

Re- centring nature: towards a new research agenda

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Abstract

This paper outlines a potential Green research agenda, employing Foucauldian concepts of power and discipline to show how economics is itself a major player within the political economy. The discipline of economics is not neutral but part of a power structure.

For Foucault ‘truth’ is the outcome of discursive rules, and contested politically. Scientific disciplines maintain power by controlling dissent. Discourse is the primary source of modern power.

To produce a counter- discourse we can employ an archaeology of scientific disciplines to uncover hidden schisms. This paper applies this to economics, linked with governance and order and centred around the human body. A Foucauldian Green economics places nature at the centre, denies an objective/ subjective split, accepts the role of power and politics and replaces the history of thought with an archaeology of the discipline.

This archaeology shows two contradictory economics have emerged. The Robbins definition denies positivism. Austrian economic concepts are expressly political, subjective and unobservable. However Robbins’ definition excludes non- substitutable resources. The paper suggests a distinction between scarce and exhausted resources. Current policy, based on substitutable resources, is inadequate. Furthermore GDP does not measure wealth; more efficient use of environmental resources lowers GDP.

A new Green political economy should focus instead upon allocation processes, drawing upon institutional economics. It should focus not upon risk and wealth, but economic security, demand management and the legal basis of economic power. This involves abandoning ‘free’ trade. Corporate law could be based upon schemes of commons management outlined by Ostrom.

Introduction – the paradox of useless economics

There was an interesting exchange in the UK Parliament last year, during which the Prime Minister accused the leader of the opposition (who had suggested an energy price freeze) of needing “a lesson in economics”. It is hard to imagine the Prime Minister suggesting similar lessons in philosophy. If however he is relying upon an academic discipline for policy prescription, then philosophy may suit his purpose just as well. The scientific status of economics was questioned long before the 2008 crash, although this adds a poignancy to the critiques. If economics is a science, it is one that does not apply evidence or experiment and is never tested. The interesting point about the 2008 crash was not only the failure of the economics profession to predict it, but the continued inability to reconcile the present situation with fundamental economic concepts. The fundamental tenets of economics no longer appear to have empirical application – large corporations falling like dominos and bringing down entire economies appears to be at odds with any conceivable notion of equilibrium. If economics is indeed a positive science, one would rather imagine the body of theory to have been refuted by now.

Just as interestingly, the 2008 crash *was* predicted, but not by using economic theory. Economic models, to use the words of one of those who did predict the crash and attempted to warn governments, were “largely useless” [Blanchflower, cited Hodgson 2009 p. 1207].

Yet curiously not only does the discipline of economics seemed fairly unchanged by both its apparent inability to explain or predict well and its apparent redundancy in this task [Hodgson 2009], but the standing of the profession appears undiminished.² The question we will address in

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² Hodgson’s pronouncements to the contrary now seem a bit premature [Hodgson 2009]

this paper is, if economics is really as poor both in performance and method as is often suggested [Lawson 2009, 2012], why are economists still employed, and why are their conclusions still noted by governments?

What this paper will suggest is that economics is far from being a neutral science, but is part of the practice of governance. We will maintain that the discipline performs an ideological function to enable justification of what are essentially political decisions. This paper takes up the invitation of Kologlugil [2010] to employ a Foucauldian approach to economics, utilising it to explain the lack of reflexivity of the discipline of economics, and to show how the history of economics can be used to not only explain why the predictive capacity of the discipline is so poor, but also to suggest what an alternative to the orthodoxy might look like.³ Following K.W. Kapp, we suggest this would be interdisciplinary, and based around notions of economic security.

To this end, it should be borne in mind that Foucault, unlike for example Marx⁴, does not view his own work as an alternative social theory (he would be antithetical to any such 'authored' theory), and neither would a Foucauldian approach to economics provides an alternative theory of "value" or "price" or whatever. Foucault suggested his work could be used simply as tools to "short-circuit, discredit or smash systems of power" [Vigo De Lima 2010 p. 134]. It is in this spirit that this paper will suggest what a Foucauldian approach to economics might look like. We will suggest that this approach leans towards a description of political economic *process*, rather than providing an alternative economic 'science'.

Foucault: the politics of truth

The question we start with is therefore why what appears to be a spectacular and extended refutation of orthodox economics has not diminished the status of the discipline. The Foucauldian conception of discourse appears to be ideally suited for examining this. Foucault claims that the acceptance of a body of knowledge as "scientific" is the result of historically specific (discursive) rules, rather than the endeavours of the practitioners. These discursive rules limit what is said or even thought about an object of analysis. They determine what is acceptable as evidence as well as what questions are asked. The acceptance of a given body of knowledge as "scientific" or even "true" is therefore historically specific, they are never held to be true for all time. There are no universal criteria for a scientific method, and therefore no objective methodology or epistemology [Foucault 1972 see also Kologlugil 2010 pp. 2-3]. The question is why certain forms of knowledge are privileged at certain historical periods of time. Claims to truth are for Foucault historically situated [Amariglio 1988 p. 587] and the focus is therefore on ontology. Foucault challenges the split between theory and practice, since "theory is already a practice, which occurs in a particular time and place" [Vigo De Lima 2010 p. 6].

Foucault's conception of the discourse and discursive practices are inextricably linked to power [e.g Foucault 1976] and in his later work he explicitly distinguishes this from domination, which is where those subordinated have little or no choices [Foucault 1988 cited Lemke 2000 p. 5]. Foucault claims that the discourse has become the main source of contemporary power, in that it creates a process of self – modification or construction of the self [Foucault 1988, cited Lemke 2000 p. 6]. According to Foucault discourse has replaced coercion as the main source of power in modern societies. Power is ubiquitous, and determines action. Furthermore it cannot be avoided, and we should be suspicious of claims to emancipation from power, but power itself can be emancipatory or otherwise beneficial [Foucault 2003 p. 183 cited Vigo De Lima 2010 p. 235].

The Foucauldian approach to ontology is therefore political – he refers to the "politics of truth". The acceptance of a body of knowledge as representing "truth", and the resulting social actions and social order, is the result of social power.

³ However this paper will also include Foucault's later works, in particular the Paris lectures

[Foucault 1979], in which he gives some insights on his archaeology of economics.

⁴ For a comparison of Marx and Foucault see Lemke [2000]

Foucault views power as a “network”, flowing along linked avenues. Individuals circulate, and always use their power or have it used upon them. They are never simply the targets of power [Foucault 2003, cited Vigo De Lima 2010 p.235]. Power is made visible at sites of “resistance”, often at the periphery rather than at the centre of power [Foucault 1976]. By the same token, the creation of a counter- discourse will vary by historic specificity.

Foucault’s later work considered the effects of disciplinary practice on discourses. The dictionary yields two meanings of the word “discipline”; as a “branch of knowledge” or as “a system of rules of conduct”. The two meanings, Foucault suggests, are not separate – the discourse generated by a particular body of knowledge will determine behaviour both within a discipline and externally as a form of social order. The disciplines will maintain discipline⁵, and they will also *be* maintained to enable maintenance of a social order .⁶ Both the refusal of the discipline of economics to engage in a critique of its foundations, and the continued support of a discipline that appears to be empirically redundant is made clear by the light shed by Foucault. The economics discipline is both unwilling and unable to see any “truth” outside of the narrow discourse that surrounds it, and is itself a major player in the contemporary power structure. The discipline of economics, we shall see, is a major element in the modern social order, both altering behaviour by affecting beliefs, and conferring legitimacy on political decisions.

In order to investigate the effect of a discipline, Foucault suggests we look to its past. However this was not to be a simple history of ideas. Rather we need an “archaeology of knowledge”. This consisted of two elements – a “negative” critical work of deconstruction, and the “positive” construction of new sets of questions and concepts for historical enquiry [Vigo De Lima 2010 p. 35]. We therefore need to begin by a deconstruction of economics, not only its internal contradictions, but also “tearing out the hidden and forbidden assumptions” which we achieve “by showing they are not so objective and universally true as they pretend” [Roseneau 1992 p. 67, cited Screpanti 2000 p.88]

Foucault outlined four elements to archaeological thinking:

1 *The principle of reversal* – we should reject the traditional interpretations, and seek opposite approaches

2 *The principle of discontinuity* – we should look at the past as a discontinuous, not as leading inexorably to the present ⁷

3 *The principle of specificity* – the discourse does not represent some non-discursive reality, but is historically particular

4 *The principle of exteriority* – there are no fundamental nature of discourses, no “deeper” meanings

[Vigo De Lima 2010 pp. 30–32]

What we are looking for is firstly the internal conditions of existence of discourse, which allows only some statements to be produced. This Foucault terms an *archaeology*. External conditions, especially social conditions revolving around power relationships, are objects for a *genealogy* [Vigo De Lima 2010 pp. 30- 32].

The archaeology therefore explores the hidden ruptures within the disciplinary discourse, and lays bare the historical specificity of the claims to truth and the acceptance of a body of knowledge as representing “scientific” knowledge.

⁵ The strategies of the practitioners of the economics profession to maintain discipline, and remove any critiques of the orthodoxy are fairly legion. For a description of some of the techniques applied to ecological economics see Spash [2011].

⁶ Piketty, for example, claims that the maintenance of high levels of inequality is primarily dependent on the “apparatus of justification”, and the key issue is the ability to justify inequality, rather than the magnitude of that inequality [Piketty 2014 p.264]. As Monbiot rather pithily puts it “If voters can be persuaded that insane levels of inequality are sane, reasonable and even necessary, then the concentration of income can keep growing.” [Monbiot 2014 p. 29].

⁷ An argument also made by Kuhn, who pointed to the practise of redrafting the history of sciences to present them as unbroken continuous progressions.

Towards an Archaeology of economics

For economics to perform a legitimating ideological function, the discourse of economics needs to be recast as a modernist science alongside physics, chemistry or indeed meteorology. This is a fraught task, especially since the main foundations of the discipline were not situated within such a discourse, and economics has always been uncomfortable in its dual role as a positivist policy science. The archaeology of economics is therefore a particularly powerful tool, because economic concepts were not originated within the positivist framework, and it can be seen how the attempts at developing a positivist economics has rendered the discipline contradictory and vacuous [Mulberg 1995].

Indeed the separation of fact and value would have seemed bizarre to many of the founders of the discipline. Marshall (ironically the first writer to drop the prefix “political” from economics) was entirely dismissive of ‘pure’ economics theory bereft of moral considerations, which he viewed as a waste of time [Coase 1975 p. 29]. Economics was to be applied in a way that befitted Marshall’s (Victorian) morality. It is easy to ignore the ethical component of Marshall’s economics however, since these were put in asides, but the quantity of these asides suggests that Marshall viewed them as a vital element. The ethical and moral component of economics was the point of the economic analysis and the mathematical shorthand they were to burn after use [Mulberg 1995].

However there were many other problems associated with attempting to derive a positive policy science from an ethical – based economics. The hedonistic basis of the marginalist scheme lends itself to a methodological individualism. However the policy requirements are collective. This leaves a *laissez-faire* positive economics to hold three simultaneous propositions:

1. That economic data is only available at the individual level
2. That this data is capable of aggregation
3. That only then can the best aggregate outcome be realized.

[Mulberg 1995]

The trajectory of the discipline can be traced through these propositions. We shall see firstly how orthodox economics attempted, and failed, to hold all three propositions simultaneously. We will then consider one of the main schisms in the archaeology of economics – the socialist calculation debate of the 1930s, between the ‘market socialists’, who dropped proposition (1), and the Austrian School, which dropped proposition (2).

The trajectory of the development of the discipline of economics was that objective measurements of value invariably contradict proposition (1) above. Marx showed this for Ricardo’s labour theory of value, but the same ‘socialist’ conclusions could be applied to the neo- classical formulation of utility. As Joan Robinson pointed out, addressing the marginal utility of income or money would justify a whole raft of interventionist policies to counteract inequality, rather than justifying *laissez-faire* [Robinson 1962 p. 53 and *passim*].

Later developments of utility theory can be seen as attempts to reconcile neo- classical economics and *laissez-faire*. These ranged from denying interpersonal comparisons of utility (which as Myrdal pointed out was the entire *raison d’etre* of the concept of utility [Myrdal 1929 p. 99], to a switch to ordinal utility, through to the concept of revealed preference, which claimed to avoid the concept of utility altogether. These formulations led to vast aggregation problems however (proposition 2 above), which led to economics being unable to show how aggregate welfare is maximised by *laissez-faire* – proposition (3) above. Instead the profession produced numerous studies which “embarrassed” the discipline [Screpanti 2000 p. 94], including the theory of second-best, and the impossibility theory of Prof. Arrow [Mulberg 1995 ch.2]. Sen suggests these arise because of the paucity of information allowed into contemporary economic theory [Sen 1979 p. 539].⁸

⁸ A more usual slight of hand is to simply change the unit of analysis, so that the functions are applied directly to aggregates; groups, entire markets, or even nations.

Far from being a continuous evolution of gradually refined scientific endeavour, economics could be viewed as a political endeavour attempting to reconcile *laissez-faire* politics with a theory originally grounded in egalitarian principles. This became even more transparent with the 1930s socialist calculation debate. As Taylor pointed out in his American Economic Association presidential address, if value and prices were objective or involved objective feedback mechanisms, then the state agencies can plan the economy accordingly. Proposition (1) above can be ignored without penalty.

It is hard to refute the logic of Taylor, and this eventually led to the distinctive formulation of the Austrian School [Keizer 1989 p.63 ff]. It is important to note that this school rejected the Neo-classical approach, and rejected proposition (2) above. The utility approach of the Austrian School was subjective, not objective. No aggregation is possible, and the scheme of the Austrian School is expressly political – Hayek railed against “scientism”. The now ubiquitous “choice” definition of economics, published by Robbins in 1932, was Austrian School in character. However while it may be ubiquitous now, it was different to that of Marshall, and it is important to stress that Robbins and Marshall are not employing the same definition (Robbins states this on page one of his 1935 Essay), and are not attempting to do the same thing. Marshall claimed economics was concerned with “the material requisites of well-being... 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 pp. 26- 27]. Unlike Robbins, this was not some kind of abstract *homo oeconomicus*, but “a man of flesh and blood” [Marshall 1920 pp. 26–27]. Robbins on the other hand locates his formulation within a Weberian framework, and employs the concepts of ideal types and *versatehen*. For Robbins economic man is such an ideal type. It is an expository device to be used cautiously in the development of arguments [Robbins 1935 .p. 97]. He states emphatically that valuation is subjective and cannot be observed, and that “we do in fact *understand* terms such as choice, indifference preference and the like in terms of inner experience” [1935 p. 87 original emphasis]. This is a distinctly non- positivist approach.

In fact, neither Robbins or later economists employ rational choice in a Weberian manner. Indeed, as we just saw, Robbins *defined* the discipline in terms of this presumed ideal type, therefore behaviour which is non rational- choice would not even be considered within economics. As Hollis and Nell put it, “economics is [therefore] the study of rational economic man” [Hollis and Nell 1975 p.53]. Furthermore, later economists misemployed his definition to investigate *observable* behaviour. Indeed as a schoolchild this author learned from a textbook titled *Introduction To Positive Economics*, which claimed to be about ‘what is’ rather than ‘what ought to be’⁹

This is entirely at odds with the choice definition of the Austrian School. Choice is not observable or measurable. Whereas Marshall held his metaphor of value being determined by the “scissor- blades” of demand and cost, the Austrian School joined these together. The notion of opportunity cost – cost as opportunities forgone – was central to this. Opportunity cost is subjective – it cannot be measured. Buchanan makes this clear and explicit

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.

⁹ 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.

[Buchanan 1973 pp.14-15].

Indeed, all the concepts of the Austrian School, in particular profit, rent and the concept of uncertainty, are based around this conception of choice. Robbins' definition therefore takes us in an explicitly subjective direction.

Foucault is therefore correct to associate the Robbins definition with a break from positivism, which he claimed has been the dominant rationalisation of economic discourse [Lemke 2000 p. 6]; Foucault associates it with "neo-liberalism", predicting the rise of the new discourse. Furthermore, he points out, the Robbins' definition leaves economics without a subject. Rather than describing what is, it is also "a sort of utopian focus". American neo-liberalism moreover is "a whole way of being and thinking" and 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].

Far from being a positive science, the whole idea of the neo-liberal enterprise, for Foucault, is to incorporate the politic into the economic calculus, and to extend economic analysis into previously uncharted areas, thereby enabling economic interpretations of previously non-economic domains. In this way, economics is itself a form of governance, what in Foucault's later works he refers to as a 'governmentality'. All the social, political and governmental activity is subsumed into the notion of individual choice [Foucault 1979 pp. 218-43].

Re-centring nature

The focus on power and governmentality moves Foucault somewhat away from the usual understanding of what a post-modern approach would look like, and more towards a critical realist position¹⁰. However while Foucault is not expressly post-modern, he does critique the modernist discourse, and critiques what he views as the modernist economic discourse (which – like Keynes – he dates back to Ricardo). Screpanti outlines three dichotomies which the modernist approach is concerned with – certainty/uncertainty, order/disorder and centring /decentring [Screpanti 2000 p. 89].

We can see from the analysis above that the rupture between the neo-classical framework and the neo-liberal approach could be viewed in terms of these dichotomies. The debate, while ostensibly at the level of methodology and theory, was invariably within a discourse involving the issue that certainty and predictability allowed a different (egalitarian) social order to be mooted. Foucault also viewed the modernist centring of the human in economics as altered by neo-liberalism – individuals became viewed as "investors" in their own "capital" [Foucault 1979 p.215 ff]. The previous conceptions were as labouring human or as desiring human [Kologlugil 2010 p.14].

Amariglio [1988] outlines four principles that he believes a Foucauldian 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-centering 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 Foucauldian-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.

¹⁰ For critical realist readings of Foucault see Marsden [1999] and Al-Amoudi [2007]

[Amariglio 1988 pp. 609-12]

The resistant discourses have advocated such a programme. We will consider the Green movement here, but equally the feminist or development movements, or any recent protest movement, could be examined. The green movement has long suggested that nature should replace humans at the centre of economics. These non- anthropocentric approaches often advocate both radical social change, incorporate ethical issues, and are suspicious of notions of sustainable development [McShane 2007 cited Seghezzeo 2009 p. 541]. 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 calls since its inception. There have also been constant calls for the inclusion of values within the new economics [Myrdal 1929, Söderbaum 2011].¹¹ In the remainder of this paper we will outline the ruptures within the orthodoxy over the inclusion of nature within a human- centred discourse, before suggesting what constructing a Foucauldian counter- discourse might involve.

Ironically enough, the re-introduction of physical science – by for example Georgescu-Roegen [1971] and the Club of Rome [Meadows et.al. 1972] – has the effect of stretching orthodox economics beyond its limits, an issue anticipated by Foucault [Foucault 1977 cited Özveren 2007]. The response of anthropocentric economics to nature invariably involves the commodification of what are regarded as environmental resources [Jacobs 1994 p. 68]. In fact, the rupture in the discipline we have outlined has led to two opposing strands of policy. Jacobs outlines a property – rights strand (which we suggest could be classified as more neo- liberal), and an orthodox (neo- classical) strand, which he suggests relies on state intervention. This intervention can be incorporated in two ways; by a Pigouvian - style taxation, or by attempting to estimate the pecuniary value of centrally planned (or centrally regulated) proposals, by such methods as elaborate surveys or calculations based on existing markets [Jacobs 1994 p. 68].

The neo – classical approach is subject to the same critique as the rest of that school. If the value of environmental resources can be estimated by elaborate cost – benefit analyses, why not do this for all resources? In fact, empirical examination of CBA calculations usually show clearly their political bias.¹² Essentially the charge is these CBA – style calculations are just political decisions with numbers stuck on to justify them. A similar criticism could be applied to the level of environmental taxes, a point we will return to shortly.

The Austrian School, on the other hand, is antithetical to this approach. Recall that for these theorists not only cannot costs be measured, they cannot be passed on to others. The Austrian School approach is, by contrast, to actually trade environmental “commodities”, by a variety of cap- and- trade schemes. Many current international agreements (such as Kyoto) are of this character.

Jacobs points 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 [see e.g. Pearce 1996, Juniper 2012]. In actual fact, we could suggest that both strands of commodification are designed to avoid taking environmental degradation seriously. Both assume a tradable and priceable surplus.¹³ In fact, Robbins *excluded commodities which have no substitute usage from his definition*. “If means of satisfaction have no alternative use” he wrote “then they may be scarce, but they cannot be economised” [Robbins 1935 p. 13].

Pigou and Robbins were writing at a time when environmental degradation might have been regarded as the exception rather than the rule. This is no longer the case. Aside from climate change, fuel shortages (‘peak oil’), fish stock depletion, acid rain and a plethora of other depletion problems (including, globally, food and water) are now to be faced. If we follow Robbins, this presumably takes virtually all production out of consideration of economics. What is being suggested here is that

¹¹ Although, as Spash and Ryan points out, much research purporting to be about environmental or green economics are either mildly revisionist of the orthodoxy, or a form of uncritical pragmatism proposing ad hoc changes without a thorough-going framework for guidance [Spash and Ryan 2012].

¹² See for example the UK High Speed Rail (HS2) analysis, which was based mainly on travel-time valuation of executives.

¹³ This point was made many years ago by J.K. Galbraith. As he once put it “you don’t trade your last meal”.

we need to distinguish between *scarcity*, which applies to all resources, and *exhaustion*, which relates to what Hirsch turns “social scarcity” [Hirsch 1977]. If resources are no longer substitutable, as with rapidly depleting fuel and mineral stocks, their consumption becomes a zero-sum game, where one person can only consume at the expense of another.¹⁴ Such resources will require a process of allocation, of which price is only one method. Allocation will involve an allocating body, a mechanism for allocation, and principles for application. This means that markets become firmly entrenched within the polity.

A common response is that alternatives are always available, and that “correct” pricing will enable “clean” alternatives to be developed.¹⁵ Instead the reality has been, as Beck pointed out, that greater and greater risks have been taken to ensure the availability of alternative fuels and other environmental resources, risks that now outstrip institutional controls (q.v. Beck [1992]). That is, the neo-liberal response to the issues of nature has raised fundamental issues of governance. By the same token, if the idea of environmental taxation was to be taken seriously, these would be so high as to trigger severe and widespread poverty and disruption even in the developed world, which would in turn trigger calls for massive and unprecedented intervention and redistribution, which would again create huge issues of governance. A serious attempt at an ecological economy soon renders *laissez-faire* impossible.

Another corollary of the Robbins definition is that aggregate measures become somewhat meaningless. In addition, as we are to forego measurement, we also forego any notion of efficiency – we cannot measure inputs, outputs or any ratio between them. This can lead to anomalies. As Hirsch points out, separating ends from means is not ultimately possible. It is never known what the ultimate “end” is, or what is a cost and what is a benefit [Hirsch 1977]. Hirsch’s concept was of intermediate goods, which are consumed as a means to obtain other goods or services. My consumption of petrol, for example, is the cost incurred to obtain something else – perhaps food, or employment. Hirsch calls these defensive expenditures, and views them as a cost rather than a benefit. However the presence of defensive expenditures renders aggregate measures inadequate. Economics no longer “adds up” [Hirsch 1977].

The lack of an efficiency ratio, and the ability to separate out costs and benefits, explain seemingly paradoxical results. Both polluting economic activities *and* any consequent clean-up activities add to GDP. If in fact new clean technologies are invented that also result in a lower expenditure it would actually lower GDP. The UK Office of National Statistics, for example, reported that the good weather in the UK in April 2011 reduced the use of heating fuel and therefore lowered GDP [ONS 2011].

This analysis suggests that the current preoccupation with maximising GDP is misplaced; it is not clear what we are obtaining more of with a higher GDP. Our analysis suggests instead more of a focus upon demand management than maximising economic throughput. Indeed, this contrast of demand management rather than a predict- and- supply approach has long been a staple of the green movement, and the critiques of consumer culture go back as far as J.K Galbraith and Veblen.

Conclusion: towards a counter discourse

Replacing a history of economics with a Foucauldian archaeology has therefore shown up the ruptures within the discipline. It has shown how the original formulation of neo-classical economics had a rejection of a fact/value split, or at least held both of these as vital parts of the enterprise, and also lead logically to an egalitarian and socialist economic order. Attempting to maintain a positive economics whilst rejecting the political implications of the neo-classical formulations has led to a contradictory economics that neither predicts nor explains.

¹⁴ This issue is partly obscured in the neo-classical approach by the lack of specification of the actual ‘commodity’ under consideration (an issue itself critiqued by the Austrian School). This definition is constantly switched, e.g. from ‘oil’ to ‘energy’ and back again. Such a slight of hand gives an appearance of complete substitutability, and negates the very conception of resource depletion.

¹⁵ 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].

Furthermore, when nature is brought in to replace “desiring human” as the centre of the discourse, the issues of power and politics and the divide between subject and object are brought to the fore. The discipline of economics is split as to how to conceive of, account for and deal with environmental degradation, and the orthodox formulation yields absurd results. Natural resources (to the extent that we can even view them in this manner) are for the most part now non- substitutable, and therefore require allocation. Price is only one allocative system – allocation based on ration or needs/rights are others¹⁶. Clearly however, the choice between the systems, as well as the detail of their operation, requires political and social decisions and control. Control would also be required to alter the manipulation of artificially created needs by corporations, an idea which has long been a stalwart of the environmental movement.

The archaeology of economics also showed up the inadequacies of aggregate economic measures, and showed how the present pre- occupation with higher GDP was unfounded. Ironically, one beneficial side effect of an archaeology of economics is that many of the contributions that have been pushed to the periphery can be utilised as alternatives. We have already mentioned the critiques of Veblen and J.K. Galbraith of the manipulation of wants. K.W. Kapp suggested replacing the current focus on constant acceleration of consumption with a new focus on economic security. That is, a nature- centred discourse could be based on an ‘economics of enough’, which replaces risk and uncertainty with security. Economic security would require operationalisation, and we might conjecture this would contain both relatively objective and relatively subjective elements, to develop the establishment of criteria and thresholds. [Kapp 1976].

What the recent protest movements such as Occupy have achieved is precisely to relocate the economic discourse within government. They have succeeded in making the political aspects of economic policy visible, and in locating responsibility for lives and livelihoods within the polity.

In addition to the Veblen/J.K Galbraith strand, the other elements of institutional economics which we have mentioned is the legal foundations of economic transactions, a tradition going back at least to John Commons. We saw how this is employed in conceptions of property rights leading to cap- and – trade policies. Firstly, we see that the concept is part of a neo – liberal tradition which expressly breaks from positivism. Discussing property rights leads us a considerable distance from discussing ‘what is’, and towards discussing ‘what ought to be’.

In fact, neo- liberals fail to properly discuss either property or rights, and a thorough examination of these would lead us away from cap-and- trade, possibly towards discussion of legal obligations in corporate ownership. As Deakin points out, corporations enjoy considerable legal rights, and these require justification. In particular, he is concerned with limited liability, and with corporate ownership. He suggests that selectively applying limitations to the law of limited liability would limit the risks that corporations undertake, and would also provide a natural ceiling to their size. He further suggests that the sort of strategies for the actual management of commons that was outlined by Elinor Ostrom, such as including stakeholders within their management, should also be applied to corporate ownership [Deakin 2012].

At any event, discussion of the legal basis of the economy in itself implies legal jurisdiction. This almost certainly implies the economy being smaller than the polity, and a counter- discourse could begin by the sort of control over international trade suggested by Daly and Cobb [Daly and Cobb 1990].¹⁷ Of course the size of the polity has long been an issue within the green counter- discourse, which has held for a movement of power away from the centre towards the periphery. “Thinking globally and acting locally” has been an mantra for many years. A Green counter- discourse would quite probably seek governance both downwards and upwards, moving power away from nation- states towards local regions, whilst simultaneously seeking international co- operation and agreements.

¹⁶ These principles are common in public services – in many countries health services for example are provided according to need. Rationing is, of course, common in wartime or in emergency situations.

¹⁷ For a critique of the theory of comparative advantage, which is usually put forward as a defence of free trade, see Prasch [1996]. This critique has as its basis the sort of aggregation problem noted in this paper. Also note Keynes’ view that the theory only holds under conditions of full employment (q.v. Milberg [2002]).

We have seen therefore that the Foucauldian approach of power and discourse not only explains the behaviour of the practitioners of the economics discipline, but also the ideological function this discipline performs, and the link between economics and governmentality. By conducting an archaeology of economics the ruptures within the discipline can be uncovered, which shows clearly its political basis. We saw briefly some examples of how the knowledge of the political underpinnings of economic arguments can then be utilised to form a nascent counter-discourse. The Foucauldian approach is powerful, and I would urge others to use these tools.

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