Abstract Economic versus ecological world view – ontology as reality blinder

Standard economics has “discovered” the environment as resource prices were roaring and disposal cost skyrocketing, turning the environment into a significant cost factor. Other standard economists were driven by a serious concern about the environment, but both groups shared the same economic world view For the problems perceived, the analysis of their causal factors and the policy recom-mendations offered how to solve them, the respective world view or pre-analytic vision is decisive. The elements constituting a world view are its ontology including an anthropology, its epistemology, and axiology including a societal vision, the latter comprising political ecology and political economy.

In a nutshell, for environmental economics as a branch of neoclassical economics , the axiology is an utilitarian one with values reducible to exchange values, the anthropology one of self-centred individuals, the epistemology one of science-cum-technology confident positivism and trust in models, and the societal vision one of free market society. Only the ontology is different between neoclassical and environmental economics (although of course in each of the schools of thought discussed here individual variations occur). For ecological economics, the divide is broader: not only are the ontologies different, there is scepticism regarding the unlimited possibilities of science and technology, uncertainty is considered omnipresent and an empirical foundation is considered crucial, humans are perceived as multi-facetted, social beings, and non-instrumental values are emphasised. As the “science and management of sustainability”, ecological economics includes a societal vision of intra- and intergenerational justice, and of environmental limitations to economic activities (WCED 1987). However, as the most fundamental demarcation line between environmental and ecological economics is at the ontological level. For environmental economists, “internalising external effects” is the rule of the game (as opposed to the opposite view of ecological economists), thus turning the environment into a part of the economic system. This ontology and its accompanying axiology determine the “solutions” developed: no limitation to growth but trust in technology and substitutability, internalising cost to correct market failures instead of recognising market system failures, efficiency instead of sufficiency, decoupling instead of capping. Without challenging the ontology the dedication to growth will not be overcome. Such an ontology ‘dematerialises’ the world to the point that natural laws governing the flow of matter and energy seem to be of limited relevance, as the subject of interest is an abstract one, money, and not a physical process. On the other hand, if nature is a part of the econo-my, economic ‘laws’ apply to nature as well, like value increase with scarcity, the rule of de-creasing marginal benefits or increasing demand inducing sufficient supply. Natural laws are valid, but not directly linked to the economic process, and can be neglected without overly simplifying the system description. This difference, and the fact that in standard economic models all processes are potentially reversible may be the reason that they do not necessarily feel the same sense of urgency in combating environmental degradation including climate change as people with a different ontology do: there is no point of no return.

This requires a rethinking of the very basics of economic theory and its underlying world view, including insights from physics (thermodynamics replacing mechanics), psychology (homo socialis replacing homo economicus), ecology (essential instead of substitutable), sociology (group processes instead of methodological individualism), and so forth. Current attempts in economics to accommodate such insights by modifying some “upper layers” of theory while leaving the basic models unchanged are desperate attempts to reconcile theory and a reality which makes itself felt in a way that it can no longer be ignored, and cannot but fail. Alternatively, from an ecological economics ontology it follows that economic laws do not necessarily apply to nature (the abundant

can be more valuable than the scarce, demand does not trigger supply, etc.). Production processes are essentially irreversible mechanical, physico-chemical and biological processes under the direct rule of the laws of nature, including thermodynamics. Thus neither truly circular flows are possible, nor unlimited efficiency increases; limiting environmental damage requires limiting entropy generation. Future resource scarcity is a real threat, as technology – for all its merits – cannot escape the limits set by the laws of nature.

Even with shared ambitions and values – like safeguarding the environment – the two worldviews determine diverging and often mutually exclusive policy recommendations. Nonetheless, although the discourses are distinct, and in the end mutually exclusive, there are some overlaps. Many of the components of a green economy have long been demanded by environment and development NGOs supporting post-growth policies – for instance the improvement of energy and resource efficiency, with ecological tax reforms and the abolishment of environmentally harmful and socially unnecessary subsidies besides standards, quota etc., more recycling, and a transition to renewable energies in industrial as well as in so-called developing countries. However, these partial overlaps should not lead to the misperception that the world views do not matter, or the objectives emerging from them were identical. For instance, while under an environmental economics world view economic instruments are an element of the economic sphere, designed to support market functioning, in an ecological economics perspective they are but policy instruments, i.e. elements of the social sphere. Their purpose is not internalisation of social and environmental damage into the system to let the market find a new equilibrium providing a welfare optimum. Instead they are designed as political framework conditions to change human behaviour and the development trajectory of the economic system. Their level is determined according to their effectiveness as incentives, not based on the market value of nature as part of the natural capital stock, and they are no silver bullets but one element of an effective policy mix, together with norms, standards, laws, and other formal and informal institutions.

This is the situation when a “paradigm shift” (Kuhn) seems to be in the making – however, so far a coherent alternative, a conceptual and theoretical base for degrowth philosophies and strategies, is only slowly emerging. Accelerating this process is a necessary condition for cultural hegemony and thus for sufficient political impact to reverse the current development trajectory.