green movement's long held idea of the production of waste, deriving from Veblen, Galbraith and other authors, what Hirsch refers to as the 'paradox of affluence'.

This also links to the 'Theory of Education' in Fay's schema presented above. The Green movement has long advocated that an awareness of the issues of poor consumption will *of itself* change the behaviour of the population. Certainly the absence of a huge power structure instilling trivial wants that are forever changing, or inducing a desire for positional, conspicuous consumption, would itself go some way towards radical change.

There are also signs of a sea-change in world views. While the central focus of the modernist discourse is upon 'the body', the body of neo-liberalist theory is atomistic and isolated. By attempting to remove ethical issues from the discourse, the notion of social and ethical human has been lost. We have witnessed a revival of ethics in recent times, and most large inter-governmental meetings now witness huge protests. This suggests a transformative role for a political economy which does not claim to be value-free. It also suggests a role for the sort of discourse of danger – of both lives and livelihoods – which the Green movement have been attempting to develop.

The Green movement has also outlined some of the concepts for transformative action, which Fay suggests is required for a critical social science. These also fit with the Foucaudian scheme. He calls for a focus on the resistance at the periphery, not in the centre of the discourse. The Green movement has long been advocating devolution of power in this manner, and basing new power institutions at a local level. Many of the legal frameworks already exist for this, but an institutional overhaul would be needed to make them fit for their new, expanded purpose.

The archaeology of economics within this paper aims to give some guidance as to what this counter-discourse might include. It aims to replace an economics based on choice with a political economy based on allocation. However, it is not a 'grand theory', nor a blueprint for a new Green society, or any such 'authored' theory. The aim here is simply to give some guidance to those resisting the dominant discourse.

As stated, the Green movement has long called for a localised politics. However, this paper has shown a need for an economics of allocation also - market systems are inadequate for this. An allocation, of course, requires an allocator, and this requires a political institution for its organisation.

There are four methods of allocation that this author can think of:

1. Allocation by dictat.
2. Allocation by ration.
3. Allocation by right or need.
4. Allocation by auction/ price.

The first of these is precisely what is likely to happen if environmental resource allocation is not dealt with by one of the other methods. The legitimacy and ethnicity of rationing vis-à-vis rights claims is a political issue, beyond the scope of this paper, but to which the contributions of political theory may be relevant.

What has altered since the post-war era is that the *locus* of economic questions is, and remains, within government. The previously hidden governmentality aspects of the economic discourse have become visible, and the expectations now that security of lives and livelihoods will be dealt with by the polity, and one of the drivers behind recent political events is precisely the inability of Governments' working within the orthodox economic discourse to deliver this security. There are two corollaries of this that would appear relevant.

Firstly, a new political economy allocation would focus upon security, rather than wealth. Security is not an objective concept, but rather a subjective or even political concept, to be decided by political discourse. But once this decision does emerge, measurements of security could presumably replace measures of economic activity, which are no longer of particular interest.

Secondly, to provide this security it seems that the polity must obtain control of the economy. One of the issues arising from the debate over property rights is that markets actually have a legal basis.<sup>31</sup> From this, I would suggest that a counter-discourse need not shy away from the employment of market mechanisms for non socially-scarce resources; markets can to an extent be adapted to meet requirements. However, control of such a market system does appear *prima facie* to entail the economy being the same size as the polity. That is, it would entail a level of protectionism. This would almost certainly include protection of financial markets, indeed it is hard to conceive of political control without financial control. This does not entail an absence of trade, but simply that the trading organisations are controlled in some manner. It seems apparent that if markets are to come under political control, this will involve political control of access to the markets within the jurisdiction of the polity.

It does also seem evident that inter-governmental agreements and institutions need to be developed on an unprecedented scale. Clearly, global issues cannot be solely dealt with at a local or even a national level. In addition, any re-distribution between polities, or (as Gough pointed out) any legalistic oversight of individual polities, would require an institution larger than those affected<sup>32</sup>. What this paper and other analysis has shown however, is that once we break open the economic discourse, we can see both how to take control of the economy, and that such control is vital to the security of lives and livelihoods.

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This paper has suggested that the discipline of economics is best viewed in terms of Foucaudian discourse, which explains why there has been no proper questioning of the inadequacy of the discipline to forestall the current financial crisis. It also explains why the discipline has been unable to countenance many of the fundamental questions arising from issues such as global poverty or environmental degradation. It is part of a discourse that determines not only the objects of investigation, but also what questions may be asked within that investigation, what is to count as evidence and indeed what questions are even thought of. In this sense, the discipline itself is a constituent part of a power network that helps determine the very events it claims to be investigating.

By contradistinction, one of the main elements of the discourse has been the denial of this power basis. Economics classes in schools claim to be teaching positive, value-free economics. In order to investigate the power of the discipline, Foucault suggests an

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<sup>31</sup> For a fuller discussion see Mulberg [1995].

<sup>32</sup> Ian Gough presented this argument in a meeting of the now moribund ESRC Political Economy study group. He suggested this meant a need for the State [qv. Doyal and Gough 1991 pp.88-89]



‘archaeology’ of the discipline, to uncover the ‘ruptures’ within the discipline’s development. When we do so, we discover the discipline is far from unified, but is both split and contradictory, and is unable to avoid political considerations. The objective, value free economic science models would function better with governmental intervention and control, whereas the subjective models of the neo-Austrian school yields an overtly political economy, but one where no objective measures are possible. When the discipline attempts to employ objective measurements of these subjective concepts, the results are nonsensical.

Also inadequate are the attempts to bring nature back to the centre of the discourse. The objectivist ‘neo-classical’ wing views the issue as one of ‘externalities’ and proposes various interventionist measures, such as taxation and quasi-judicial decision aids, aiming to provide objective prices for non-traded resources. The subjectivist approach is to actually create new markets in environmental resources. Both these approaches trivialise the problem of scarcity of environmental resources. Indeed these resources, that are absolutely scarce, have been defined out of the discipline, and required an alternative approach for analysis. However, Foucault warns against attempting to create an alternative ‘grand theory’, or another modernist discourse. Instead, the paper draws upon ideas developed within the Green movement to show how a non-anthropocentric, de-centred and expressly political economics might be developed, based on the necessity of allocation of physically, and therefore socially, scarce resources. Such a political economy would be localised, would be a locus for, and would measure, security of life and livelihood, and would protect internal markets.

<p style="text-align: center;"><b>Fay [1987] pp.31-32</b></p>	<p style="text-align: center;"><b>Green Political Economy</b></p>
<p><b>I: A theory of false consciousness</b> which</p> <ol style="list-style-type: none"> <li>1. Demonstrates the ways in which the self-understandings of a group of people are false or incoherent</li> <li>2. Explains how these came about and are maintained</li> <li>3. Contrasts them with a superior self-understanding</li> </ol>	<ol style="list-style-type: none"> <li>1. Production of waste. Belief in Economics</li> <li>2. Waste demanded due to advertising and to cultural power. Part of scientisation of politics</li> <li>3. Historical consumption patterns superior “Economics of enough”</li> </ol>
<p><b>II: A theory of crisis</b> which</p> <ol style="list-style-type: none"> <li>4. Spells out what a social crisis is</li> <li>5. Indicates how a particular society is in such a crisis (involving examination of felt dissatisfactions, showing they threaten social cohesion and that these cannot at present be alleviated)</li> <li>6. Provides an historical account of the crisis’ development (in terms of false consciousness and societal structure)</li> </ol>	<ol style="list-style-type: none"> <li>4. Environmental crisis.</li> <li>5. Unavoidable by orthodox economic reformism</li> <li>6. This explains chronic policy malaise</li> </ol>
<p><b>III: A theory of education</b> which</p> <ol style="list-style-type: none"> <li>7. Offers an account of the necessary and sufficient conditions for self-enlightenment</li> <li>8. Shows that these conditions are occurring</li> </ol>	<ol style="list-style-type: none"> <li>7. New Political Economy “economics of enough”</li> <li>8. New visible resistance and desire for change</li> </ol>
<p><b>IV: A theory of transformative action</b> which</p> <ol style="list-style-type: none"> <li>9. Identifies which aspects of society require change to resolve crisis and dissatisfactions</li> <li>10. Details a plan of action, including change agents and a general idea of how change will be accomplished</li> </ol>	<ol style="list-style-type: none"> <li>9. Democratic program of decentralisation, market control and protection, non-market values</li> <li>10. Democratic movements, localised activity.</li> </ol>

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