Science, ideology and development: Is there a 'Sustainability Economics'?

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Abstract

The reasons why we as scholars prefer one paradigm to another are not only scientific but also ideological. It is suggested that pluralism should be discussed at the levels of theory of science, paradigms in economics and ideological orientations. Neoclassical economics is closely connected with logical positivism as a theory of science and is close to Neo-liberalism as an ideological orientation. Specific ideas of institutional arrangements follow from these perspectives. Alternatives to the mainstream have similarly to be articulated and discussed at all three levels to open the door for an alternative set of institutional arrangements.

Exclusive reliance on economic growth in GDP-terms and on monetary profits exemplifies an ideological orientation. When faced with new challenges such as Sustainable Development and Corporate Social Responsibility, the shortcomings of the neoclassical paradigm become accentuated. Alternative ideas to those of Economic Man, profit-maximizing firms and the mechanistic model of markets in terms of supply and demand are needed. A political economics approach to an understanding of individuals and organizations as actors in markets and institutional change processes is proposed.

Introduction

Mainstream neoclassical economics is attacked by many and from different angles or vantage points. Neither the defendants nor the critics can claim value-neutrality. "Values are always with us" (Myrdal 1978) and economics is always 'political economics'. The neoclassical attempt to construct a 'pure' economics has failed. Neoclassical theory may still survive as a theory that is specific in scientific and ideological terms and useful for some purposes. But this survival has to be accompanied by the admission that neoclassical theory is built on assumptions that are specific in terms of ethics and ideology and that alternatives to these assumptions exist. The future of neoclassical theory is therefore not only a matter of its usefulness to solve economic problems in some sense but also has to do with the ideological preferences of scholars who have become accustomed to neoclassical theory and of other actors in society who may exploit neoclassical theory for their own purposes. Vested interests are involved and in neoclassical language one may argue that even when the conceptual weaknesses are demonstrated and understood there may still be a considerable 'demand' for neoclassical theory.

The vision of one logically closed economic theory for all purposes has to be abandoned in favour of an idea that different theories are useful for different purposes and that attempts to reduce these different theories to one single Master theory are no longer meaningful. In a democracy, the continued existence of competing and complementary theories, reflecting different ideological points of view is a necessity and is even positive for the development of economics as a discipline. Monopoly for one theory is not conducive to new thinking and creativity. 'Competition' may sometimes be good for individuals and for society at large, to once more use a neoclassical vocabulary.

One often hears actors argue in ways suggesting that Western societies are democracies by definition. But even if these societies perform well in some respects it is equally true that all 'democracies' can be strengthened. The existence of monopoly for neoclassical theory at Departments of Economics all over the world exemplifies an element of 'dictatorship' that cannot be accepted and has to be replaced by competition and pluralism.

In this paper I will focus on the challenge of getting closer to Sustainable Development as a justified purpose for economic theory and analysis. Neoclassical theory may not be completely useless for this purpose but the ideology built into neoclassical theory certainly goes against any reasonable interpretation of Sustainable Development. This will be further elaborated in the pages to follow.

Interpretations of Sustainable Development

Sustainable Development (SD) is a 'contested concept' (Connolly 1974). In social science one has to live with contested concepts like power, freedom, interest, ideology, democracy and this is not necessarily a disadvantage. The existence of more definitions and opinions than one is a starting point for dialogue and clarification. And clarification of different points of view may lead to new thinking. I will here point to three conceptual and ideological interpretations of SD:

- Business-as-usual. For some actors SD does not mean anything new. It may refer to 'sustained economic growth' in GDP terms at the national level and 'sustained profits' in business corporations
- Ecological and social modernization. Here it is believed that present challenges to sustainability can be dealt with through modification of the present political economic system. Minor social and institutional change processes are encouraged provided that they do not threaten essential structural aspects of the present political economic system.¹ Environmental charges or taxes, environmental labelling, Environmental Management Systems, voluntary codes of conduct in business are examples of such minor institutional adjustments.
- More radical transformations of institutional arrangements. SD is then understood as an essentially multidimensional and ethical concept. In addition to 'modernization', radical changes in political economic system have to be considered to counteract present unsustainable trends. It is not easy to state more precisely what those institutional changes should be but we can start by referring to the values or ideological orientation that could guide us in the transformation process.

Sustainable Development became part of the international development dialogue through the work of the World Commission on Environment and Development. Many actors and voices contributed and its report is partly contradictory (WCED, 1987). Arguments about "vigorous economic growth" are mixed with pleas for environmental protection and an understanding of a common destiny at a global level. It is however important to note that the mentioned Brundtland report and the following UN-process connected with the Rio des Janeiro conference in 1992 claimed some 'newness'. I suggest that this new emphasis in development thinking brings together at least four elements:

- A movement away from exclusive reliance on monetary ideas of progress in business and society to an *emphasis on non-monetary considerations* concerning health,

¹ This suggests that there is a business-as-usual aspect also in this interpretation of SD but at a different level.

equality, employment, culture, environment etc. Climate change exemplifies an urgent issue where irreversibility is present. Later the UN Millennium Development Goals (United Nations 2005) has made this emphasis on non-monetary performance more concrete. And this spectrum of non-monetary factors and impacts is not reducible to money or any other 'common denominator'.

- A movement away from narrow and short-sighted ethical considerations to an effort to extend horizons in time and geographical terms. The title of the Brundtland report "Our common future" suggests that when considering options in some specific region, actors should broaden their ideological orientations. Institutional arrangements should be designed to also consider impacts upon people in other regions and upon future generations.
- The use of chemicals (and technology more generally) has to be carefully scrutinized and a precautionary principle observed. In a report from the European Environmental Agency with the subtitle "Late Lessons from early warnings", a number of cases of 'technological optimism' where the precautionary principle was not observed are described (Harremoës et al. editors 2002). Thinking in terms of prevention and security are closely related imperatives.
- The Rio process also pointed to the role of *democracy* and dialogue as part of its Agenda 21 documents. SD is not exclusively a matter for an existing technocracy or a new elite. As many actors as possible should participate with their different backgrounds, roles, ideas and interests.

Neoclassical theory in relation to SD

Neoclassical economics is certainly conceptually and ideologically compatible with the 'business as usual' interpretation of SD. Economic growth in GDP-terms is the main indicator of progress at the macro level and monetary profits in business at the micro level. But if SD is (conceptually and ideologically) interpreted in terms of 'modernization' plus 'radical change' or along the lines of a 'reasonable interpretation' above, neoclassical economics has little to offer.

In 2003 the Ministry for research and education in Germany turned to one of the more established neoclassical economics research institutes, DIW (Deutsches Institut für Wirtschaftsforschung), Berlin, arguing that neoclassical economics is 'inadequate' for sustainability issues. What is needed is a 'sustainability economics'. Actors within DIW then initiated a number of workshops in an attempt to overcome these limitations (www.sustainabilityeconomics.de).

As will be further elaborated, neoclassical Economic Man assumptions do not respond well to the need to extend horizons and problematize the ideological orientation or ethical aspects of human thinking and behaviour. The assumptions behind the theory of the firm, especially its 'monetary reductionism' do not facilitate an increased understanding of issues such as Corporate Social Responsibility or the existence of Environmental Management Systems such as ISO 14 001. Neoclassical market theory is about supply and demand in mechanistic terms and does not raise ethical issues of 'fairness' and 'exploitation' as possible characteristics of relationships between market actors. Neoclassical international trade theory efficiently cuts off categories of impacts that are important for many actors and interested parties. Cost-Benefit analysis exemplifies 'monetary reductionism' and a kind of 'ideological

correctness' by assuming that we all agree about correct prices to be applied for purposes of resource allocation.

At a macro level, the simplifications and ideological tendencies in neoclassical theory legitimize the present role and dominance of big corporations, so called 'corporate globalization' (Korten 2001, International Forum on Globalisation, 2002, Shiva 2006) and are also behind the present global competition between regions. This competition may be good for some purposes but is increasingly causing stress to human beings and ecosystems. Natural resources are systematically degraded in the name of progress. To summarize, neoclassical economics legitimizes a worldview and ideological orientation that now appears to be an essential part of the problems faced.

Different kinds of pluralism

In the development debate there are those who want to go directly from observations in the field about negative trends in environmental or social terms to measures with a presumed potential to counteract such trends. In what follows, it is argued that it is wise to also consider options at the level of perspectives and thinking patterns. As an example, the comparison between neoclassical and institutional economics has to be seen in a broader context of competing perspectives. Also theory of science is involved where alternatives to positivism exist (Table 1). Similarly one cannot avoid discussing competing ideological orientations if one wishes to take the present sustainability challenge seriously. It is a big mistake to regard the issues of values, world view and ideology as exclusively a matter for politicians. Efforts are needed to *illuminate* such issues rather than avoiding them. This suggests that there is an issue of competition and pluralism at different (and interrelated) levels:

- theory of science and the role of science in society
- paradigms in economics and business management
- ideology and the ideological orientation of actors, especially those in power positions
- institutional arrangements that largely follow from the choice made among previously mentioned options.

In Table 1 dominant (or mainstream) perspectives are compared with complementary or alternative perspectives. The point here is that the dominant perspective in theory of science is closely related to the dominant perspective in economics which in turn is close to the dominant ideological orientation. As suggested to the left in Table 1, positivism is behind neoclassical economics and neoclassical economics is rather close to neo-liberalism and a business as usual interpretation of SD. Not only neoclassical economics but all three perspectives tell us something about the kind of institutional arrangements that we see today.

The right hand side of Table 1 suggests that ideas about good science are not limited to positivism. Various forms of subjectivism have gained legitimacy such as social constructivism (Berger and Luckman 1966), hermeneutics (Ricoeur 1981), narratives (Porter Abbott 2002), discourse analysis (Fairclough, 1995), contextualism (Toulmin 1990). We can learn from listening to the stories told by professional and other actors related to specific sustainability issues, for instance. How do they interpret SD and how does this interpretation influence practical behaviour? Have they at all internalized the concept of SD or do they stick to a business as usual interpretation? In terms of ideological orientation, the alternatives to neo-liberalism are many but let us think of priority for environmental, health and social

considerations. For institutional arrangements, an alternative is to refer to a 'subsidiarity principle' (International Forum on Globalization 2002). This principle is regarded as essential also in the rhetoric of the European Union. While not denying important global interactions, local societies and local market relationships and 'nearness' to actors with power should be strengthened when compared with 'absentee ownership'.

Table 1. Overview of fundamental perspectives in relation to a dialogue about Sustainable Development.

	Dominant perspectives	Complementary or alternative perspectives
Theory of	Positivism; expert standing	Subjectivism, social constructivism,
science; role of	outside	hermeneutics, contextualism;
the scholar in		concerned scientist
society		
Paradigms in	Neoclassical	Political approach to institutional
economics		economics
Ideological	'Business as usual'	'Modernist' or 'radical' interpretation
orientation	interpretation of SD. Extreme	of SD. Priority for Social, Health and
	market ideology; GDP-growth,	Environmental (SHE-) aspects as
	reductionist ideas of efficiency,	part of a holistic judgement
	preference for privatisation (neo-	
	liberalism)	
Institutional	Institutions that facilitate for	Subsidiarity principle; Local
arrangements	'corporate globalization' e.g. the	community development and local
	present World Trade	markets as starting points. A World
	Organization (WTO)	SHE-organization "to handle trade
		disputes" at the global level.

Table 1 should not be understood in a traditional sense as one perspective or set of perspectives being scientifically correct or 'true' while the other perspectives are false. Even perspectives on the left hand side have a role as part of a pluralistic philosophy. For some kinds of problems, neoclassical economics may be useful (monetary policy, for instance). But for the kind of problems that interest us here neoclassical economics will play a secondary role or even be part of the problems faced. The 'fact' that ideological orientation is involved means that it is not realistic in a democracy to limit attention to one scientific and ideological perspective. Actors within Department of Economics make this mistake and these departments thereby play a role as political propaganda centres.

Options with respect to theory of science

While there is interdependence between levels in Table 1, it is still meaningful to take a look at each level. Looking first more closely at tensions between perspectives referring to theory of science (Table 2), neoclassical theory is essentially based on positivism while institutional economics brings in more subjectivist manners of doing research, such as social constructivism, hermeneutics and narrative analysis. With respect to time, neoclassical theory is mechanistic with 'static' and 'comparative static' analysis while institutional economics

tends to be evolutionary referring to concepts such as inertia, path-dependence and irreversibility.

Table 2. Tensions between dominant perspective and alternative perspectives with respect to theory of science.

	Dominant perspective	Alternative perspectives (social
	(Positivism)	constructivism, hermeneutics, narrative
		analysis etc.)
Time aspect	History not important;	History matters; evolutionary patterns,
	mechanistic models	path dependence
Value issues	Objectivity, value-	Subjectivity matters; dealing with values
	neutrality	and ideology in a conscious and open way
Field of inquiry and	Standing outside	Entering into a dialogue of interactive
position in relation	observing events;	learning with actors and interested parties
to it	traditional role as expert	
Purpose of study	Looking for universal	Case studies, uniqueness, contextualism
	regularities	
Methodological	Quantification, optimal	Illumination of options with respect to
guidelines and	solutions e.g. the	ideological orientation and impacts of
habits	'monetary reductionism'	alternatives; conditional conclusions e.g.
	of CBA	disaggregated and ethically open analysis
		in terms of Positional Analysis, PA
Decision-making	Decisions essentially	Matching ideological orientation of each
	based on calculation by	decision-maker and expected impacts of
	experts	each alternative; 'appropriateness',
		'pattern recognition'

In the neoclassical approach, the analyst is an outside, disengaged observer aiming at objectivity and value-neutrality. The institutional analyst – the right hand side of Table 2 – recognizes his own subjectivity as important and influential in the research process. He also takes an interest in the subjectivity of other actors and interested parties, listens to their narratives etc. The scholar typically enters into a dialogue with other actors as part of an interactive learning process.

While the neoclassical economist typically looks for regularities, even laws of corporate conduct, the institutional analyst is ready to consider each case as unique, partly based on specific contextual factors. As already indicated, positivism is the main theory of science for neoclassical economists. Qualitative analysis may be used but quantification is the ideal. Cost-Benefit Analysis, CBA, is based on the assumptions that decision-makers need clear-cut one-dimensional numbers, that money is the best measuring rod and that it is meaningful to refer to correct prices for specific impacts. Experts point to optimal solutions and it is expected that politicians or other decision-makers will listen to advice of this kind from experts.

The alternative to optimization is 'illumination' of an issue in a many-sided way for actors and interested parties who differ among themselves with respect to position, interests and ideological orientation. This approach is based on normal imperatives of democracy. Dialogue, sensitiveness to opinions other than your own and interactive learning are some characteristics of this process. But there is also an effort to systematically deal with

ideological orientations, alternatives of choice and impacts. Conclusions are conditional (in relation to ideological orientation and scenarios about the future). Positional Analysis (PA) is the approach to Sustainability Assessment, or more generally decision-making, preferred by the present author.

While neoclassical economists typically focus on things going on in ecosystems or the 'field' more generally, an institutional economist may focus on actors and their understanding of concepts such as 'Sustainable Development'. In the Uppsala and Kalmar regions in Sweden, new organizations have been set up for planning at the regional level and actors involved in these activities have been approached with questions about what they see as the main objective for their activities, how they understand the concept of sustainable development and how this understanding influences their practice. With few exceptions the result was that 'economic growth' and 'international competitiveness' are the big things while health, social considerations and environment are secondary issues (Puskas Nordin, 2004). It may be added that dialogue with neoclassical economists or institutional economists are equally meaningful as part of an interactive learning process (Borgström Hansson 2003). The idea is to make the respondents responsible as actors and their arguments visible.

Options with respect to paradigms in economics

Institutional theory as an alternative to neoclassical economics, its microeconomics in particular, has been presented elsewhere (Söderbaum 2000). This attempt to develop an economics more appropriate in relation to Sustainable Development continues. A 'Sustainability Economics', 'Ecological Economics' or 'Green Economics' is very much needed. The present version by no means excludes contributions from other schools of thought and authors.

Here I will focus on three aspects of such a sustainability economics. Individuals and organizations are understood as actors in a political context. Markets are understood as part of an actor-oriented approach. Decision making and *ex post* evaluation or Sustainability Assessment is discussed in a multi-dimensional, ideologically open way compatible with normal imperatives of democracy.

Political Economic Persons and Political Economic Organizations

In Table 3, neoclassical Economic Man assumptions are compared to a view of the individual as a Political Economic Person (PEP) i.e. an individual as actor guided by her 'ideological orientation'. I will here assume that my readers are reasonably acquainted with Economic Man assumptions and focus on the right hand side of Table 3.

The Economic Man interpretation of individuals is based upon assumptions about preferences, alternatives and impacts as given. It is a closed model that lends itself to simplistic mathematical treatment. The PEP-model on the other hand is more open. The individual refers to her ideological orientation but this orientation as well as alternatives of choice and impacts are more or less fragmentary and uncertain. The individual's preferences may be changing over time and the same is true of information about alternatives and their impacts. The individual is learning while interacting with a changing context.

Table 3. Two schemes of interpretation: Economic Man versus Political Economic Person

	Economic Man	Political Economic
		Person (PEP)
History	Not considered relevant	The individual is a product of
		her history and her relationships
		to specific contexts; path dependence
Context	Markets for products and	Political, socio-cultural, institutional
	factors of production	(e.g. market), physical man-made, ecological
Roles	Consumer, wage-earner	Citizen, parent, professional, market-related
		roles etc.
Relationships	Market relationships	Market and non-market relationships of a
	between selfish market	cooperative or non-cooperative kind
	actors	
Values	Maximum utility of	Ideological orientation as guiding principle
	commodities within budget	e.g. 'Green' orientation
	constraint	
Behaviour	Optimizing	Habitual, 'rule-following', also learning and
		conscious choice (decisions);
		appropriateness, matching

Source: Söderbaum 2001 p. 187.

Reference is made to concepts from social psychology, such as role, motives, identity, dissonance, relationships and activities. The individual as actor disposes of certain resources at a particular point in time and can use her power position for different purposes. As citizen and in other roles she can articulate her ideological orientation and change her life-style to make it more compatible with Sustainable Development, for instance. She also influences other individuals by her example and in other ways.

'Political' in 'Political Economic Person' stands for the fact that our societies claims to be democracies. The individual is expected to respect a number of imperatives of democracy. As actor the individual is a responsible and accountable person in her different roles as citizen and professional. There is a private sphere but the behaviour pattern or life-style of an individual is at the same time a political issue, i.e. an issue that concerns others. We all understand, for instance, that the choice of means of transportation has impacts upon other individuals, sometimes even at a global level.

While neoclassical theory focuses on business companies or firms, the term Political Economic Organizations (PEO) suggests that also other organizations, such as environmental organizations, human rights organizations, churches, universities, political parties, think tanks (and even research organizations such as the International Confederation of Associations for Pluralism in Economics, ICAPE) can be of interest in relation to the challenge of Sustainable Development. Business corporations take part in this dialogue about the future, sometimes openly, sometimes by attempting to influence other actors such as representatives of national governments or the European Union. Some business companies refer to their Corporate Social Responsibility (CSR), phenomena that much like other ethical considerations, can hardly be understood within the scope of a neoclassical paradigm.

Table 4. Organizations: the neoclassical and institutional view

History Not considered relevant The organization is a product of its history; path-dependence Context Markets for products and factors of production Profits for shareholders Business concept, mission statement, 'Core Values', political ideology, 'social responsibility' View of individual Largely invisible Polycentric organization with individuals as PEPs, guided by their ideological orientation Relationships Internally: largely invisible, hierarchic non-cooperative and non-cooperative) between individuals as actors, internally and externally, market relationships Interests related Consensus idea based A complex of common and conflicting		Profit-maximizing Political Economic	
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	Decision act	Optimization: maximum	Multidimensional impact studies, also rule
statement) with expected impacts		profits	following, matching ideology (mission
			statement) with expected impacts

The PEO is 'polycentric' in the sense that each individual is a Political Economic Person (PEP) and that the ideological orientation of a member of the organization may depart more or less from the objectives and visions of the leadership. Such tensions can be constructive for the success of an organization and even lead to a reconsideration of its mission.

Relationships between market actors

While neoclassical theory focuses on and is limited to market relationships, the kind of institutional theory presented here also recognizes the existence of 'non-market relationships' as important in the development dialogue and practice. But let us focus on market relationships since they are at the heart of neoclassical economics. Are there alternatives to supply and demand?

As part of the institutional perspective, market relationships are no longer exclusively understood in mechanistic terms but also in social and evolutionary terms. Market actors are individuals (and this is so even when they work for organizations) who may bother about each other or (influenced by the neoclassical perspective) see a particular relationship as completely impersonal.

Table 5. The market as a phenomenon. Two schemes of interpretation

	Neoclassical perspective	Institutional perspective
History	Not considered relevant	Each market relationship has its history that may or may not involve trust, commitments etc.
View of individual	Economic Man	Political Economic Person as actor
View of organization	Profit maximizing firm	Political Economic Organization as actor
Interaction between buyer and seller	Supply and demand	Multifaceted social relationship between potentially responsible market actors
Goods and services	Homogeneity, one commodity at a time	Also heterogeneity, multiple commodities and transactions, multifunctionality in relation to many interests and stakeholders
Motives for transaction	Profits or utility related to quantity and price (optimization)	Ideological considerations 'monetary price and beyond' (matching)
Relations to other actors	Emphasis on personal gain (Belief in 'invisible hand')	Also inclusive ('I & We Paradigm', 'Person in Community')
Features of relationship	Independence: contracts between parties with conflicting interests	Also cooperation; considerations of trust and fairness

Market actor A may exploit her power position in relation to Market actor B or think in terms of common interests and fairness. 'Trust' is known to be an important factor in 'business to business' relationships (Ford 1990). As with other social relationships an ethical aspect is present and judgments of fairness are not limited to prices but may refer to all kinds of conditions and impacts. In the case of 'corporate globalization' also impacts related to culture, health and environment are involved. A transaction is furthermore often part of networks of relationships between multiple actors rather than limited to two parties.

Neoclassical market theory, especially international trade theory, has influenced the design of international institutions, such as the WTO (World Trade Organization). When it is argued that this theory contributes to increased efficiency in the global economy and improved welfare for all, it should be understood that reference is made to an efficiency concept that is specific in scientific as well as ideological terms. This ideology is shared by many professional actors once educated in neoclassical economics, for instance the Trade Commissioner Peter Mandelson of the European Union and Thomas Östros, the previous Trade Minister of Sweden. Their reasoning in relation to quotas on shoes and textiles for the European Union is extremely simplistic. What is called 'free trade' is good, 'protectionism' is bad. ²It can be added that Östros came directly to politics from the Department of Economics, Uppsala University.

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² But 'protecting' neoclassical theory from competing ideas is good.

This neoclassical trade theory focuses on one dimension, i.e. the price at which a commodity can be delivered and is extremely narrow in cutting off a large number of other considerations about impacts on employment in different parts of the world; about environmental impacts and on culture. Ethics is not part of this idea of rationality. The international trade theory is rather of a cynical kind. But it may still suit some actors and interested parties.

Today climate has become an issue. When faced with this, leading politicians, civil servants, scientists equipped with their market fundamentalism naturally think in terms of market solutions. In this way we have got the Kyoto protocol with its many flexible (escape) mechanisms. Larry Lohman at the Corner House in UK has articulated what many feel in the book *Carbon Trading* (Lohman 2006). Among other things, he focuses on the impossibility of knowing and quantifying what would have happened without a specific project within the scope of the CDM:s (Clean Development Mechanisms).

Approaches to Sustainability Assessment and decision making

As we all know Cost-Benefit Analysis (CBA) in monetary terms is the approach to decision-making at the societal level advocated by neoclassical economists. Money is the measuring rod and the idea is to transform all impacts that are non-monetary in kind to their alleged monetary equivalent. The prices used for this operation are current market prices and for the case that an actual market does not exist, imagined (or hypothetical) market prices. 'Revealed preferences', 'contingent valuation' are parts of the vocabulary used when finding out what the 'correct' prices are from the point of view of optimal 'resource allocation'.

Over the years there has been a debate about the claims of CBA advocates that theirs is 'the' approach to decision-making. Even persons essentially educated in the neoclassical tradition occasionally raised their doubts. Ezra Mishan wrote a textbook on CBA (1971) but later argued that CBA can be used in a particular society only if there is a consensus in society about the rules of valuation built into the method. Mishan was concerned about environmental issues and considering the conflicting views about environmental issues at the time, he argued, that such a consensus (if it had existed earlier) no longer existed (Mishan 1980).

Mishan did not use the word 'ideology' but his observation and judgement can be reformulated by saying that CBA is based upon a specific ideology and one that is more precise than other ideologies, for instance liberalism and social-democracy among established political ideologies. Another mainly neoclassical economist, Leif Johansen, identified the CBA-ideology as being close to, if not identical with, the 'economic growth' ideology (Johansen 1977). The conceptual framework is the same and the logic in terms of 'net present value' is similar to the 'net value added' concept used in GDP accounting exercises.

The debate between the advocates of CBA (e.g. Sunstein 2002) and critics (e.g. Ackerman and Heinzerling 2004) will continue. CBA advocates get political support from those educated in neoclassical economics and from neo-liberals. The future of CBA is not only a matter of good science but also of 'political demand'.

Today many of us are critical about the economic growth ideology and we look for ideological openings in Green or other directions. We live in democracies and therefore

approaches to decision-making should be ideologically open rather than closed. An issue should be *illuminated* in relation to different possible ideological orientations that appear to be relevant. Rather than reference to the 'optimal' solution we should refer to 'conditional conclusions' in relation to each ideological orientation considered and other assumptions made. A Green ideological orientation, specified in some way, will in many cases point to other alternatives than a 'business-as-usual' orientation (e.g. an economic growth orientation) as appropriate.

Alternatives to CBA should then be less technocratic and more compatible with democracy. Such a move also suggests that the analyst should engage in a dialogue and interactive learning process with interested parties and other actors; what are their positions in relation to the issue? How do they understand the problem? How do they articulate their ideological orientations in a more narrow sense and for society at large? What do they expect in terms of impacts for the case that specific alternatives are chosen?

The existence of more than one ideological orientation in relation to an issue suggests that aggregation in one-dimensional terms is not a useful strategy. Rather one has to distinguish between different kinds of impacts and think in terms of multidimensional profiles. In Table 6, a distinction is made between monetary and non-monetary impacts and another distinction between impacts expressed as 'flows' i.e. for specific periods of time and impacts expressed as 'positions' or states, i.e. for specific points in time.

Table 6. A classification of impacts in economic analysis.

	Flow (referring to a	Position (referring to
	period of time)	a point in time)
Monetary	а	b
Non-monetary	С	d

The turnover of a business company and the salary of a person employed exemplify monetary flows (a. in Table 6). The balance sheet is a monetary position (or set of monetary positions, if you prefer – cf. b.). Pollution from a factory or transportation activity is a non-monetary flow (c. in Table 6) and the existence of some pollutants in the blood of a human being at a point in time, a non-monetary position (cf. d.). Land-use changes, changes in available knowledge and in health are often described in positional terms.

The idea here is that non-monetary impacts should be described in their own terms. Environmental Impact Statements and Environmental Impact Assessment (EIA) builds on a similar idea that environmental impacts should be considered separately and not 'disappear' by being mixed up with monetary impacts. While EIA is a disaggregated approach that distinguishes between different environmental consequences, the EIA procedure may have some disadvantages and limitations. It does not cover all kinds of impacts and generally enters into the decision process too late when the project owner is committed to one alternative and knows what he or she wishes to accomplish (cf. Söderbaum 2004a).

The preference of the present author is Positional Analysis (PA) suggesting that 'positional thinking' in non-monetary terms, is a good idea. Positional thinking is thinking in two or more steps where decision trees can be used and aspects such as inertia and irreversibility illuminated. A decision is normally regarded as a first step leading to new

positions (with new options) that differ qualitatively from previous positions, much like the way a game of chess develops.³

Monetary impacts may be considered in a step by step fashion but this way of looking upon decision-making and decision processes is perhaps even more relevant on the non-monetary side. If specific ecosystems are exploited for construction purposes then it is not so easy to return to the previous position in land-use terms. Today we learn about the impacts on climate in different parts of the world from CO2 emissions connected with transportation, for instance. Exploitation in the form of mining or dam construction often leads to resettlement of indigenous people, another ethical issue not so easily solved through monetary calculation.⁴

Options with respect to ideologies and ideological orientations

If economics is political economics then politics is no longer outside economics. Even articulation of ideological orientation and 'ideology development' become central concerns. What are the desired directions of change? How do we describe the ideology that is dominant in Western societies and what are the alternatives?

Since the dominant ideology in Western societies is so much connected with neoclassical economics, it can be expected that there is a need for a new economics, a Green economics if one wishes, to strengthen Green ideology. Something has hopefully been achieved in this respect in previous pages. I will here focus mainly on neo-liberalism and the relationship between neoclassical economics (as science and ideology) and neo-liberalism. In attempting to expose the weaknesses of neo-liberalism we will automatically get an idea of alternatives that are more constructive in relation to Sustainable Development (SD).

The International Forum on Globalization (2002) with authors such as David Korten, Vandana Shiva, Maude Barlow, Walden Bellow, Edward Goldsmith, Helena Norberg-Hodge has identified the following 'key ingredients' of neo-liberalism, alternatively called 'corporate globalization' (Ibid. p. 19):

- Promotion of hypergrowth and unrestricted exploitation of environmental resources to fuel that growth
- Privatization and commodifiction of public services and of remaining aspects of the global and community commons
- Global cultural and economic homogenization and the intense promotion of consumerism
- Integration and conversion of national economies, including some that were largely self-reliant, to environmentally and socially harmful export-oriented production
- Corporate deregulation and unrestricted movement of capital across borders
- Dramatically increased corporate concentration
- Dismantling of public health, social, and environmental programs already in place

³ It should be observed that unlike the decision trees used in game theory no quantitative 'pay-offs' are indicated at the end of the ramifications. Instead, each new position is qualitatively and quantitatively described with all its new possibilities.

⁴ It is not possible here to describe PA in detail, where the approach comes from and how it can be used, see Söderbaum 2000 pp. 85-105, Söderbaum 2006, 2007.

 Replacement of traditional powers of democratic nation-states and local communities by global corporate bureaucracies

In short, this is not a nice ideology or ideological orientation for many of us. But it may be useful in searching for and articulating alternatives. Let us first take a look at the relationship between neoclassical economics and neo-liberalism.

It has already been argued that neoclassical economics is not only science but at the same time ideology. Neo-liberalism is more extreme as ideology – a kind of market fundamentalism – but it is interesting to observe how many similarities there are between neoclassical economics as ideology and neo-liberalism (as ideology).

- There is a focus on markets in both cases and concerns outside the market receive only limited attention
- Economic growth in GDP-terms is the main indicator of progress in society in both cases
- The only organizations seriously considered is the firm or business corporation in both cases
- The consumer is the king and the consumer is supposed to consider only short run utility rather than bother about what is now referred to as sustainability (impacts upon others, future generations etc.) In both cases we are dealing with an ideology of 'consumerism'
- The focus is narrow in both cases in the sense of referring to one commodity at a time when dealing with markets and international trade. Reasoning in terms of multiple transactions, multiple interests, multi-functionality is avoided.
- Analysis is largely monetary in kind as in the case of CBA. Even neoclassical environmental economics emphasizes markets and the monetary dimension
- The efficiency idea is the same in both cases, referring to the monetary cost of each unit of a commodity produced, sold or bought.
- The simplistic nature of international trade theory means that this theory supports export-oriented production at the expense of local self-reliance
- Neoclassical economists similarly tend to believe that unrestricted capital movements across borders is good for efficiency in a global perspective

But neoclassical economics need not be as repugnant as neo-liberalism in some other respects:

- While neoclassical analysis is of little help in opening the doors for alternative ideas about efficiency, neoclassical economists are not necessarily in favour of privatisation
- While being silent about power issues, neoclassical economists need not support the uncontrolled growth of business corporations. They believe in competition as more efficient than monopolies and cartels
- Among neoclassical economists there are many social democrats (at least in Sweden) that are in favour of a strong state and who argue that there is still a role for regulation

While there is no complete identity, this comparison between neoclassical theory and neo-liberalism suggests that neoclassical theory conceptually and ideologically in many ways legitimizes neo-liberalism. It should always be remembered that thousands and thousands of students all over the world each year are indoctrinated in the belief system of neoclassical economics. Together with the activities of neo-liberal think-tanks, the dominance of market

ideology in present societies is not unexpected. Many professionals and political leaders do not know of any other economics.

Options with respect to institutional arrangements

Social and institutional change processes occur all the time from the micro level of individuals and organizations up to the national, European Union and global levels. At issue is whether these changes go in a Green direction or if unsustainable trends continue.

Ideas and ideological orientations play a role in this and so does science and conceptual models of various kinds. In the development dialogue, economic growth – now regional economic growth – is still the dominant objective in a country such as Sweden. A lot of money is spent in the search for individuals with ideas about how to start new businesses, so called entrepreneurs. Gender issues may enter into this process. Minorities such as immigrants are regarded as potential entrepreneurs and expected to contribute to economic growth, employment and prosperity. In our present society we are rather left with persons or actors who think in terms of neoclassical models and business management models that often are not much better. How can this be changed? Is it possible to increase the share of transformations towards sustainability?

These days we need ideas, models of change and even 'Green entrepreneurs' moving us towards sustainability although one does not hear so much about the latter. A first step is to try to understand social and institutional change processes. Here we enter into the whole fabric of social psychology and social sciences with learning theory and many other things. As always in science, some simplifications are necessary. Let us take the example of Environmental Management Systems, EMS. Business companies or firms have historically largely been understood in terms of the neoclassical model of profit-maximization. At some stage, a stakeholder model of business investments and operations entered the scene and modified the previous understanding. According to this perspective at least some conflicts of interest become possible in relation to the business corporation. Not only shareholders but also those employed hope to improve their monetary conditions, for instance.

As a result of public debate about environmental degradation, some business actors understood that 'good business' in present society is not only about monetary performance. There are various forms of non-monetary performance as well, such as environmental performance. Just as there are financial management systems, there could be environmental management systems. And to make such systems more legitimate and established, a kind of certification scheme with connected auditing organizations were needed.

Environmental Management Systems, such as ISO 14 001 and EMAS (European Union Eco-Management and Audit Scheme), have been discussed critically by many (e.g. Welford 1996). On the positive side, it can be argued that it represents a first step in a Green direction. EMS is an 'institution' in itself that will increase or decrease in prevalence over time. The interesting thing, however, is that much like the stakeholder model, it may change the understanding of a 'firm' or 'business corporation' as an 'institution' for some of us.

From a Green point of view, it is essential that individuals as actors are open for new interpretations of various phenomena. I like here to cite Willis Harman:

"By deliberately changing the internal image of reality, people can change the world" (Willis Harman, from Korten 2001, p. 233)

Institutional change processes then are a matter of how various phenomena are interpreted, understood and manifested by single actors and collectivities of actors:

- An actor's interpretation of a phenomenon among available interpretative options
- naming the phenomenon together with the terminology and language used
- other manifestations of the phenomenon
- accepting interpretation and its manifestations (and thereby increasing the legitimacy of the 'institution') by an increasing number of actors.

Changes in a Green direction are partly driven by public debate together with EU (or national) environmental and development policy and it is interesting to note that there are cultural differences between countries. In Northern Europe, the popularity of Environmental Management Systems among business leaders is higher than in North America. EMS is now gaining acceptance also in public administration.⁵

Returning now to our Political-Economic-Person-assumptions, it should be observed that the initiatives by individuals are essential for changes in an organization to occur. My own university, Mälardalen, became certified in 1999 as one of the first in Europe and essentially as the result of the work of one dedicated person, Christina von Oelreich. Her ideas were eventually accepted by the rector at the time and now in 2007, the sustainability profile in research and education of the university is more or less accepted. An ecological economics undergraduate program started in 1995, suggesting that some preparations have been going on. But a lot remains to be done, of course.

Concluding comments

The kind of institutional ecological economics presented here is but one of the many alternatives to neoclassical economics. At an early stage of my career, I learnt about

alternatives to neoclassical economics. At an early stage of my career, I learnt about institutional economics in the spirit of Thorstein Veblen (Ayres 1964) and I have been part of the Association for Evolutionary Economics (AfEE) and also for some time the European Association for Evolutionary Political Economy. Among more recent institutional economists focusing on environment and development, K. William Kapp (1971, 1976) and Gunnar Myrdal (1978, 1975) have influenced me a lot. Later I have been part of the International Society for Ecological Economics (ISEE) with the journal *Ecological Economics* and the more radical European Society (ESEE).

There are many other schools of thought and associations working for pluralism in economics. This diversity is not unexpected if one accepts the political and ideological nature of any perspective in economics. While some of us see environmental issues as being too low on the political agendas, others look primarily for a social or feministic economics where poverty or gender is the starting point. Hopefully the different associations have something in common and that it will be possible to refer to some main alternatives to the neoclassical perspective.

⁵ Some scholars and other actors question this incorporation of EMS into public administration. Public administration is and should be, they argue, different from business corporations. As part of a dynamic idea of institutional change processes in multiple steps, EMS can be defended even in universities and public agencies.

In my understanding economics is always political economics in the sense that values and ideologies are always present. As has been argued, the dialogue has to be broadened to include theory of science, ideology and institutional arrangements. I hope this view will be shared by many who thereby will accept that in a democracy no group of scholars can claim monopoly based on one single economics perspective.

How can we then move from monopoly for neoclassical economics at so many departments of economics to pluralism and 'paradigm co-existence'? Since neoclassical economists in my own country largely avoid listening to economists with heterodox views, the main strategy must be one of influencing politicians and other actors through public debate. Initiatives such as the *Heterodox Economics Newsletter* and the *Post-Autistic Economics Review* are extremely important just as are articles and books (e.g. Fullbrook 2003, 2004). Textbooks pointing to alternative perspectives are very much needed. Politicians as well as students should be "free to choose" also among competing paradigms.

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⁶ Sweden is the country where the Bank of Sweden's Award in Memory of Alfred Nobel is hosted. Although it is possible to identify one or other relatively open-minded person who have received the price, this institution is essentially part of neoclassical protectionism as I have argued in an article in Dagens Nyheter (2004b).

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