

CHAPTER 1

ECONOMICS AND ECOLOGICAL POLICY

1 ECONOMICS AND THE PROBLEM OF SUSTAINABILITY

In a certain respect, industrial economies are performing very well nowadays. Economic growth is in many Western countries about 3 %. Despite this (monetary) success story, the ecological performance of our economies is worrisome. Pezzey recapitulated the general ecological (and social) tendencies of ongoing industrialisation as follows:

- a) rapid depletion of renewable natural resources (e.g. forests, fish, land and sea mammals);
- b) rapid depletion of known reserves of non-renewable energy and minerals, although new discoveries and new extraction techniques have *so far* avoided any decline in availability;
- c) rapid depletion of non-renewable stocks of genetic diversity (see Wilson 1988) and soil;
- d) severe problems of local, transient pollution in industrialising countries;
- e) steadily growing problems of cumulative pollution, both regional and global, principally acid rain, ozone depletion, and the
- f) accumulation of greenhouse gases such as CO₂ which are likely to cause global warming (Cline 1991);
- g) wide, and recently growing, inequalities between rich and poor nations (UNDP 1992); and greatly increased rates of change in most areas of life [...] (Pezzey 1992, 330-331).

A growing concern about these ecological tendencies found expression in the concept “sustainability”. The concept came into existence in the eighties. It cropped up for the first time in the document *World Conservation Strategy; Living Resource Conservation for Sustainable Development* that was published by a group of private environmental organisations, the International Union for Conservation of Nature and Natural Resources (Nelissen *et al.* 1997, 261-263). It got great political power of expression on a national and global level since its incorporation in the Brundtland report *Our Common Future* (1987). In this report the concept “sustainable development” is defined as development that

meets the needs of the present without compromising the ability of future generations to meet their own needs.

Since its introduction in the Brundtland report, many discussions have taken place concerning the precise meaning of sustainable development. In the report itself development is understood as a linear process of economic growth.

We see [...] the possibility for a new era of economic growth, one that must be based on policies that sustain and expand the environmental resource base. And we believe such growth to be absolutely essential to relieve the great poverty that is deepening in much of the developing world (WCED 1987, 1).

This interpretation dominates prevailing discourse. Critics have labelled this interpretation as an illustration that the Western world succeeded once again in presenting its cultural paradigm as a model for the whole world (Peeters 1997, 53). In this book, I start from an interpretation of sustainability that is more abstract than the Brundtland interpretation. I interpret sustainability as a “guiding idea” reflecting our striving for intergenerational justice in the way we go about with the ecological dimensions of earthly life. The concept “guiding idea” refers to an ideal that guides our political actions, but that remains without concrete, static content. Its ever provisional, concrete meaning takes shape in historical, political processes. The concept of intergenerational justice refers to our responsibility with regard to future generations. We are responsible for the ecological impacts of our present economic activities on the lives of future generations. We should make sure that these ecological impacts are compatible with the idea of intergenerational justice¹.

Sustainability as responsibility towards future generations presumes that we are able to manage the ecological performance of our economies. This interpretation of sustainability as “responsibility presupposing manageability” offers those who prefer to forget about sustainability as soon as possible an easy shot. They can argue that if the ecological performance of our economies shows to be unmanageable, there is no further reason to feel responsible about it. I consider this as too easy a way of reasoning. Present-day ecological problems are no natural problems, as are (some) earthquakes or impacts of meteorites. Present-day ecological problems are caused by humans. This human origin suffices for justifying human responsibility. And if we experience the ecological performance of our economies as unmanageable, our first task as responsible humans then consists of trying to make it manageable again.

The list of general ecological tendencies mentioned above does not show much evidence of the ecological manageability of our economies. On the contrary, the tension between these general tendencies and the idea of sustainability is growing, despite increasing political and technological efforts to avert these tendencies. This latter conclusion gets reaffirmed again and again. Consider, for instance, the results of the Earth Summit in Rio (1992) and of the Kyoto Summit (1997)

¹ This more abstract interpretation resembles the concept “sustainable future” proposed by the Dutch Committee for Long-Term Environmental Policy in its publication *The environment. Towards a Sustainable Future*. Consider the following quotation: ‘ [...] a sustainable future is a basic principle; a guiding idea concerning a desirable future; a notion to describe the will of existing people to take care for the future of new generations. The concept of sustainable future has ethic aspects; it emphasizes the need for responsibility of the present generation for the world of future generations’ (DCLTEP 1994).

(www.oneworld.org/guides/kyoto/front.html). In Rio, rich industrial countries agreed in principle to stabilise emissions of greenhouse gases at 1990 levels by the year 2010. This agreement – though insufficient according to the best scientific understanding – was, however, non-binding. In the period between the Earth Summit and the Kyoto Summit the level of greenhouse gas emissions has actually risen in most of the rich nations. In Kyoto, a division emerged between the US and the EU. The US stated that it would be more effective for rich nations to invest in new technology in developing countries in order to cut overall global emission. The Europeans accused the US of trying to wriggle out of its responsibility to put its own house in order. Finally, the North has committed itself to *some real* reductions. If we compare this commitment to the results mentioned in the Environmental Balance Sheet 1998 of the Netherlands' National Institute of Public Health and the Environment, possible hope soon gets lost (www.milieubalans.rivm.nl/inl_samen/sheet.html).

Growth in production and consumption has led to higher energy use, greater mobility and more waste. [...] CO₂ emissions increased by about 2% in 1997. [...] The reduction targets for greenhouse gas emissions, acidification and eutrophication will not be met even after implementation of the measures contained in the National Environmental Policy Plan 3 (NEPP3). These measures cannot fully compensate for the increasing environmental burden of the growing economy. [...]

This conclusion, namely that we turn out not to be able to manage the ecological performance of our economies so far, burdens economic science with a special task. Economics, as the science that has economies as its domain of research, should investigate *reasons for the unmanageability* of the ecological performance of present economies. A science that is not able to provide *reasons*, cannot be expected to inspire fundamental solutions. It can at most contribute to solutions by accident.

We can recapitulate the ecological performance of our economies as showing a growing use of energy, a decrease in bio-diversity and a growing appeal on the assimilative capacity of ecological systems. Such performance causes problems that are often global in space, long-term in time and characterised by many uncertainties and possible irreversibilities. This performance turns out to be characteristic of our industrial era. Ongoing industrialisation involves an ever more roundabout production structure and an ever growing circulation velocity of commodities. The former implies that the means by which final demand requirements are met become more indirect, that the scale of the production chain of all kinds of commodities increases (Common 1988, 25). It also implies that through the expansion of intercontinental trade (and developments in information technology; MD) production chains combine (resource, knowledge and capital) inputs of all over the world (Pezzey 1992, 328-329). Economic activities represent global rather than local dimensions. The latter implies that the lifetime of many commodities becomes ever shorter. Both tendencies of ongoing industrialisation ask for ever increasing inputs of material and energetic resources and for continuous technological innovation in order to overcome problems of exhaustion and pollution (as, for example, the replacement of coal for wood, of gas for oil, and of nuclear energy for gas, oil or coal). Given this statement, namely that typical characteristics of present-day

CHAPTER 2

THE ECONOMIC AND THE POLITICAL SPHERE

In this book I intend to develop norms for an ecologically successful economics. By an ecologically successful economics I mean a theory that has our economies as its domain of research and that is influential in the political arena in the sense that it helps political actors to find effective solutions for the problem of sustainability. My research project thus implicitly makes a distinction between the economic and the political sphere. The economic sphere is the domain *about which* economics is meant to provide us with knowledge. The political sphere is the domain *in which* economics is meant to be an influential factor. In the course of my research project I noticed that, within the community of economists, there is some disagreement about whether it is useful to distinguish between the political and the economic sphere or, in other words, to distinguish between economic and political (aspects of) human actions. In this chapter I will argue that this distinction can and should be made.

In order to explain that this distinction *can* be made, I will reflect, in section 1, on economic and political theories as conceptual constructs. Considering economic and political theories as conceptual constructs implies that they are perspectivistic (i.e., value-laden) descriptions of human reality, a multiplicity of theories is possible, and it depends on the conceptual construct used whether the distinction between the economic and the political sphere is deemed significant. In section 2, I will present four possible conceptual constructs of the economic sphere. These conceptual constructs can be discerned in the history of economic theory. (I count both Weber's and Neurath's economic writings as being part of this history.)

In order to defend that this distinction *should* be made, I will start with a presentation of Buchanan's Public Choice theory (section 3). Public Choice theory is a political theory originating from an extension of economics to the political sphere. This implies that Buchanan recognises the existence of both a political and an economic sphere, but considers the rationality of actions occurring in both spheres as similar. In other words, Buchanan's conceptual construct of the political sphere is based on the opinion that it is not very significant to make a distinction between the rationality of human interactions within the political and the economic sphere. This opinion gives, however, rise to a redefinition of typically economic and typically political phenomena. The former are, henceforth, interpreted as voluntary and the latter as involuntary interactions. In section 4, I will present deliberative democracy as an alternative political theory. In section 5, I will argue that an interpretation of

the political sphere in terms of a deliberative democracy is better equipped to deal with the political objective of “sustainability” than is Buchanan’s Public Choice theory.

1 ECONOMIC AND POLITICAL THEORIES AS CONCEPTUAL CONSTRUCTS

In this section, I will argue that economic and political theories are conceptual constructs. This statement implies that we cannot conceptually circumvent the gap between spheres in reality on the one hand and economic or political theories on the other, economic and political theories are not and cannot be neutral, and different economic or political theories referring to the same economic or political sphere are possible. Max Weber and Otto Neurath inspired my thinking over the nature of economic and political theories as social constructs. They both provided us with a thorough analysis of the methodologies of the (social) sciences¹. Despite the differences with respect to their position in the philosophy of science tradition (and their political temper), they agree that social theories cannot be but conceptual constructs.

1.1 *Weber: Social Sciences as Ideal-Typical Conceptual Constructs*

Weber is both a social scientist and a methodologist of the social sciences. As a methodologist, he strongly objects to Comte’s positivist idea that the social sciences do not differ fundamentally from the natural sciences. In his view, the fact that the domain of the social sciences consists of cultural phenomena urges the social scientist to fall back on a different methodology. The term “ideal type” is an essential concept for this methodology. In the following paragraphs, I will briefly explain Weber’s basic ideas.

To start with, Weber states that it is the specificity of the domain of investigation of the social sciences that urges us to understand social sciences as social constructs. According to Weber, the subject matter of the social sciences is always part of a *cultural* reality (MSS 76). Cultural reality consists of cultural phenomena, i.e. meaningful phenomena or phenomena that are related to value ideas. Following Rickert, Weber understands this cultural reality as endlessly complex². It

presents an infinite multiplicity of successively and coexistently emerging and disappearing events, both “within” and “outside” ourselves. The absolute infinitude of this multiplicity is seen to remain undiminished even when our attention is focused on a single “object”, for instance, a concrete act of exchange, as soon as we seriously attempt an exhaustive description of *all* the individual components of this “individual phenomenon”, to say nothing of explaining it causally (MSS 72).

¹ Within the community of economists, there turns out to exist some disagreement about whether economics is a social science or not. I consider economics as one of the social sciences.

² For a more extensive comparison between the thoughts of Rickert and Weber, see Rein de Wilde (1989, 114-124).

The finite human mind cannot tackle this infinite reality without carving a finite portion out of it. The criterion which is used in the social sciences to select this segment is a particular value idea. Whether a phenomenon is of a certain social science type does not depend so much on its objective characteristics, but on its value-relevance. This implies that the meaningfulness of certain empirical data is always presupposed.

We cannot discover, however, what is meaningful to us by means of a “presuppositionless” investigation of empirical data. Rather perception of its meaningfulness to us is the presupposition of its becoming an *object* of investigation (MSS 76).

To recapitulate, a specific value idea makes us perceive some phenomena as meaningful. The set of phenomena that take their meaning from this particular value makes up the subject matter of a social science. Our value ideas thus construct the domain of a social science. Social-sciences are value-laden perspectives on human reality. Whether we distinguish economic from political science depends on whether distinct value ideas are deemed significant to constitute a political and an economic sphere respectively.

Values do, further, not only define the subject matter of the social sciences, but also the concepts and laws that become the instruments of scientific research, and of whole theories. To express the value-relatedness of these theoretical instruments, Weber introduces the term “ideal type”.

An ideal type is formed by the one-sided *accentuation* of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent *concrete individual* phenomena, which are arranged according to those one-sidedly emphasized viewpoints into a unified *analytical* construct (*Gedankenbild*) (MSS 90).

Since ideal-types are arrived at by the accentuation of certain elements of reality which seem important with respect to a specific point of view, they cannot be understood as a reflection of reality (MSS 90-93). They are not *true*: they do not simply correspond to particular empirical phenomena. They are a *logical* ideal, i.e., a well defined analytical construct, a limiting concept which allows us to compare reality with it. Ideal-types have a heuristic and expository function. Comparison between the ideal-type and reality, the estimation of similarities and discrepancies, can make the characteristic features of empirical phenomena clear and understandable. An ideal-type is not a description of reality but

aims to give unambiguous means of expression to such a description. [...] It is no hypothesis but it offers guidance to the construction of hypotheses (MSS 90).

To recapitulate, social-scientific concepts and laws or, in short, social-scientific theories are ideal-typical. This implies that they are not neutral. Not only *science* – in the sense of a particular, for instance, economic or political discipline -, but particular scientific *theories* – in the sense of particular disciplinary paradigms (to use Kuhn’s terminology) - are non-neutral social constructs. Economic and political

CHAPTER 3

THE INSTITUTIONAL AND ECOLOGICAL DIMENSION OF AN ECONOMY

In the previous chapter, I argued for *deliberative democracy* as a suitable conceptual construct of the *political* sphere in order to deal with the problem of sustainability. The normative ideal of a deliberative democracy embroiders on a distinction between economic and political actions. It presumes a typically economic (i.e., instrumental) and a typically political (i.e., communicative) rationality, typically economic and typically political products (i.e., commodities and institutions respectively), and typically economic and political decision units. In this chapter, on the contrary, I will reflect on a suitable conceptual construct of the *economic* sphere in order to deal with the problem of sustainability.

In the introductory chapter 1, I argued that economics should investigate *reasons* for the present unmanageability of the ecological performance of industrial economies. This statement is still too abstract. For a politically relevant economics should not investigate whatever kind of reasons, but reasons that can be influenced, transformed or removed through political action. Since institutions are the domain of political action, this implies that it should look for *institutional reasons*. In other words, the nature of my research question prompts for an institutional perspective on the economic sphere. Such institutional interpretation accepts the distinctions between (the rationality of) economic and political action underlying the normative ideal of a deliberative democracy, but it concentrates on “economic institutions” as the entities that make economic rationality as well as economic products and economic decision units concrete.

The statement that it is economic institutions that make economic action concrete implies that it is economic institutions that define the ecological performance of economic action. This latter implication expresses the conviction that an internal relationship exists between the ecological performance of an economy and its institutional organisation. In order to found this conviction, I will, in section 1, deal extensively with the concept “institution” in general. I will propose an interpretation of the concept that considers it as one dimension, namely the symbolic dimension, of human action. The other dimension of human action consists of its material (or physical or ecological) *substratum*. This interpretation of institutions allows us to understand (economic and other) actions as phenomena that unavoidably consist of

both a symbolic and an ecological dimension. In section 2, I will concentrate on *economic* institutions and I will illustrate the idea that the ecological performance of an economy is internally connected to its institutional organisation. I will, further, argue that, in order to understand this internal connection, we need insights into the institutional whole of an economy. This institutional whole can be interpreted in a classificatory or a hierarchical way.

1 INSTITUTIONS

The term “institution” is a concept with many senses. Economics, political science, history, sociology and philosophy each have their own interpretation of the concept. In this section I will, first, propose a definition of an institution that is in line with its use in the tradition of institutional economics. Veblen and Commons are two important originators of this tradition; Neale is a prominent present-day representative. For that reason, their interpretations of the concept “institution” function as starting points. Since Bromley, whose theoretical work is the subject matter of chapter 7 and 8, also belongs to this same tradition, his interpretation will be another point of reference. The definition I propose is so constructed that it allows us to distinguish between economic and other institutions, and to consider of an economy as a sphere in human reality of which its ecological performance is the counterpart of its institutional organisation. The latter part of this statement will be illustrated in section 2.

Second, I will enlarge on the way institutions come about. This explanation will enforce Arendt’s statement (see section 4.2 in chapter 2) that one cannot characterise a particular “rationality” with which to grasp the coming into existence of institutions. Institutions are creative, unpredictable and irreversible events. They have no single author. They are, nevertheless, the (often unintended) result of intentional interaction.

Third, I will deal with the nature of institutions as both enabling and restricting. This nature holds in a double sense: In one sense, institutions that restrict one party enable another party. In another sense, individuals are only able to act thanks to institutions that condition the form of their actions. This is another way to say that absolute freedom does not exist. Freedom is always relative to rules that provide actions with meaning.

Finally, I will reflect on the nature of institutions as “public facts”. Institutions are public facts in the sense that they result from political action and in the sense that they are valid for all members of a political community. I introduce the concept “public fact” to distinguish institutions from “public goods”. (The relevance of this distinction will become more clear in section 2). Institutions as “public facts” are political entities, while “public goods” are economic entities.

1.1 Institutions as the Symbolic Dimension of Action

Veblen defines institutions as

prevalent habits of thought with respect to particular relations and particular functions of the individual and of the community (Veblen 1965, 190).

According to Commons, an institution is

collective action in control of individual action (Commons 1934, 1).

Neale's understanding of institutions comes close to a sociological definition. According to Neale, an institution is identified by three characteristics (Neale 1987, 1182-1185). First, there are a number of people doing. The people doing can be seen doing; their actions can be observed empirically. Second, there are rules. From the observation of actions, an analyst can construct testable rules of regularity. By ordering actions into repetitive event sequences, an analyst can state that

in such-and-such a kind of situation this person will do thus-and-such and another will do thus-and-so, with some variation in the detail and style with which it is done (Neale 1987, 1182).

Third, there are folk views. Neale notes that observing a certain regularity in people's actions does not yet imply understanding their actions. Knowing the rules is insufficient for understanding, i.e. knowing when to participate and being able to explain why one is participating. Knowing the rules is, therefore, insufficient for identifying institutions.

Consider how easy it would be to confuse dancing for fun at a party, dancing for rain in a religious ceremony, and dancing for money on the evidence of the dancing alone (Neale 1987, 1183).

Folk views provide the information needed to participate intelligently in the activities of society. Folk views justify the activities or explain why they are going on, how they are related, what is thought important and what unimportant in the patterns of regularity. Folk views, Neale adds, can also be discovered by observation, but here the ear is the relevant instrument. The analyst has to ask questions and listen to the answers in order to "observe" folk views. These answers provide us with the ideas of a culture that constitute interpretations of events and explanations of the world.

After this identification of the three characteristics of institutions, Neale defines an institution as a grouping of situations in accordance with the organising ideas of the folk view. A situation is the total relevant context in which a participant in a society finds himself at any moment. It includes the social rules and the cultural folk views as well as the physical or natural environment. The relevant context is this whole environment *as perceived by the participants*. The perception of the total context is defined by the folk view of relevancy, i.e. ideas of cause and effect and of decency and morality.

Bromley's definition of institutions remains close to Commons' interpretation. Bromley distinguishes two classes of institutions: conventions and rules or entitlements (Bromley 1989, 41-43).

A *convention* is a regularity in human behavior in which everyone prefers to conform to R [i.e., the regularity in question; MD] on the expectation that all others will also