Economics must shift its focus from markets and monetary impacts to the non-monetary perspective to avoid irreversible ecological damage. Professor Emeritus Peter Söderbaum from Mälardalen University proposes a conceptual framework of ecological economics aimed at encouraging sustainable development and strengthening democracy through a political-economics perspective.

**Introduction**

Development trends around the world are unsustainable. It can be argued that mainstream neoclassical economics is part of this problem and that to shift towards sustainability we need to reconsider neoclassical economics. This paper will focus on economics and management science as taught in universities and the school system. It does so because the way economics is taught in education environments legitimises prevalent unsustainable development trends amongst societal actors. Discussing current approaches to economics education forms a basis for developing alternative perspectives in economics.

**Mainstream neoclassical economics as a paradigm and ideological orientation**

Neoclassical economics has become an established and institutionalised paradigm. This paradigm is perhaps best described in introductory textbooks used in university economics teaching for example Gregory Mankiw’s *Economics*. This neoclassical perspective positions individuals and firms as the key actors in the economy, who form a relationship...
in which they are connected in markets for commodities, labour and capital. As consumer, the individual is assumed to maximise their utility of alternative combinations of commodities within the scope of their financial budget constraint. Firms maximise profits in monetary terms and markets are understood mechanistically to balance supply (from firms) and demand (from consumers). Performance at the economic level is measured in GDP-terms and the efficiency of investments in infrastructure, such as energy or roads, is evaluated through a specific kind of cost-benefit analysis (CBA).

This neoclassical paradigm is undoubtedly helpful for some purposes. For example, it is useful for understanding inflation and a possible recession in the economy and to consider alternatives in terms of monetary policy. Furthermore, neoclassical theory and method can be extended to cover environmental issues. Taxes, charges, prohibitions and even ‘markets for pollution permits’ are possible instruments in “neoclassical environmental economics”. However, is this enough to address the big challenges we are facing, such as climate change, biodiversity loss, air pollution, land loss and water pollution? Or do we need a new economics paradigm as an alternative or complement to the neoclassical perspective?

**Ecological economics as paradigm and ideological orientation**

Neoclassical economics is not a neutral paradigm. In economics “values are always with us” to cite Gunnar Myrdal, one of the early winners of the so-called Nobel prize in economics. In economics education and research decisions are taken from a viewpoint where values (or, in my language ‘ideological orientation’) play a role. Tanja von Egan-Krieger refers to the “illusion of value-neutrality”, which she regards as valid for orthodoxy as well as heterodox schools of thought in economics. Neither the neoclassical mainstream nor its alternatives can claim value-neutrality. Instead, we must uncover the values or ideological orientation built into each paradigm and discuss their relevance.

In ideological terms, neoclassical economics can be described as ‘economics for growth in GDP-terms, for profits in business and maximum satisfaction (utility) of the consumer’. This ideological orientation is supported by many citizens, politicians and political parties. The kind of ecological economics proposed in this paper on the other hand can be described as ‘economics for sustainable development’. Our interest is developing a conceptual framework and language for sustainability politics. While sustainable development is often associated with Green political parties and an ambition ‘to Green’ our political economic systems, it is more than that, requiring a fundamental change. That is, while neoclassical economics supports the present political-economic system, sustainable development challenges it.

First, we must define ‘sustainable development’. The concept has been widely discussed and has become institutionalised at the United Nations level. In preparation for the first United Nations conference “on the Human Environment” in Stockholm in 1972, General Secretary Maurice Strong commissioned a report by Barbara Ward and René Dubos entitled *Only One Earth. The Care and Maintenance of a Small Planet.* At that stage, the ‘environment’ rather than ‘sustainable development’ was the key concept. A report from the World Commission on Environment and Development later coined and defined sustainable development in the book *Our Common Future.* It is recommended that our activities and decision-making should have a global perspective, thinking...
of our impact on those living in other parts of the world and future generations. In 2015 the United Nations established no less than 17 Sustainable Development Goals (SDGs) with sub-targets and a 2030 Agenda for Change. While the SDGs allow for GDP-growth (number 8 of the 17 SDGs), the 2030 Agenda can be regarded as a shift in emphasis from monetary concepts and analysis toward multidimensional thinking. The SDGs are underpinned by three considerations:

- Sustainable development and ecological economics should be understood in ethical and ideological terms. The idea is to broaden our views about development.
- Sustainable development is a complex and multi-faceted concept where multidimensional analysis is preferred to one-dimensional analysis in monetary terms.
- Inertia issues, for example path dependence, resilience and irreversibility, are at the heart of sustainability performance analysis.

Sustainable development can then be formulated as “ecological imperatives for public policy”. In 1982, I suggested the following principles for choice in decision situations at the regional level:

1. Alternatives with negative long-run impacts upon living conditions within the region should be avoided,
2. Alternatives with negative long-run impacts in other regions (and globally) should be avoided,
3. Alternatives that involve risks of considerable negative long-run impacts upon living conditions should be avoided,
4. If no alternative remains, research and development or other search activities should be initiated.

As an example, the issue of whether Sweden should build additional nuclear reactors to respond to an increasing demand for energy is currently hotly debated. In this case the above list of imperatives tells us that nuclear energy is unsustainable according to the three first criteria. Negative long-term impacts follow from each step, from mining of uranium, energy production and storage of radioactive material. Nuclear accidents are possible as in the Fukushima disaster in Japan. Current events make clear that war is possible even in Europe and that protection of reactor sites can be a problem. As suggested by point 3 above, a precautionary principle appears relevant. There are other energy sources, such as waterpower, solar energy and wind energy, the impact profiles of which are significantly less negative from a sustainability point of view.

The concepts of paradigm and ‘paradigm coexistence’ in relation to social science

In economics, the concept of a paradigm is attributed to its use in physics and other natural sciences. This conceptualization of a paradigm claims there is only one true paradigm at a time but that there can be a ‘paradigm-shift’ in the sense that the original paradigm is replaced by a new and improved one. The concept of ‘paradigm-shift’ goes back to the writings of Thomas Kuhn and is connected with the ideas that science is neutral. However, an alternative conceptualization sees each paradigm as specific in value or ideological terms, and two or more paradigms connected with different ideological orientations may coexist. They may compete or be regarded as complementary. One paradigm may be dominant.
at a point in time, but this can change, creating a ‘paradigm-shift’ in a different sense.

Even our way of defining or understanding ‘paradigm’ can be reconsidered. Natural sciences rely mainly on the testing of hypotheses in experimental situations. Knowledge should be ‘evidence-based’. While there is a role for this kind of analysis also in social sciences, a limitation to evidence-based research in social science would be dysfunctional. General statements about how all individuals behave, for example that individuals maximise utility, are limiting.

This essay’s ‘paradigm’ is primarily understood as ‘conceptual framework and language’. Testing hypotheses within the scope of a traditional conceptual framework and language may not be enough when new challenges appear, such as climate change, biodiversity loss and pollution of soil, air and water, or in more general terms, sustainability issues. In this situation we may need a new paradigm (or new paradigms) in terms of conceptual framework and language that can help in understanding these issues.

Steps in this direction, that explore new ideas about individuals, organisations and markets beyond those offered in neoclassical economics are outlined in this paper.

An alternative definition of economics

According to a traditional neoclassical view, economics is about “optimal allocation of scarce resources”. Quantification in one-dimensional terms is at the heart of this definition, and the monetary dimension is emphasised. However, this view of economics is but one way of defining the subject. Söderbaum’s 13 definition of economics as “multidimensional management of limited resources in a democratic society”.

Söderbaum’s definition represents a move away from one-dimensional monetary analysis, so-called “monetary reductionism”, toward multidimensional thinking and analysis. Sustainable development is regarded as a multidimensional phenomenon, not easily reduceable to one dimension, monetary or otherwise. There are a range of impacts, and each kind of impact should be understood by its own terms; environmental impacts should be described in environmental terms, health impacts in health terms and social impacts in social terms.

Furthermore, non-monetary impacts are as economical as financial impacts. We are inculcated to think of economics mainly in monetary terms, in which impacts are framed by terms such as ‘cost’ and ‘benefit’, regardless of whether they are monetary and/or non-monetary. As suggested in Table 1 there are ‘non-monetary costs’ and ‘non-monetary benefits’ (‘b’ and ‘d’ respectively) just as there are monetary costs and benefits. The importance of specific impacts and of the combination of expected impacts connected with an alternative is a matter of an actor’s ideological orientation.

TABLE 1: Categories of impacts in impact studies

<table>
<thead>
<tr>
<th>Monetary</th>
<th>Non-monetary</th>
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<tbody>
<tr>
<td>Cost</td>
<td>‘a’</td>
</tr>
<tr>
<td>Benefit</td>
<td>‘c’</td>
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Söderbaum’s 14 definition also suggests a move away from one single way of valuing each impact towards accepting the imperatives of a democratic society. Democracy is about listening to many voices. In a decision situation, competing ideological orientations is usually relevant. There is a choice among ideological orientations just as there is a choice among alternatives. Furthermore, any preference ordering among alternatives considered is conditional upon ideological orientation.

In the neoclassical perspective, ‘democracy’ and ‘ideology’ or ‘ideological orientation’ play a
peripheral role. These words are absent from the glossary and subject index in Gregory Mankiw’s previously mentioned textbook. 15

**Ideological orientation, ideology and democracy as key concepts**

The concepts of ‘ideology’ and ‘ideological orientation’ may appear foreign to economists and economics. As part of a division of labour when university research and education is concerned, democracy and ideology may be regarded as belonging to political science. Nevertheless, economics is a political science. The idea of economics as neutral in value terms has been abandoned. 16

Not all economists have been reluctant to use the word ‘ideology’. I have found three who regard ideology as an essential and unavoidable concept in economics. Joan Robinson 17 points to the similarity between the ideology built into the discipline of economics and the dominant ideology in public discourse:

> In the general mass of notions and sentiments that make up an ideology those concerned with economic life play a large part, and economics itself (that is the subject as it is taught in universities and evening classes and pronounced upon in leading articles) has always been partly a vehicle for the ruling ideology of each period as well as partly a method of scientific investigation.

In his book on institutional change, Douglass North 18 defines ideology in the following way:

> By ideology I mean the subjective perceptions (models, theories) all people possess to explain the world around them. Whether at the microlevel of individual relationships or at the macrolevel of organised ideologies providing integrated explanations of the past and the present, such as communism or religion, the theories individuals construct are colored by normative views of how the world should be organised.

The third example is Thomas Piketty’s book *Capital and Ideology* where ideology is defined as follows: 19

I use “ideology” in a positive and constructive sense to refer to a set of a priori plausible ideas and discourses describing how society should be structured. An ideology has social, economic and political dimensions. It is an attempt to respond to a broad set of questions concerning the desirable or ideal organisation of society. Given the complexity of the issues, it should be obvious that no ideology could ever command full and total assent: ideological conflict and disagreement are inherent in the very notion of ideology. Nevertheless, every society must attempt to answer questions about how it should be organised, usually on the basis of its own historical experience but sometimes also on the experiences of other societies. Individuals will usually also feel called on to form opinions of their own on these fundamental existential issues, however vague or unsatisfactory they may be.

Ideology can be understood as a means-ends philosophy for individuals as well as for collectives, such as organisations of different kinds, including political parties. Ideologies are about “fundamental existential issues”, as mentioned by Piketty, but also have a role in everyday decision-making. When referring to such commonplace situations for example walking on the street, reference to ‘ideological orientation’ is preferable to ‘ideology’.

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15. Mankiw, 2011
16. Actually, “political economics” was the terminology used until about 1870. The attempt to present economics in more neutral terms is here regarded as a failure.
17. Robinson, 1962, p. 1
18. North, 1992, p. 23, italics in original
19. Piketty, 2020, pp. 3–4
A proposed conceptual framework and language

Hence, economics is always ‘political economics’. The actors or agents in the economy are political actors and they are part of a democratic society. Therefore, an individual is referred to as a Political-economic Person (PEP) and an organisation as a Political-economic Organisation (PEO).

- A political-economic person is an actor guided by their ideological orientation
- A political-economic organisation is an actor guided by its ideological orientation or mission

Reference to ideological orientation or mission means that broader ethical or ideological issues are potentially part of the picture. Simplifications that all individuals are exclusively concerned about their income in monetary terms and purchasing power while organisations are exclusively focused on monetary profits are thus downplayed.20 We are not looking for statements about how all individuals (organisations) behave but rather differences in behaviour between actors and within an actor category.21 Our interest in sustainability furthermore means that we want to know how the behaviour of a specific actor changes over time. Can economic analysis be carried out in ways that make individuals and organisations seriously consider ‘social responsibility’ or ‘sustainable development’?

In a functioning democracy, individuals and organisations are encouraged to participate in public dialogue. As Mary Clark22 argued, these actors do not react mechanistically like billiard balls to government policy instruments, rather they participate as actors and potential policymakers. The behaviour of PEPs and PEOs is a matter of social psychology and cultural studies with concepts such as role, relationship, identity, cognition, affection, attitude, trust, goodwill, dissonance etc. Such concepts are mainly missing from neoclassical economics textbooks.

PEPs and PEOs interact through social and physical relationships and networks, markets being a subcategory of relationships and networks. The functioning of networks is often a matter of trust. Actor A may trust another actor B (or the network of which B is part). Such a positive attitude may influence the initiation and fulfilment of transactions between A and B.23 An actor can participate in a few networks, which can hinder or facilitate desired performance following the actor’s ideological orientation or mission.

Network thinking implies that the border between an individual (organisation) and their environment becomes less clear or more uncertain than in neoclassical theory and conventional accounting practices. No Business is an Island24 is the thought-provoking title of a book that encapsulates the idea that ideological orientation and consequent behaviour of an actor A is not only a matter of exploitation but may include a willingness to support other actors or networks B, C and D.

The emphasis in neoclassical economics upon optimal solutions concerning private and public investment projects is replaced in the proposed framework with an ambition to illuminate a decision situation in a many-sided way concerning ideological orientation, alternatives of choice and impacts—such a view being more compatible with democracy. Looking for one optimal solution means that only one ideological orientation is considered and can, therefore, be considered as a case of manipulation. Why should all politicians and other actors rely on one ideological orientation such as the one built into CBA?

20. Monetary or financial analysis and calculation is certainly still important in our present political-economic system. Such analysis should, however, be regarded as ‘partial economic analysis’. Non-monetary impacts are other parts of our multidimensional idea of economics.
22. Clark, 2002, pp. 6--8
23. Ford, 1990
24. Håkansson and Snehota, 2017
In an analysis that is ‘many-sided’ in the above sense, conclusions will be conditional in relation to each ideological orientation considered. The order of preference among alternatives considered will differ, for example, between an ideology emphasising traditional monetary criteria (such as GDP growth and profits in business) and ideologies aiming at sustainability.

The impacts of each alternative are described in multidimensional profile terms, and decision-making (or an actor’s position at a point in time about an issue) is regarded as ‘matching’ their specific ideological orientation with the expected (multidimensional) impact profile of each alternative considered. An alternative may be more or less compatible with the ideological orientation of an actor.

Decision-making is furthermore regarded as a multiple-stage process. As previously argued, considering the different kinds of inertia, irreversibility included, is essential when planning for sustainability. Will implementing one alternative lead to irreversible losses in future living conditions? Are there alternatives that are instead connected with minor degradation of the future natural resource base or perhaps improvements in future conditions?

Some approaches are more compatible with democracy and sustainable development. Positional Analysis (PA)\(^{25}\) builds on the conceptual framework already presented and can broadly be described as ideologically open and multidimensional (‘e’ in Table 2), while neoclassical CBA is ideologically closed and one-dimensional (category ‘h’ in Table 2). Other approaches than these two mentioned above are relevant in sustainability studies, for example Environmental Impact Statements (EIS) and Social Impact Statements (SIE). They are both multidimensional, but each is limited to a specific kind of impact.

### TABLE 2: Classification of approaches to decision-making

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<tr>
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<th>Ideologically open</th>
<th>Ideologically closed</th>
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<tr>
<td>Multi-dimensional</td>
<td>‘e’</td>
<td>‘f’</td>
</tr>
<tr>
<td>One-dimensional</td>
<td>‘g’</td>
<td>‘h’</td>
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Positional Analysis\(^{26}\) has mainly been applied at the public level, but is also relevant for private decisions at the levels of individuals, groups and organisations.

The behaviour of individuals and organisations is often said to be accepted by many and institutionalised. The concept of institution relates to habits of thought and habits of behaviour. Inertia is at the heart of institutions, but there is also room for more or less radical institutional change. Mainstream economists have accepted mainly the existing institutional framework and the political-economic system just as they support the mainstream economic paradigm. They may also support modifications of mainstream institutions. However, radical institutional change must be considered in relation to climate change and other sustainability challenges.

The business corporation as an institution exists and is supported in nations such as Sweden or in the European Union (EU) and also by actors belonging to the establishment. Nevertheless, even corporations may fail. In *The Social Costs of Private Enterprise*,\(^{27}\) William Kapp warned of the tendencies to limit attention to monetary dimension. In an article,\(^{28}\) he later argued as follows:

Thus, a system of decision-making, operating in accordance with the principle of investment for profit, cannot be expected to proceed in any other way but to try to reduce its costs whenever possible by shifting them to the shoulders of others or to society at large.
Others have followed, for instance Joel Bakan\textsuperscript{29} wrote the book \textit{The Corporation}. The path\textit{ological pursuit of profit and power} arguing that all business corporations are dangerous entities. However, here I take a step back to suggest that corporations need to be scrutinised concerning climate change and other sustainability issues. Accounting systems limited to monetary impacts are no longer enough.\textsuperscript{30}

**Examples of institutional challenges**

Institutions in the sense of habits of thought and habits of behaviour, change over time. At issue is if changes in a specific domain represent improvements or degradation from a sustainability point of view. Actors may together institutionalise specific standardisation schemes, for example Corporate Social Responsibility or Fair Trade. Such systems have been active for some time with some—but not enough progress—made. We need to go further, to consider government intervention in terms of laws regulating business organisations at national and international levels. Any law or other regulation that limits performance indicators to the monetary dimension has to be reconsidered.

University economics and management science departments are critical in paving the way for new laws regulating business. Yet, actors inside and outside the university defend business-as-usual and maintain the present monopoly for neoclassical economics. Ideas of education and research as being neutral, and objective are comforting but what we need now is disruption in the form of an open analysis compatible with democracy. Organisations for heterodox economics and transdisciplinary approaches are needed. Each university needs to present its response to the problem of climate change and other sustainability issues.

The “Bank of Sweden Prize in Economics in Memory of Alfred Nobel” is a related field where institutional change is also needed. This award is not part of the original Nobel prizes but is financed separately by the Bank of Sweden. In recent years the award has become an instrument defending and strengthening the neoclassical monopoly. While this argument is undoubtedly a subjective judgement, it simply reiterates my point that “values are always with us”.

Political-economic systems are not limited to the national level. Existing global institutions, such as the World Bank, International Monetary Fund and the World Trade Organisation must be rethought and the neoclassical doctrines that these organizations are based on must be scrutinized. The so-called Bridgetown Initiative advocates this in the present 2022 climate change negotiations of COP27. Financial support to make this change is undoubtedly needed.

**Concluding comments on sustainability politics**

In this essay, a redefinition of economics has been proposed as well as a few concepts. Individuals are understood as political economic persons, organisations as political-economic organisations and so on. The overriding idea is to use a conceptual framework that places individuals (organisations) in a position to act. We need individuals who are concerned and engaged in democracy and society who can take even little steps away from the neoclassical understanding of the behaviour of individuals.

Positional Analysis has similarly been suggested as an approach to decision-making that is more compatible with democracy. The concepts of ideology and ideological orientation need to be brought into economics. The central role of various forms of inertia (path dependence, irreversibility etc.) in relation to sustainability has been stressed. We need to move economics from its focus on markets and monetary impacts where all kinds

\textsuperscript{29} Bakan, 2004  
\textsuperscript{30} Bebbington et al., 2007
of impacts can be traded against each other, to the non-monetary perspective, where issues of irreversibility become visible.

We now need “action” rather than “talk” concerning climate change and other sustainability challenges. But to make change happen we need to shift the focus toward issues of paradigm and ideology in a way that is multidimensional. We have permitted neoclassical economics and neoliberalism as ideology to dominate. That a specific version of a market perspective dominates cannot be allowed to continue in a democratic society. Other ideological orientations must be represented.

Will conceptual struggles as outlined here move us away from unsustainable development trends? Together these concepts and ideas represent access to a different language in economics as part of a pluralist perspective. It can contribute to a discourse that shapes mainstream perspectives to acknowledge sustainability issues. In a democracy this is an issue for continued dialogue.

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