Value Theory in Ecological Economics: The Contribution of a Political Economy of Wealth

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ABSTRACT

This paper demonstrates how a Political Economy of Wealth – an analytical framework inspired from Ricardo's and Marx's theories of value – strengthens the analytical force of Socio-Ecological Economics in the context of the controversy over the value of nature. The Political Economy of Wealth helps (1) to overcome some theoretical limitations encountered in Socio-Ecological Economics, (2) to develop a critical perspective on neoclassical theory of environmental values, as well as a new justification of value incommensurability, and (3) to move toward a new research agenda that aims to study interactions between the economy and the environment from a socio-historical perspective.

KEYWORDS

Economic value, Marx, money, commodification

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1. INTRODUCTION

Ecological Economics (EE) has opened up a new area of research that focuses on ethics, interdisciplinary research, and the embeddedness of the economy in nature. The development of specific programmes in the field has generated much ambiguity about the position of EE in relation to Environmental and Resource Economics (ERE) (Røpke, 2005). Much of this research – mainly the North American natural science and energy schools – has tended to adopt a conservative approach based on neoclassical models and tools. A more heterodox approach – particularly in the European Society – argues that dealing successfully with ecological issues requires a 'break from the mainstream epistemology' (Özkaynak et al. 2004: 289) and a 'Socio-Ecological Economics' (SEE).

This article does not claim to provide a comprehensive review of the different internal debates within EE (see, for example, the two volumes on the 'Recent Developments' in EE edited by J. Martinez-Alier and I. Røpke). It focuses instead on the most controversial issue in the field: the value of nature. The predominance of neoclassical economic valuation has given rise to two distinct approaches within EE. One approach aims to expand the use of the concepts and methods of ERE to ecosystem services and biodiversity, while another approach (SEE) has generated a substantial body of ethical criticism. This paper is designed as a contribution to the critical approach. SEE has been successful in making most environmentalists suspicious of efforts to value nature in monetary terms and in making them sensitive to the incommensurability of values. This has been achieved: 1) by exposing and critically assessing some key philosophical assumptions about human beings, 2) by highlighting the ethical limits of commodification, and 3) by stressing the need for discursive institutions. One striking point is that SEE has rarely (if ever) examined the concepts of commodity, economic value and money, despite its claim to be founded on political economy (Söderbaum, 2008; Spash, 1999). These concepts were central to the analyses propounded by Smith, Ricardo and Marx, and are also at the core of the economic valuation of nature. One may then reasonably ask what is missing in the objectives of SEE. Ignoring these concepts means that SEE is unable to connect the issue of environmental values (and more generally ecological issues) at the analytical and conceptual levels with the socio-historical conditions that account both for the global ecological crisis and the dominant position of monetary values.¹ For example, while lamenting the widespread perception that money and market relations are the natural way of valuing things, the critique provides no account as to why they appear so natural.

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The aim of this paper is to show how a *Political Economy of Wealth* (PEW) – a framework inspired from Ricardo's and Marx's theories of value – might enable SEE to gain in analytical force. The PEW helps: (1) to overcome a number of theoretical limitations in SEE; (2) to develop a new critical perspective on neoclassical value theory, and thereby provide a new justification of the incommensurability of values; and (3) to move toward a new research agenda that aims to study interactions between the economy and the environment from a socio-historical perspective (Douai, 2008).² All these points require a theoretically sound concept of economic value.

The task may be made difficult by the fact that the usefulness of an alternative concept of economic value is not widely supported by SEE (or by some who have influenced many SEE). Söderbaum argues that he is 'sceptical of attempting to find the correct ideas about values' because he 'connect[s] values with the neoclassical approach' (personal correspondence). Sagoff (2008: 242) argues that 'nature has no economic value' (a view shared by this author) because 'nothing has economic value'. More generally, environmental valuation is one of the many areas that show little interest in the history of economic value (Canonne and Macdonald, 2003; Throsby, 2003). Spash (1999: 413) argues that SEE needs to return 'to an explicit inclusion of ethical issues in the mode of classical political economy', which 'means rediscovering past works and exploring new ways of thinking about socio-economics and the environment'. I argue that in order to address the challenge of building a comprehensive socio-economic approach – i.e. an approach that takes into account essential aspects of the relation between nature and society - SEE also needs to return to an explicit inclusion of the basic analytical categories used by Ricardo and Marx to analyse the 'operation of the socio-economic system as a whole' (Adaman and Özkaynak, 2002: 123).

Section 2 briefly reviews the main approaches to the value of nature in EE. Section 3 presents the concepts underlying the PEW. Section 4 connects the PEW with the debate surrounding the value of nature. Section 5 includes some concluding remarks and identifies the new questions and/or challenges arising from this approach.

2. COMMODIFICATION VS. INCOMMENSURABILITY OF VALUES

The principles of the economic valuation approach have already been widely discussed, and so I need not review all of them here. Two underlying presuppositions underlie this debate: (1) the commensurability of environmental

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values, i.e. 'the existence of a common essence of all wants, into which [they] can be merged into a mono-dimensional definition of utility' (Gowdy and Mayumi, 2001: 229); (2) commodification, i.e. 'the need to transform ... use and existence values into a uniform system of exchange values ...' (Vatn, 2000: 495). These assumptions can be usefully summarised by two simple relations, which are neither considered nor questioned even by most standard economists and users:

(1) UTILITY \Leftrightarrow PLEASURE (2) UTILITY \Leftrightarrow MONEY

The first relation refers to the neoclassical model of human behaviour, which has so far provided the main focus of studies in the field. The second relation has not been addressed satisfactorily, and raises the following question: what enables the economic valuation approach to assume that money is the objectivation of the utility of things? The answer to this question depends on two basic claims: (1) the denial of the distinction between usevalue (utility) and exchange-value at the theoretical level. Hodgson (1997: 54) mentions the issue in passing: 'the conceptual reduction of [exchange] value to utility suggests that everything could be somehow evaluated in monetary terms'; (2) philosophically, the key idea – which Marx and Engels (1975) attributed to Bentham – is that 'money represents the value of all things, people and social relations'.

These claims are not reducible to the monistic consequentialist character of the 'neoclassical man'. The neoclassical theory of value is not merely about how humans value things individually, since it also represents a set of epistemological/philosophical assumptions about how humans interact materially with nature. The fundamental nature of these two claims is closely related to the existing dominant social structures. They account for the need: (1) to relate environmental degradations to the 'zero price problem', even pragmatically, as in Daily (1997: 5): 'nothing could matter more than attaching economic values to ecological services because the way our decisions are made today is based almost entirely on [them]', 2) to assume the possibility of trade-off between non-market things and money, the latter reflecting 'others things people value' (Turner et al. 2003: 494), and (3) to promote the ever increasing transformation of ecological resources into real commodities. For Pearce (2002: 4), 'valuation is only one stage of a two-stage process'. Once the importance of nature in terms of WTP is established, what remains to be done is to 'devise ways in which those valuations can be realised as

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cash flows', since 'for a great many policy contexts [?], costs and benefits matter only if they are associated with real resource flows'.

The core message of SEE on this matter is that 'it is important to avoid commodification of all entities in environmental valuation because this reduces the complexity of the issue' (Røpke, 2005). A clear recognition of 'different languages of valuation' (Martinez-Alier, 2002), or of the 'incommensurability of values' (Martinez-Alier et al. 1998), is therefore needed. The approaches to environmental values taken in SEE are very diverse, and an exhaustive review is beyond the scope of this article. As noted above, three areas are articulated.

1) An alternative view of the valuing agent. For O'Neill and Spash (2000: 521–2), 'an alternative view of values is that they express individual judgments about what is legitimate or right ... A deontological ethic may accept a role for consequences, but it emphasises that [it is] not the only thing that matters'. Actors are seen as ethical agents with motivations that are different from mere pleasure-seeking and are socially constructed (Vatn, 2005a).

2) The ethical limits to commodification. A number of empirical observations indicate that in the context of contingent valuation respondents may not wish and indeed often fail to conform to neoclassical assumptions. Thus, there are ethical limits to commodification. Protest responses in terms of WTA/WTP (high individual bids, zero bid, refusal to bid) indicate that for people, 'the environment is not well represented by economic value' (Svedsäter, 2003: 123). O'Neill and Spash (2000: 528) observe that putting 'a price ... has a cultural meaning: it can be felt as an act of betrayal of a moral commitment'.

3) The need for discursive institutions. The logical extension of these two claims is the appeal to other Value Articulating Institut⇔ions (VAI), i.e. 'constructed set[s] of rules that define who shall participate and [...] in which role' (Vatn, 2005a: 210). Since the 'institutional setting influences which preferences and values in the continuum from 'I' and 'We' are found to be acceptable and/or relevant", an important 'choice for society is to decide which institutional system should be in place for which type of problem' (Vatn 2005b: 163). Discursive institutions are the appropriate forms for dealing with the 'common good':

[S]ince environmental conflicts are open to reasoned debate which aims to change preferences rather than simply recording them, it follows that different institutional forms are required for their resolution ... discursive institutions are the appropriate form for resolution. (O'Neill 1997a: 144)

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Jacobs (1997: 214 and 228) emphasises the normative character of this argument:

It is important to distinguish...between positive and normative claims...[n]ot everyone approaches the environment in [an ethical] way...the fact that people do not always vote in pursuit of the common good is not an argument against the normative claim that they should do so. (...) The institutions proposed here are based on a normative political theory, that of deliberative democracy.

SEE 'struggle[s] towards a newly unified picture of economics and ethics' (Foster, 1997: 17) in order to demonstrate the irreducibility of environmental values to monetary value. This article argues that another approach—the PEW approach—has much to offer SEE in this regard. A political economy-based approach of the concepts of commodity, economic value and money tends: 1) to invalidate the second postulate of the economic valuation approach and to provide a new justification of the incommensurability of values, and 2) to make SEE more operative in fields of study that had so far remained conceptually unattainable. Value theory in Marxian economics deals with economic value as a product of capitalist relations of production. Value theory in SEE deals with plural modes of human valuation. These two perspectives can be unified around the PEW in the interests of a genuine transdisciplinary and socio-economic understanding of environmental values and ecological issues.

3. A POLITICAL ECONOMY OF WEALTH

The roots of the PEW can be traced back to Ricardo's defence of the distinction between wealth and exchange-value [ExV] against Say. Say rejected the distinction drawn by Aristotle and Smith between use-value and ExV. He argued that 'with respect to the *relative price* of products, it is in all cases determined by the intensity of the desire and the degree of utility in each product for the time being' (Say, 1803: 213). Hence, 'price is the measure of [ExV] and [ExV] is the measure of utility' (Say, 1803: 39). Moreover, '[ExV] and riches are synonymous' (Say in Ricardo, 1821: 231). Ricardo argued that '[u]tility is certainly the *foundation* of [ExV], but the degree of utility can never be a measure by which to estimate [ExV]. A commodity difficult of production will always be more valuable than one which is easily produced although all men should agree that the latter is more useful than the former' (Ricardo, *Works*, VI: 247–8).

The quality that emerges from the connection between the properties of the object and one's need (whatever its nature) is a necessary though

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not sufficient condition for the object to have an [ExV]. Ricardo refuted Lauderdale's idea that if water, previously gratis, became the exclusive possession of an individual, then not only his riches, but also national wealth, would increase. Ricardo replied that this would increase his fortune, but the same quantity of wealth/use-values would still be 'enjoyed by the whole society'. Wealth would simply be 'differently distributed' (Ricardo, 1821: 223). Therefore, the production of [ExV] resulting from the transfer of a hitherto gratis object within the market sphere is merely a different allocation of social wealth. This production does not increase wealth, which is outside the scope of market calculus.

Say never overcame the contradiction between the claims that [ExV] is determined only by utility, and that 'natural wealth' – all non market use-values – have no [ExV]. But his thought contributed to shunting the car of economics away from the classical on to a different track that was to lead to marginalism. Jevons claimed to have solved the so-called 'paradox of value' by formalising a relationship between ExV and marginal utility. The related conflation of the word 'value' with the word 'price' implies that there is no room for a substantive account of human valuation of things that lie outside the realm of commodities.

Ricardo's system is more suitable in this respect. Utility is merely the capacity of things to meet the 'necessities, conveniences, and enjoyments of human life' (Ricardo, 1821: 224). His conception of political economy is central: 'Political Economy [Say] thinks is an enquiry into the nature and causes of wealth; I think it should rather be called an enquiry into the laws which determine the division of the produce of industry amongst the classes who concur in its formation'. Wealth – etymologically, the conditions of wellbeing – is irreducible to ExV, and its non-market part is therefore beyond the scope of political economy. These issues cannot be tackled with the analytical categories that political economy brings to bear on commodities.

Marx developed the PEW by highlighting the dialectical relation between economic value and social wealth that is specific to capitalist social relations. The analysis of commodities developed at the start of *Capital* is crucial. Marx observed that to understand it presents the greatest difficulties. Yet it was the most important part of his work since the '[economic] valueform, whose fully developed shape is the money-form, is the cell-form' of capitalist societies (Marx, 1867: 558).

The commodity is the *particular* form taken by a part of wealth in capitalist society. This form has a twofold aspect: (1) use-value and (2) ExV. As use-values, commodities satisfy human needs (in relation to their physical properties). For Marx, this *quality* depends on the social context and is not

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an economic category.³ As use-values, commodities are *incommensurable*: a pullover and a bowl of rice have nothing in common in terms of fulfilment of needs. As ExV, they have only quantitative characters. The equality between them means that we treat them as different quantities of something they have in common. The common substance is the labour that served to produce them. But the twofold aspect of commodities is a reflection of the twofold character of the labour that produced them. Concrete labours are not socially useful without market exchange. But exchanged labours are not concrete labours, and are instead defined by Marx as 'abstract' labours. Concrete labours are qualitatively different, but on markets all labours count only as 'productive expenditures of human brains, muscles, nerves, hands...' (Marx, 1867: 72). Abstract labour is that which is common to all commodities, and is the substance of a purely social phenomenon: 'economic value (exchange-value being its form of appearance)' (Marx, 1880: 1550). The concrete representation of economic value is money, which can be conceived as the social institution without which the produced economic value would not be socially validated and could not take the money-form.

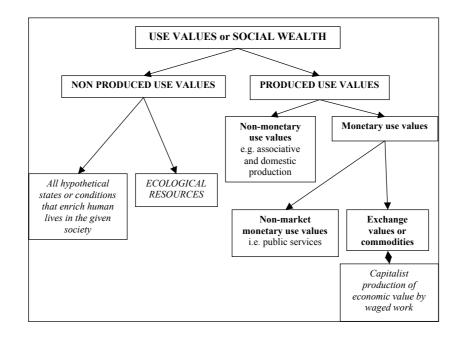


FIGURE 1. A Marxian typology of forms of social wealth (modified from Harribey, 2004)

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The irreducibility of social wealth to market categories is central in this scheme (figure 1). Whatever 'its social form may be, wealth always consists of use-values' (Marx, 1857-8: 278). A thing 'can be a use-value, without having [economic] value. This is the case whenever its utility to man is not due to labour. Such are air, virgin soil, natural meadows, etc. A thing can be useful, and the product of human labour, without being a commodity. Whoever directly satisfies his wants with the produce of his own labour creates, indeed, use-values, but not commodities'. Conversely, 'nothing can have [economic value], without being an object of utility. If the thing is useless, so is the labour contained in it; the labour does not count as labour, and therefore creates no [economic value]' (Marx, 1867: 568).

A further step is the study of the dialectical relation between social wealth and economic value. Marx established the very indifference of economic value to wealth, i.e. indifference to material conditions and resources, and also to any ethical or socio-political conditions. Commodities 'count for each other as expressions of that social substance which is theirs, expressions which differences are quantitative, not at all qualitative' (Marx, 1867: 613). The production of use-values is just 'an unavoidable intermediate link [...], a necessary evil for the sake of money-making' (Marx, 1885: 52). Economic value is merely a form of social organisation and its production does not enrich society. 'Not too much wealth is produced. But at times too much wealth is produced in its capitalistic, self-contradictory forms' (Marx, 1894: 270). He thought that we should not call it 'wealth' because 'the selfvalorisation of capital – the creation of surplus value... is utterly miserable and abstract content' (Marx, 1971: 143).

When the aim of labour is not a particular product standing in a particular relation to the particular needs of the individual, but money, wealth in its general form, then, firstly the individual's industriousness knows no bounds; it is indifferent to its particularity, and takes on every form which serves the purpose., it is ingenious in the creation of new objects for a social need, etc. (1857–8: 213)

Marx described the primacy of economic value over use-values, i.e. the primacy of abstract wealth over concrete wealth.

This dialectical view is the analytical basis for an approach in terms of potential crisis that goes beyond those usually considered by Marxists. The 'auto-movement' of economic value (Marx, 1857-58: 211) means that the concrete character as well as the social and environmental consequences of production processes are not part of the social nature of commodities. The use-value produced by concrete labour is nothing more than the result of

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the transformation of matter and energy, i.e. the transformation of nature. However, the economic value produced by abstract labour is nothing more than an immaterial social relation in capitalism between the capitalist class and the working class. This is the only historical-structural explanation of the ecological crisis, and highlights the metabolic rift between nature and society. Another potential rift could be identified. It concerns the harmony in the economic order and the 'creation of disvalue' in terms of wellbeing as a result of the increasingly commodified satisfaction of needs (Illich, 2005: 780). Disvalue might refer to ethical or political conditions that are socially valued and that are put at risk by the 'madness of money' (Marx, 1857-8: 337). In Marx's dialectical view, the ecological and other social costs of economic value accumulation are endogenous to the metabolic process of human-natural reproduction in its specifically capitalist form.

A crucial point is that economic value and money 'express [i.e. are the objectivation] of the social relations of production' (Marx, 1857-8: 278) and are absolutely not the objectivation of utility. This is at the core of Marx's criticisms of utilitarianism while others, such as Brenkert (1975: 216), argue that Marx rejected utilitarianism because he harboured an ethic in which people live such that their 'actions and relations are meaningful and morally correct in themselves, not because of their relations to something else'. Brenkert relies on the following passage:

The exchangeability of all products, activities and relations with a third, objective entity which can be re-exchanged for everything without distinction that is, the development of exchange values (and of money relations) is identical with universal venality, corruption. Universal prostitution appears as a necessary phase in the development of the social character of personal talents, capacities, abilities, activities. More politely expressed: the universal relation of utility or use. The equation of the incompatible, as Shakespeare nicely defined money. (1857-58: 100)

It is easy to show that the type of commensurability condemned by Marx has nothing to do with the valuation-need relationship. Brenkert overlooks the following passages from Marx's Notes on Wagner (1880):

Human beings only give a special name to these things because they already know that they serve to satisfy their needs... they call them 'goods'... which expresses the fact... that these things are useful to them, and they give the thing this character of utility.... If one terms the fact that human beings treat such things... as means of satisfying their needs... 'attributing value' to them, then one has proved that the general concept 'value' stems from the

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behaviour of human beings towards the things found in the outside world which satisfy their needs.

The 'general concept of value' refers to the human valuation of things. As Melanson (1999: 407) puts it, the 'connection between the quality of an object and our need is the basis for its having a new quality for us, its usefulness'. There is no suggestion of another value that exists independently of this. Marx described this as a historical and practical process: 'an individual's need is only possible in a definite 'social organisation''. Human valuation is to be viewed as being distinct from the economic category of value, which 'amounts to a mere concretisation of human labour, as expenditure of equal human labour-power' (Marx, 1880: 1550).

Utilitarianism was conceived by Marx and Engels as the first and most immediate philosophical expression or justification of capitalist economic practices, that is 1) the exploitation of man by man; and 2) the 'external and abstract' mediator (money) which 'becomes a *real God*' (Marx, 1844: 17), the mode of social organisation that reduces *all* things to itself:

Hence the actual relations that are presupposed here are speech, love, definite manifestations of definite qualities of individuals. Now the relations are supposed not to have the meaning peculiar to them but to be the expression and manifestation of some third relation attributed to them, the relation of utility or utilisation... *a relation determined by social relations* ... All this is actually the case with the bourgeois. For him only one relation is valid on its own account: the relation of exploitation... *The material expression of this use is money which represents the value of all things, people and social relations*. (1975: 409-410)

Utility theory is both the analytical formalisation and the ideological support of the *reduction* or the *inversion* inherent to a society in which money is the social link, i.e. capitalist societies:

The economic content gradually turned the utility theory into a mere apologia for the existing state of affairs, an attempt to prove that under existing conditions the mutual relationships of people today are the most advantageous and generally useful. (1975: 417)

This mediator becomes a real God, for the mediator is the real power over what it mediates to me. Its cult becomes an end in itself. Objects separated from this mediator have lost their value. (1844: 17)

Before it is replaced by economic value, every form of natural wealth presupposes an essential relation between the individual and the objects, in which the individual in one of his aspects objectifies himself in the thing,

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so that his possession of the thing appears at the same time as a certain development of his individuality: wealth in sheep, the development of the individual as shepherd, wealth in grain his development as agriculturist, etc. (1857–8: 210)

Since money, as the existing and active concept of [economic] value, confounds and confuses all things, it is the general confounding and confusing of all things – the world upside -down – the confounding and confusing of all natural and human qualities. As money is not exchanged for any one specific quality, for any one specific thing, or for any particular human essential power, but for the entire objective world of man and nature ... (1857–8: 118)

The possibility of seeing the value of all things, people and social relations in terms of money is specific to capitalist conditions. What utility theory does not say is that money is the material expression of the social character of production and not of utility. When money becomes the general expression of wealth, it expresses: 1) a power: 'that each individual exercises over others' activity or over social wealth exists in him as the owner money. Thus both his power over society and his association with it is carried in his pocket' (Marx, 1857-8: 94); (2) the effacement of all natural and human qualities. The nature of money in capitalism is not to account for the utility of things, or their different qualitative aspects, or the distinct modes of valuation, but is in fact to efface them. His attack against Bentham needs to be understood in this light: 'he takes the modern shopkeeper, especially the English shopkeeper, as the normal man. Whatever is useful to this queer normal man, and to this world, is absolutely useful.' (Marx, 1867: 1117-18). The reduction of the value of things to a single criterion for usefulness results in needs that are not reducible to economic value being ignored in capitalist society. The critique of utility theory does not require valuing things 'regardless of their connection to our interests'. It appears to be inspired 'by a concern for the[ir] plurality' (Melanson, 1999: 409).

This commitment to value pluralism would make most SEE's members quite sympathetic to the PEW. But the basis for a wider appeal and acceptance of the PEW as a useful *theoretical* perspective for expanding the scope of the controversy over the value of nature requires a direct connection with some essential aspects of the latter.

4. THE NATURE OF THE VALUE OF ECOLOGICAL RESOURCES

Burkett (2006) argues that (S)EE has a priori eliminated Marx from its background. Yet the relations between (S)EE and heterodox schools are

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more complex than Burkett suggests. Røpke (2005) provides a useful illustration of this idea. An EE leader insists that 'the European Society has always been aimed at pulling together various strands [Marxists, Critical institutionalists and so on]. Unfortunately some factions in EE... have gone for neoclassical models and money numbers so making the journal a mess' (personal correspondence). This helps clarify some mistakes in the concepts of the PEW.

(S)EE and the PEW: Rhapsody in value

A comprehensive list of the mistakes made in (S)EE about classical and Marxian theories of value is beyond the scope of this paper. But the arguments outlined by Sagoff (2008) merit special attention. They arise out of a misunderstanding of Ricardo and Marx's theories of value and result in an unfortunate espousal of neoclassical theory of value, while Sagoff (2008: 240) refutes the idea that 'prices at which goods trade in efficient markets respond to preferences'. Though he cannot be described as an SEE, Sagoff has clearly influenced many SEE. In a section entitled 'The economic value of nature', Sagoff writes:

Ricardo and Marx ... endorsed the idea that the amount of labour inherent in an object determines its economic value. Because Marx saw economic value as ... intrinsic quantity and located it in the contribution of labour, he... concluded that natural materials obtain value only when mixed with labour

The purely natural material in which human labour is objectified has no value.

[They] thought the term referred to the input of labour, but it is hard to find anyone who propounds this view seriously today.

No one has measured use value, benefit or utility ... to test whether or not it varies with embodied labour, embedded energy or willingness to pay. (Sagoff, 2008: 241–2)

This is inaccurate on several counts. (1) When Marx wrote that the 'purely natural material ... has no value', he meant that the natural material has no *economic value*, but not that it has no *use-value*. Indeed, 'a thing can be a *use-value*, without having [economic] value... [e.g.] whenever its utility to man is not due to labor. Such are air, virgin soil, natural meadows, etc'. (2) Ricardo and Marx *never claimed to measure use-value or utility with embodied labour, nor with money*. Indeed this is precisely what they fought against. For them, utility is to be conceived as a *quality*, not a quantity. ExV

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does not measure use-value. ExV is the form of appearance of the economic value produced by social labour. Ricardo and Marx argued for what SEE fails to assume at the conceptual level: '[SEE] argued that values which are the subject of a typical [contingent valuation] survey are not necessarily economic in nature' (Lockwood, 1999: 330). The PEW is clear: these values are not *economic*, and nature has no *intrinsic* economic value.

Sagoff (2008: 242–3) endorses Lauderdale's view on 'economic value', though he had previously claimed that 'the phrase 'economic value' has no coherent reference'. For Sagoff and Lauderdale: (1) scarcity is the principal condition of economic value; (2) supply and demand determine economic value. Sagoff adds that '[f]or Lauderdale, "economic value" should be understood in terms of what Adam Smith called "value in exchange" ... That "value in exchange" of a good is negligible tells us nothing about its utility or its "value in use". Sagoff fails to see that this *was precisely the view taken by Ricardo and Marx.*⁴

The unjustified charge against Ricardo and Marx leads Sagoff into some contradictions. He argues that 'markets already assign efficient prices to [natural] goods' since '[they] are too "lumpy" to price in incremental units'. Referring to fresh water, Sagoff observes: 'what has value – what is scarce relative to demand – is not water, which is superabundant, but the labour and technology needed to transport water where it is consumed' (Sagoff, 2008: 245). What better illustration of Ricardo's/Marx's views?

Discussing pollination, Sagoff writes: 'To associate an economic value with this service we could try to estimate the price which an incremental unit of it would fetch in a competitive market ... [It] has a zero price because there is so much of it, anyone can have all he wants for nothing ... To show how price is relevant ... one must demonstrate the prospect of scarcity, in other words, the prospect that someone might be interested in purchasing the incremental unit of the service' (Sagoff, 2008: 247–8). *How can this be said to differ from the neoclassical account*? Marginalists claimed that the subjective valuation of a good, i.e. the estimation of its last unit consumed, determines its price, while the scarcity of the good is a condition. How do neoclassical environmental economists justify their approach if not by the prospect that people might be interested in purchasing the incremental unit of the service (see Heal, 2000)?

Other points could have been considered here, but the main point is already made. The rejection of any alternative conception of economic value results in an (implicit) adoption of neoclassical value theory. The idea can be further illustrated by a brief discussion of the concession made by Martinez-Alier et al. (1998) to neoclassical value theory:

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We are not against giving economic value to natural resources ... A location may be valuable for its biodiversity (measured in richness of species or genetic variety), and also as a landscape, and have also economic value (measured by differential rent, and also by the travel cost method, or contingent valuation). These are different types of value ... The 'fetishism' of fictitious commodities is common among environmental economists. We understand and share their efforts to value environmental amenities, life-support systems, biodiversity, human lives by contingent valuation or other similar methods ... our contention is that the environment, as also human lives or non-human species, has other values which are not commensurable in money terms.

This statement is theoretically incorrect. Martinez-Alier et al. do not define economic value, but merely refer to the neoclassical concept. The validity of the neoclassical concept is supported since they point out that its relevant scope does not take into account some essential values. The argument is mistaken since it neglects the fundamental philosophical presupposition that underlies the concept. The argument is consistent only if they reprove the disregard concerning the potential intrinsic value of nature or non-anthropocentric values. But this would weaken the critique of the concept since ERE recognises and even claims such a positioning. In fact, they do not restrict their comment to intrinsic value: the reference to 'sacredness [that] cannot trade-off money' indicates that they (also) consider values where these are the 'result of a human valuing process that occurs in cultural, social and historical contexts', as Trainor writes (2006: 4). But one cannot both: (1) share the efforts of standard economists to give economic value to nature; (2) and criticise them on the grounds that they ignore such values. Why is this so? Because the vocation of the neoclassical concept of economic value is not to capture some particular modes of human valuation, or some particular uses of nature. Formally, it captures all things of the material world, as well as all human interactions with the latter. Indeed, an irreducible philosophical presupposition is that money represents the value of all things and relations, whatever the social context and the nature of human motivations.

This is why Turner et al.'s (2003) exclusion of 'historical, cultural, symbolic values' in their account of 'total economic value' on the grounds that 'for some people [socio-historical, historical or symbolical] values cannot be meaningfully expressed in monetary terms' is theoretically illogical and therefore unfounded. (1) Either one emphasises the formal validity of the neoclassical concept of economic value, in which case one need not worry about the effects of social norms: it inherently supports the obliteration of all natural and human qualities; (2) or one has some doubts about the possibility of measuring environmental values in monetary terms because

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of socio-historical factors, in which case one must (analytically) consider *money and economic value themselves as socio-historical categories* – as categories that have meaning only in relation to given social relations. But then the neoclassical concept of economic value loses its philosophical and analytical basis, and one comes closer to the PEW perspective.

It is not clear what Martinez-Alier et al. mean by 'fetishism of fictious commodities'. However, whatever its meaning, the phrase is too weak since it does not make explicit the concept of economic value which the authors are keen to articulate with other values. The issue is to establish how the authors define the economic value of human lives. We only know that the fetishism of the commodity and money which emphasises that the foolish approach - which seems so natural to many people (and not only to standard economists) - consisting in comparing, on the same scale, the benefits of an industrial activity with its costs in terms of human health/lives: (1) derives directly and irreducibly from the basic structures and dynamics of capitalism; (2) represents an ideological commitment to the inherent process of capitalism, i.e. the real extension of the sphere of economic value to an increasing number of human activities and ecological resources. As Marx (1867: 561) observed, the 'wealth of those societies in which the capitalist mode of production prevails, presents itself as an immense accumulation of commodities' because:

The only utility whatsoever which an object can have for capital can be to preserve or increase it. In the case of money, [economic] value, having become independent as such, is capable of no other motion than a quantitative one., to increase itself. It is according to its concept the quintessence of all use values... It is therefore inherent in its nature constantly to drive beyond its own barrier. (1857–8: 98)

Nature has no intrinsic economic value

The concept of economic value is an empty space in SEE. This is detrimental to the achievement of its main goals – i.e. legitimising a conception of value that makes ecological goods and values autonomous from market forces, and taking account of essential aspects of the relation between nature and society. The issue is an important one since it indicates that these categories cannot be considered as 'just finance' (Spash, personal correspondence): the issue of environmental values cannot be isolated from the 'operation of the socio-economic system as a whole'. As noted above, the neoclassical theory of value is not merely about human valuation, since it also constitutes a set of assumptions about how humans (should) interact with nature. This

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separation, which in my view remains the case *at a theoretical level* in SEE, implies that it provides ultimately a validation of the neoclassical value theory – on prices and money – along with an ethical complaint about its lack of plurality in its account of human motivations. But the monism in terms of wellbeing is inseparable from the support of neoclassical economics for the view that *money represents the value of everything*. The point is that this stance – which is not limited to neoclassical economists – results from the relations that humans have with each other through the objective capitalist system. Conversely, I argue that the stance of value incommensurability also has to be based on explanations of just why 'money is the "measuring rod of value" and why it is possible to say that '[m]onetary price is not a neutral measuring device' (O'Neill and Spash, 2000: 532).

The historical-structural standpoint of the PEW provides some clues, which may be seen as a contribution to a theoretical restructuration of the controversy on the value of nature: economic value (as its monetary form) is an expression of social relations that are exclusively characteristic of *capitalism*. These are socio-historical categories 'designed to ensure [the] reproduction and expanding accumulation of a particular social power' (Nelson, 2001: 504). Hence, ecological resources have no intrinsic economic value. The term intrinsic serves to avoid any naturalistic bias: the scope of economic value is a socio-historical matter and depends on the state of power relationships between economic and non-economic interests within society. Indeed, an ecological resource can become the support of the production of economic value for capital. As noted above, its scarcity and usefulness are necessary pre-conditions in this regard. But nothing can be the 'material substratum' or the 'carriers' of economic value (Marx, 1867: 754) without the application of what Pearce (2002), endorsing a-historical and a-social setting, calls 'mechanisms of capture [of WTP in form of cash flows]', i.e. of what have to be seen, in a socio-historical setting, as the fundamental mediations between humans within capitalism that simultaneously define their dominant relations with nature: private property right, wage-labour, markets and money as means of social validation of labour through exchange.

The accumulated economic value does not capture the benefits that humans derive from the resource. 'Cash flows' are 'a mere concretisation of human labour'. Human valuation of the good is just a necessary condition for the production of 'cash flows'. Those goods which escape the predation of capital have no economic value. Paraphrasing Hodgson (see above), we might say that 'the conceptual [distinction] between [economic] value and utility suggests that not everything – [even a small part of social wealth] – [can] be evaluated in monetary terms'. It can therefore be argued without

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contradiction that the various social modes of valuation of natural wealth relate to realms such as politics, ethics and aesthetics, *and not to the economic realm*. Figure 2 summarises this conceptual structure.

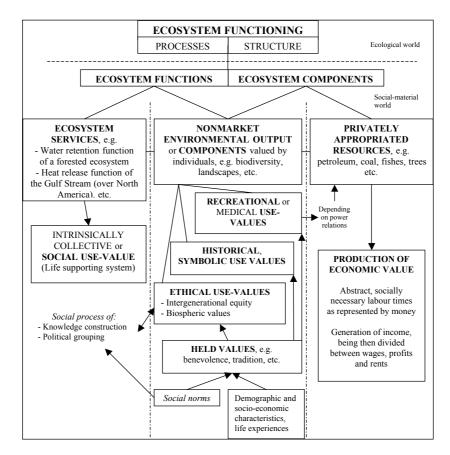


FIGURE 2. A typology of environmental values: economic value vs. values

Figure 2 does not claim to be exhaustive. The top of the figure represents standard concepts of the literature on ecosystem services (Ansink et al. 2008). Ecosystem functions and components serve the reproduction of social life or particular group interests. The left part of the figure should be familiar to proponents of SEE. But the point is the radical demarcation of

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unappropriated resources from economic value. Turner et al. (2003: 498) argue that ecological resources which 'we harvest have readily estimable values (because of the existence of markets)' while 'nature's services may have to be more indirectly valued'. Yet these 'estimable values' are actually pure expressions of specific social relations, i.e. labour socially validated by market exchange. These resources need to be useful to somebody, but their usefulness is not what is objectified in markets. Moreover, the fact that ecosystem services enable the reproduction of existing social relations does not imply that they generate economic value in themselves. In capitalist conditions, social labour is the only source of economic value.⁵

CBA can be criticised for its underlying model of human behaviour. However, there is something missing if CBA is not conceived as an *analytical form of the fetishism of the commodity* and as providing *ideological support for the growing commodification of nature*: (1) money is treated simply as a means of exchange and measure of utility, not as a social relation in its own right; (2) money is used to capture the plurality of values, though in reality it functions as a mediator following a purely quantitative logic by obliterating all distinctive human and natural qualities.

This account helps to explain why monetary valuation – though a specific and historically limited form of valuation – appears to be so natural. It may also add to our understanding of the various resistances exhibited by people when they are asked to value nature in money terms (Vatn, 2004): they may associate economic value/money with specific interests or positions in bourgeois society and/or see it as representative of the negation of any specific quality. It also provides a structural explanation as to why respondents cooperate in pricing natural goods, since it reflects the alienation of social relations and relations with nature from their real meaning.

5. FINAL REMARKS AND NEW QUESTIONS

To a socio-ecological economist, a brief review of the approach adopted here may suggest the two following conclusions:

- Even if it is not a clearly-defined tradition, there is now a body of work that explicitly relates value and sustainability to institutional factors. For example, Söderbaum (2008: 13) argues that 'CBA is based upon a specific ideology' – the ideology of 'business as usual'.
- 2) The PEW tells us nothing about the prevailing issue in SEE, i.e. how to include environmental values in decision-making.

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My aim is to make a constructive contribution to the debate:

- 1) Despite its insights on value pluralism, SEE still fails to define a conceptual framework that relates ecological issues to the operation of the socio-economic system as a whole, which would require a holistic-structuralist approach.
- The PEW does not provide guidelines for developing institutions for decision-making, which is not a theoretical weakness, but rather an epistemological posture.

I will base my arguments on the two following remarks:

Although the [Institutional school of SEE] has elaborated suggestions regarding environmental issues, it has not yet fully considered the operation of the socio-economic system *as a whole*. Readers may find it difficult to see how decisions on environmental issues might be incorporated into the overall picture [...] The critical survey [of institutional approaches of the environment] ... will lead us to the conclusion that only a *holistic methodology* will enable to take full account of the complexity and multidimensionality of *social and economic structures* and natural systems and their dynamic interactions.(Adaman and Özkaynak 2002: 123, 111)

The theoretical particulars of the [Index of Sustainable Economic Welfare (ISEW), see Ziegler 2007] abstract from the workings of the capitalist system, because the ISEW advocates have not specified a society in the socioeconomic system which currently have. Specifically, there is no underlying linked systems view of the disembedded economy [in Marxian terms, the autonomy of economic value]. [...] The tension between capitalism's specific material requirements and the requirements of a healthy coevolution of humanity and nature is not considered. The ISEW theories do not realize that capitalism is a socioeconomic system with contesting ideologies, values – made the more difficult with contradictory relations and vested interests deeply-rooted.(Brennan 2008: 1, 11)

I share these ideas and argue that these features result from the same cause: the absence of a theory of economic value that could be articulated with a theory of plural human values.

The PEW could be construed as an initial attempt to fill this conceptual void. It claims that all human-nature relationships are inscribed within the relations between humans themselves. Therefore, environmental issues cannot be abstracted from the socio-economic structures and dynamics of capitalism. More precisely, environmental issues cannot be abstracted from the latter's inherent ecological contradictions expressed through social con-

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flicts, and from the opposing interests and power relations inherent within these conflicts. This perspective calls for a holistic-structuralist approach that focuses on the transformation of social relationships with nature.

SEE provides important insights in this regard, which tend however to be overlooked in dealing with value articulation. SEE becomes an 'institutional [social constructivist] microeconomics' (Söderbaum, 2008b) that pursues a normative agenda. Its normative agenda is based on two assumptions: 1) actors are conceived as 'ethical agents'. 2) Politics is a space of convergence between different values. But here SEE abstracts from the social relationships with nature.

The highly productive work of Vatn (2005b) provides a good illustration of this pattern. In the first part of his book, Vatn focuses on institutional change, referring to economic relations and highlighting the role of property rights and the state. He argues that 'as soon as conflicts are involved': (1) Institutions '*regulate* conflicts', i.e. 'make them invisible' (Vatn, 2005b: 84 and 90). (2) Institutions result in the recognition of some interests and the denial of others. (3) Institutions are not natural, neutral and immortal. (4) Institutions are condensations of power relations. (5) The criteria of efficiency that institutions support and impose are endogenous, and reflect the interests of those in dominant positions. (6) Ideas – theorems, philosophical standpoints, etc. – are the ideological supports of institutions. They are part of the power struggle between different groups to obtain institutions that are favourable to them.

But environmental conflicts are not affected by this analysis. The environment represents the 'common good', and therefore has its own 'institutional system' (Vatn, 2005b: 226) – deliberative democracy – within which 'the good can be evaluated in objective terms' (Vatn, 2005b: 363). The relevant role of actors in this system is to serve as citizens. Since 'interests are often defined by the existing position a person holds in society', one may ask a person 'to step out of that position', so that the 'principal issues are put more in the centre and the contemporary position of each person is given reduced influence' (Vatn, 2005b: 355). For Vatn, this is not based on a 'naïve ideal' because: (1) 'dialogue in itself discourages strategic behaviour'. (2) '[S]ocially weak groups may be given special support so that their voice might be heard' (Vatn, 2005b: 351-2). But why and against whom might weak groups need special support? This is also a substantive issue.

There is no doubt that the normative approach to environmental conflicts has its merits. But for the purposes of SEE an approach more in line with the first part of Vatn's work is desirable. SEE *voluntarily* rejects the role of *objective social conditions* from which values or ideologies are formed. SEE

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also rejects the role of power relations (see Akbulut and Soylu, 2008; Gale, 1998) and of *political compromises* – i.e. arbitrations between inherently competing interests, which correspond neither to economic efficiency nor to an ethical imperative of justice, but to mechanisms of power accumulation.

Some caveats have been raised in SEE. For example, Holland (2002: 33) claims that a sound 'criticism [of deliberative institutions] will focus on the effects of the uneven distributions of power, confidence, understanding, and oral skill that will apply to any given context of deliberation. [...] What this points to is the maintenance of an overarching role for qualitative discrimination ...: democratic principles imply a right to be considered ['procedural justice' (Paavola, 2007)]; but they do not imply a right to count, or to determine the outcome ['distributive justice'].' We cannot understand the cause and the outcomes of a conflict without relating it to the social positions of involved individuals/groups. O'Neill (1997b: 85-6) observes that 'environmental conflicts are not only about values, [but] also about power and interests. The two are in tension ... the possibility of resolution through dialogue needs to be tempered by recognition of the ... existence of interest conflict [...] The association of evaluative practices with positions of social power... induces quite proper scepticism about their reliability'. The tension is between the focus on individual values and the ignorance of social structures. One cannot both: (1) promote deliberative democracy and (2) analyse the social world and its relations with nature by maintaining the same epistemological and methodological standpoints.

Paavola (2007) rightly defines environmental governance as 'the establishment, reaffirmation or change of institutions to resolve conflicts over ecological resources'. He argues that 'these conflicts have to be resolved [by] defining whose interests are to prevail, and to what degree.' But arguing that environmental governance 'is a matter of social justice [that is mainly procedural, since 'interests and values are sacrificed to realise some other interests and values']' is just a part of the story. Environmental governance is primarily a matter of power accumulation, i.e. a matter of the capacities of actors to prevail over other interests, or to be hegemonic in the sense of the capacity to compel other actors to accept a compromise. As Pascal observed, 'justice is subject to dispute; force is easily recognised and is not disputed. So we cannot give force to justice, because force has gainsaid justice and has declared that it is she herself who is just. Thus, being unable to make what is just strong, we have made what is strong just.' (1954: 1160). Vatn (2005b: 185) indicates that '[p]ower may be built into the basic structures of society - the institutions - like access to resources ... brute force is transformed into

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"the way things are" (emphasis mine). Why would environmental conflicts and governance escape this picture? A PEW-based approach emphasises that the institutions to which Vatn refers highlight the 'role of interest protection and power' in accounting for institutional change, *at the same time structuring specific social relationships with nature*. Conversely, the PEW assumes that ecological issues cannot be abstracted from the working of the capitalist system, along with interests and power relations. In this respect, three points merit further investigation and discussion:

- 1) A large part of socio-political conflicts over nature are indicative of structural contradictions in the use of nature for commodity/economic value production.
- 2) The environment and sustainability can be seen *normatively* as an objective model to be achieved jointly by the various actors as soon as they fit into the appropriate VAI. But *analytically* the environment and sustainability are *terrains of conflicts* where opposing interests and power relations are *inherent*. They are elements of the conflicts that are being fought over the *regulation* of social relations.
- 3) Politics is the space of mediation that selects and arbitrates between different social demands. Conflicts related to changing social relationships with nature cannot be *resolved* as such. They are regulated or stabilised via (temporary) political compromises between actors. What requires further study is the political work of actors aiming to acquire the capacity to prevail over other actors to accept a compromise. Consider the example of global climate politics (from Brand and Görg, 2001):
 - Objectives are invariably based on certain assumptions that are invariably the subject of dispute. They are never based simply on biophysical necessities.
 - These assumptions derive from controversial interpretations by different actors that are mediated by the individual capacities of actors to prevail over other interests;
 - An agency is required to guarantee all compromises institutionally.

This is not to say that the practical content of ecological issues or the implications of formal rules in terms of procedural justice have to be ignored. They have first to be included and articulated within an analysis of the conflicts and inherent divergent interests and power relations within the socio-economic system as a whole.

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If a socio-economic approach is defined as an approach that places its objects of study within a larger social context, then the treatment of these issues should enhance the appeal and strength of SEE.

NOTES

¹ Becker and Raza (2000) argue that 'Ecological economics has made important contributions to our understanding of these physical aspects of man's relation to nature ... We think, however, that a static and/or biologistic perception of nature – nature as something completely exogenous to the social realm – which is common to neo-classical environmental/resource economics and ecological economics alike, would fall short of essential aspects of the relation between nature and society.' Of course, this is a somewhat reductive view, though it is also to some extent true (see infra).

² With the help of Andrew Mearman, the core thesis of this article provided the focus for a workshop aimed at bringing together leading socio-ecological economists (Martinez-Alier, Ropke, Söderbaum, Özkaynak, Adaman ...) and advocates of various heterodox strands at the annual Conference of the Association for Heterodox Economics, with a view to developing a research agenda for a broad socio-economic approach to sustainability.

³ 'Use-values serve social needs and exist within the social framework, [but] they do not express the social relations of production. To be a use-value is a necessary prerequisite of the commodity, but it is immaterial to the use-value whether it is a commodity. Use-value as such lies outside the sphere of investigation of political economy.' (1857–8: 278).

⁴ Note that: (1) for Marx, scarcity is also a condition of economic value – 'if the land were so easily available, at everyone's free disposal, then a principal element for the formation of capital would be missing ... [A]part from man himself and his labour, the only original condition of production could not be disposed of, could not be appropriated' (1863: 41). (2) Ricardo and Marx did not deny the role of the supply-demand 'game':

Supply and demand regulate nothing but the temporary fluctuations of market prices. They will explain to you why the market price of a commodity rises above or sinks below its value, but they can never account for the value itself. (1857–8)

Many others factors can lead to deviations between market prices and economic values. They are determined by three related factors: (1) the average quantity of labour that is socially necessary for production; (2) the application by capitalists of a mean rate of profit (in relation to power relations in society); (3) change in supply/demand.

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⁵ Sjaastad et al. (2005: 40) define environmental income as the 'income earned from wild or uncultivated natural resources', differentiated from the income generated from 'fish farms, forest plantations ... which are incapable of generating environmental income'. Ricardo and Marx accepted the idea of the fecundity of nature. But for them nature is productive of wealth rather than of economic value. Sjaatad et al. are therefore wrong in claiming that 'Marx held that labour rather than land was the source of wealth creation'. From the point of view of economic value, what do an uncultivated tree and a planted tree have in common? They have both been subject to private appropriation, wage-labour and trade in the market. Would any 'income be earned from uncultivated natural resources' without these institutions? Do petroleum and coal that are yet to be discovered and extracted have an economic value?

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