Environmental Ethics and Environmental Politics

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Many critical contemporaries believe that our technical and industrial civilisation has now reached a turning point. For quite some time now, signs have been multiplying that the further progress of the modern world will be determined less by the exploitation of natural resources and more by the confrontation of modern societies with hazards they themselves have generated through their technology and industry. The ecology crisis has shown that we can no longer continue to pursue the paradigm of technological and industrial progress, for if we did, its dangers would grow more critical as fast as it helps us to control the parameters of human existence.

We have now reached a state in our social history 'at which the hazards generated so far along the traditional path of our industrial society begin to preponderate. Consequently, the question arises whether this development has its own inherent limitations, and we are confronted with the need to re-evaluate the standards thus far attained (with regard to responsibility, security, control, damage limitation, and the allocation of damage sequels) in respect of their potential dangers'. To be sure, whether or not such efforts are successful depends on the extent to which the dynamism of the unbridled productive forces of modernity can be exploited without giving rise to a destructive confrontation between society and nature. Any approach which describes the safeguarding of progress and our future merely in terms of political or economic planning, decision-making, and design is doomed. Left to their own devices, technology, science, and the economy are no longer able to manage the amount of control over nature that has been attained. Quite obviously, there are things which are beyond technical explanation, economic accounting, and political control, which modern societies may dismiss only at the peril of losing their future. This being so, we need a new socio-cultural concept in which 'progress' counts for rather more than one-dimensional improvement in the functionality and efficiency of societal subsystems.

It is just such a new definition incorporating politically binding targets that has been urged for years in the debate about environmental ethics. Meanwhile, this debate has progressed beyond the stage of formulating ethical approaches in environmental thinking such as, for instance, anthropocen-

trism, pathocentrism, or biocentrism. Nowadays, the focus is on the formulation of eco-ethology criteria to serve as standards of assessment and decision-making (e.g. environmental and social compatibility), which at the same time should link up with the debates currently pending in the economic, technical, scientific, and political subsystems about how to secure the future of modern societies. Besides, it is gradually emerging that economists, engineers, and politicians are rather more prepared now to participate in interdisciplinary exchanges, as well as being more open-minded towards issues of environmental and social ethics.

In these economically difficult times, as the problems encountered by many enterprises in their efforts to adapt to changes in the economic situation are threatening to swamp the concerns of ecology, the Council of Experts convoked by the Federal Environmental Ministry presented its Environmental Report of 1994. This document of scientific political advice would deserve little attention if it spent itself in an appeal to regard environmental protection as an integral element of all political activities, or if it had nothing more to offer than a catalogue of ecological measures designed to repair technological or industrial damage. What is intriguing about this report is the fact that in view of the structural changes going on in the economy, and in view of the need to modernise society along ecological lines, it presents a combined concept of ecology and economy which might well serve as a long-term beacon of environmental policy, and which at the same time has been finalised to such an extent as to represent a useful instrument capable of dealing with concrete problems.

I – Sustainable Development

In preparing its Environmental Report of 1994, the Environmental Council set itself the task of formulating a concept of methodological foundations for the implementation of sustainable development. It was not the primary concern of the Report to present a comprehensive description of the environmental situation in Germany, or to recommend specific measures to carry out certain environmental plans. Rather, the Council primarily aimed at systematically developing an integrative approach towards an overarching environmental-policy concept. Its primary concern was to relieve the general shortage of fundamental guidelines and evaluation standards, thus permitting everyone to deal matter-of-factly with the flood of data, theories, and postulates of environmental-policy relevance. The supreme goal of 'sustainable development' symbolises a coherent reference framework which will enable politicians to assess and analyse the relative importance of economic, social, and ecological requirements when making concrete decisions, and when pursuing the long-term project of establishing an environmental policy capable of coming into play long before economic or social regulatory mechanisms

show signs of failing. Part and parcel of this overarching concept is the insight that economic, social, and ecological developments must be regarded as inherently related, and that the elements of this related unit should neither be isolated nor set against each other. In the opinion of the Environmental Council, it has become impossible by now to cling to the interpretation of progress 'as meaning the cultivation of the human environment regardless of its comprehensive interaction with the elements of nature that support this environment. The development and cultivation of the human environment is subject to rules and regulations set by nature herself, which we have no alternative but to respect'. By way of conclusion, it is demanded 'that systems of civilisation should be integrated into the natural network that supports them, implying that the progress and development of economic systems should be permanently conformable with the supportive capacity of the relevant ecological system'. If we wish to ensure the survival of the economy, its production processes must remain an integral part of the ecological cycles that support them.

This approach does justice to the fact that the ecology-risk society is now heir to the 'classical' industrial society. Its advent has added new dimensions to the problem complexes and challenges associated with the 'social question'. In the final analysis, the social question in its former configuration involved the issue of distribution and/or the creation of legal framework conditions designed to ensure the social compatibility of economic development. These considerations were guided by ethical impulses: the idea that all human beings are imbued with personal dignity, and the consequent awareness that solidarity is a condition of social justice. The 'ecology question', on the other hand, relates to a constellation of problems which goes beyond and/or embraces the social question with regard to the scope of its challenges and approaches. If ethical parameters are to play a relevant role in dealing with these problems, they must be formulated and configured to match the complexity of the subject. In other words, due consideration must be given to the fact that virtually all structures and processes in the social and natural environment of mankind form a 'global network'. This global network is characterised by frequent feedbacks, interdependences, and synergistic effects. Even social progress will have to be measured in the future by these resource- and environment-related yardsticks. Under the concept of sustainability, the limits to which civilisation must adhere in its development are set by the ability of natural mechanisms, processes, and structures to respond to and absorb anthropogenic and sociogenic changes. This basically means that the rate at which we utilize natural resources must not be faster than the rate at which they are regenerated, and that the amount of contaminants or pollutants released through industrial activity must not exceed nature's absorption capacity.

This principle circumscribes a problem which can only be solved by interdisciplinary activity, i.e. by consulting representatives of the natural and cultural sciences. For, to begin with, Nature as such is a strictly evolutionary quantity. It does not represent a static order which remains immutable forevermore; instead, it is characterised by repeated bursts of development and transformation. What we perceive as 'natural equilibrium' is, in fact, the result of conflict-laden processes of evolution. At the same time, what we perceive as products of 'natural evolution' has, in fact, been part and parcel of 'socialised' nature for a long time. Now, at the end of the modern age, it has become possible for the first time in our technology-based industrial societies to influence biological evolution by interfering with genetic codes, thus reversing the original dependences that existed between socio-cultural and genetic-biological evolution. Nature is seen today not so much as something that exists by itself; rather, it is regarded both epistemiologically and practically as a function of the approaches which are open to us; it has, in fact, become part of our cultural constitution. Culture, in turn, forms part of that self-same nature which it helps to constitute. To put it in more concrete terms: our biological and physical environment (biosphere) no longer forms the outer shell of our social environment (sociosphere). The ozone hole above our polar ice caps and the gradual warming of the earth's atmosphere are 'natural phenomena' which, however, are rooted not in nature itself but in certain socio-economic developments. In this age of genetic engineering, it has become meaningless to distinguish between 'natural' nature which is independent of mankind in its origin, and 'synthetic' nature which has been manufactured by man. This, in turn, immediately affects the question of whether there are 'natural' factors regulating sustainable development. Thus, our understanding of nature should be such as to regard it as part of our socio-cultural constitution. At the same time, modern societies must view nature as an integral element of their own self-perception.

II – The Ethical Basis of Ecological Action

At the end of the modern age, social evolution should no longer be seen as the emancipation of the social element from the natural slings, arrows, and constraints of human coexistence. Not only must we define the exact line demarcating the social from the natural element, we must clarify the inextricable relationship that exists between the two. One of the major challenges presented by the ecology crisis is that of unearthing, in the process of defining the conditions that govern the existence of social systems in a socialised natural environment, those objective parameters of societal practice which mark a path of social evolution that is governed by reason. Sounding out this regulatory system is one of the central functions of ecological ethics on the way to political relevance. It would not be in keeping with the level of so-

phistication claimed by such an ethic if it were to postulate that socio-economic processes should be based on the concept of aboriginal nature untainted by human intervention, serving as a framework for automatic processes of existence and exchange. Now that the era of modernity has reached its end, it is no longer fitting nor up-to-date to view nature as distinct from society and society as distinct from nature. The same goes for any attempt to reinvest nature with mythical or pantheistic elements so as to equip it with normative powers. Rather, it appears most important to see what common sense considerations might make it imperative to accept nature as the standard governing the design of the social element. What we are looking for is an ethical approach which bases its standards of action as firmly on the natural dimension of personal and social existence as on the pre-eminence of independent practical reason ('self-determination', 'self-legislation') without relapsing into pre-modern concepts of reason or morality.

The consequences of all this manifest themselves first of all in the ethically-adequate use of language as, for instance, in the application of the notion of 'responsibility'. Given that our understanding of nature is non-mythical and post-metaphysical, it is no longer admissible to say that we bear responsibility towards the environment, but only for it. This change of emphasis gives birth to a fundamental feature in the configuration of environmental ethics. References made in the Report to the fact that the notion of responsibility derives its ethical quality from personal elements indicate that the paradigm of the Report is eco-ethical in part. This paradigm, from its approach and its configuration, would be best described by 'ecological humanitarianism' or 'rational ecological anthropocentrism'. If we do so, it is by no means our intention to suppress the reservations about anthropocentrist thinking that have so far been voiced in the debate about environmental ethics; rather, it is our aim to release it from its undisputed constraints.

1 – Personality and Ecological Retinity

The anthropocentrist aims of moral philosophy, most prominently expressed by Immanuel Kant in his Categorical Imperative, primarily address man 'on whom these aspirations focus in order to safeguard his inalienable dignity, which, however, does not imply by any means that man must be the only concern of the resultant moral requirements'. Anthropocentrist ethics is not meant to dull our sensitivity towards life that is not human, nor is it meant to degrade nature to an agglomeration of materials to be used by man. Respect for the intrinsic value of nature as well as empathy with suffering creatures are quite compatible with the approach of anthropocentrist ethics. Conversely, dropping the fundamental concern of this type of ethic, to safeguard man's status of moral autonomy, would imperil his dignity as a person, which is of major importance among the fundamental principles of free and

democratic social orders, thus putting at risk an ethical and political asset which has only been acquired in our modern age after prolonged and painful political and economic conflict. If it is true, then, that the social question can only be resolved by a concept of social justice based on the respect of personal dignity and the awareness of solidarity, it would not help to abandon this particular brand of 'anthropocentrism'. If, furthermore, it should also be true that the problems of justice and social policy associated with the issue of social distribution are nowadays embedded in a more comprehensive network of environmental-policy problems we must be at pains to make proper allowances for the relationship existing between man and nature and/or between society and nature in an ethical context. 'It appears that nature reaches beyond the confines of human existence. [...] Nature keeps setting itself an unbroken succession of new goals, which in their purpose nowhere simply coincide with those of man. What is important in this context is the amalgamation of all forms of life in all their complexity and richness of manifestation ... Human life is an integral part of just this natural reality. Ultimately, man's responsibility for non-human nature stems from the insight that this self-same nature, with all its immense and immensely vulnerable potential, will continue to be at our disposal only if we respect the fact that being at our service is not the only purpose of nature's existence'.

The central problem consists of reintegrating the cultural world of man into the natural network which supports it. To describe the relevant style of thinking and acting, the notion of 'retinity' is used. This term, which is derived from the Latin word 'rete' (net), is one of the key terms in the eco-ethical argumentation of the Environmental Report: 'To preserve his personal dignity as a rational being in his dealings with himself and with others, and to do justice to the responsibility for nature implied in the above, man must place all his actions under the guiding principle that all his civilisation-related activities and products form part and parcel of a network that includes nature'. To respect this principle is one of the fundamental conditions on which the future survival of modern societies depends.

2 – Compatibility with the Requirements of Human Existence and Social Ecology

In the context of policy and decision-making, the issue of retinity immediately leads to the question of what additional criteria might have to be developed to facilitate assessing the compatibility of concrete socio-economic goals and projects with social, environmental, and human requirements. Man actually implements his postulated responsibility for his natural environment wherever the effects of his actions remain conformable with the structural capacity of nature and its ecosystems. There are two respects in which such action is subject to the postulate of environmental compatibility. On the

one hand, 'man's own existence must be safeguarded and the implicit importance of nature accepted without reference to man himself'. On the other hand, assessments must be made of those consequences and side-effects of human action which affect man's own natural living conditions. Implicit in this is the view that environmental and social compatibility are postulates that cannot be discussed independently of each other. The postulate of social compatibility implies the assumption of responsibility for the vital rights and opportunities of future generations as well as a mandate to identify the ecological cost of economic innovation and discuss its reasonableness. No longer may we regard nature as a 'free commodity', which is available in abundance, and which engineers and industrialists, to maximise the output of the economy, may use and exploit at will and at no charge.

To suit our actions to these postulates we must go beyond rethinking and abandoning the 'obliviousness towards nature' that is traditional among economists. Manifestations of such a policy must include 'regulatory and price-related measures of control and restriction'. However, such frameworks imposed by the state may only relate to conditions which 'affect exclusively matters of commonweal, i.e. environmental and social, relevance, but not those matters that relate to the specific development of the individual, who alone is competent to decide for himself whether or not he considers such a framework appropriate'. It is particularly in conjunction with the self-determined actions of individuals that ethical awareness is required to counteract any trend to reduce the individual's responsibility towards his social and natural environment to purely legalistic terms. Although it is true that an individual's sphere of freedom must not be restricted by outside influences, it is not exempt from the effects of ecological retinity. Especially private households do a great deal to exacerbate ecological problems by, for instance, their consumption of energy, their consumerist attitudes, and their throwaway mentality. In the view of the Environmental Council, regimentation is out of the question, particularly because possible abuses of individual liberty protected by law cannot be obviated without running the risk of relinquishing the legal safeguards protecting that very liberty. However, the Council believes it is a matter of correspondingly greater urgency to develop an 'ethic of responsible freedom'. The normative force with which such an ethic would support the creation of a human environment that is both socially and environmentally compatible is held to be just as fundamental as the attendant development of the legal order. According to the view of the experts, therefore, there are two levels of action to be distinguished with regard to the implementation of eco-ethical precepts. The ecological orientation of human behaviour, and the requisite mobilisation of environmental awareness: 'One is personal, and one is structural. Both obey their own criteria, both are re-

lated to one another, and both are basically irreplaceable'. (For an illustration of this fundamental context see the Figure below.)

3 – Ethical Action Between Conflict and Consensus

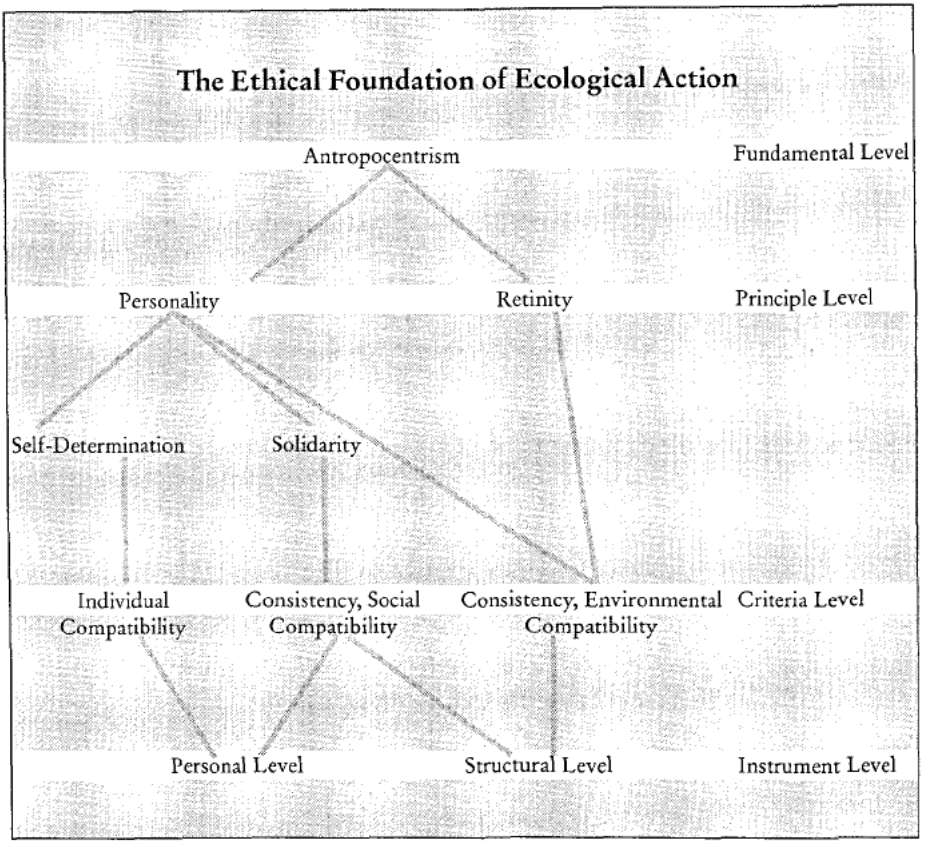
The precepts, postulates, and criteria of ecological action sketched out above, however, represent only part of the global goal of ecological ethics. Whether or not it will succeed in directing behaviour patterns depends on its capability to supply the weighting criteria required to resolve concrete decision-making problems marred by competing and conflicting interests, value codes, etc. In complex societies, such situations occur with increasing frequency, but they still seem to be overtaken by the so-called 'Midas Effect'. According to the legends of Antiquity, King Midas was granted his wish that everything he touched should turn into gold. When some time had passed, it became clear that the fulfilment of this wish did not mean that he had attained the greatest possible success in his striving for wealth, but the precise reverse. You cannot eat gold. Ecology-risk societies cannot afford such nit-picking single-dimensional success criteria. The only criteria that are helpful in our context are those which do not relate to the one-sided realisation of a single goal but to the optimisation of interaction between a wide variety of linked and/or conflicting options, opportunities, and risks. Wherever goals diverge, and wherever negative side-effects or risks cannot be evaded, a method of weighing good against evil is indispensable. Ethical discourses about risks are inescapeable whenever quantitative methods of risk assessment cease to be adequate or become entirely ineffectual. This limit is reached whenever in a specific case a need arises for precise definitions as to what is to be regarded as compatible with human, social, and environmental requirements.

Whether or not environmental ethics can ever be operationalised will essentially depend on whether or not it has a set of rules to offer for processes of this kind. To begin with, we might gather some helpful information by reflecting about the varying probabilities of hazards, their scope, and their duration. Couched in two preferential-rule terms, this reads as follows:

Rule 1 – 'All other circumstances being equal, a course of action which entails a certain evil at a lower level of probability is to be preferred to another course of action which entails the same evil at a higher level of probability.'

Rule 2 – 'All other circumstances being equal, a lesser inevitable evil is to be preferred to the greater, and the shorter to be preferred to that of longer duration.'

When applying these preferential rules, it must be remembered that neither delayed effects nor side-effects are necessarily static but may be subject to human influence with regard to both their scope and their duration.



Whenever such influence occurs, the basis of ethical evaluation changes, and we may, therefore, formulate yet another maxim, as follows:

Rule 3 – 'Any action designed to serve a moral purpose can be justified ethically only if the negative side-effects it entails are reduced to the lowest possible level.'

We cannot, however, dismiss the possibility that a fundamental problem might come up for decision which proves impossible to resolve in spite of optimum compliance with the injunction to minimise evil, and that substantial doubts might continue to be raised about some measure that has been envisaged. The question that now arises concerns the standards to be used in evaluating a course of action to which a body of negative side-effects is inextricably attached. In such an instance, the following rule about the weighing of evil would apply:

Rule 4 – 'A course of action designed to serve a moral purpose can be justified ethically only if the consequences of its evil side-effects are less severe than those of potential inaction.'

In other words: Whenever a specific measure is deemed necessary although grave reservations continue to be raised against it, the next step must be to prove that the harmful and disadvantageous consequences of dispensing with the measure in question would be more severe than the disadvantages and risks arising from its implementation.

In this context, an autonomous problem arises with regard to the justifiability and explainability of decisions that are attended by uncertainties which cannot be cleared up in spite of everything. Such uncertainties might concern the impact of the potential negative consequences of the impending decision as well as the probability of their occurrence. In such a situation, the only choice is basically the following: Either the remaining level of uncertainty causes the action to be dropped, or the process of deliberation is continued, with everyone fully aware that the decision that has been taken is attended by certain risks, which, in turn, would necessitate scrutinising every single step for compliance with the postulate of evil-minimisation. The first alternative implies interpreting the injunction to avoid risks so restrictively that the negative side-effects of not following a course of action are not even included in the deliberations that lead to an ultimate decision. If this happens, the consequence might be 'that even greater hazards and risks may have to be borne deliberately. Any application of the principle which says that whenever any uncertainty is involved in a specific course of action, certainty must be re-established by not acting at all, will eventually lead to a situation whereby the practice of innovation is dropped altogether, and progress is prevented in areas like medical research, for instance, where – ironically enough – ethical motives demand it. Therefore, if we decide not to conform to this 'tutiorism', 'we must do everything that is necessary to keep the probable impact of potential harm as well as the probability of its occurrence as low as possible'. If we apply the injunction to the weighing of different evils, however, omitting action would appear imperative only wherever the risk of subsequent damage appeared less extensive than the risk of negative consequences in the event of action being taken. This qualification might be expressed in even more precise terms by saying that it is imperative to refrain from action 'whenever the cumulative effect of the likelihood and the extent of the damage that is expected to result from inaction is less than the cumulative effect of the likelihood and the extent of the damage that is expected to result from action'. All these optional evaluations, however, cease to be meaningful at that point where every purpose loses its meaning and its value. This limit is reached 'whenever the negative side-effects on which an achievement is predicated are greater than its positive results'.

It is likely that in an ecology-risk society there is no meaningful alternative in environmental ethics to addressing the complex and difficult process of weighing evils and minimising risks. Only by such a process are we enabled to implement decisions and measures 'that appear better in every respect in a given situation, and thus appear to be the best possible approach'. Such a concept, however, is naturally less attractive than those utopian or visionary ideas which depict a pristine relationship between man and his environment. Unlike such visions and utopias, this concept rather soberly emphasises rational choice among lesser evils in the awareness that an ecology-risk society may well live without the maximum of happiness but cannot live with the greatest evil. There are cases where the lesser evil may well be the best possible solution.

III – The Societal Relevance of Environmental Ethics

The Environmental Report marks the completion of a major step towards redefining the parameters of the discourse about self-restraint and the ecological transformation of industrial culture. In approaching the environmental issue from the ethical angle, the Report demonstrates that defining the limits of societal accountability is a process which even in times of economic difficulties should not be subjected to the constraints and the logic of economics and technology alone. Constraints, in fact, are nothing but seemingly 'inevitable consequences of previous decisions about policies, goals, and value preferences. To check the rationality of such a normative context is the mandate of ethical investigation. Ethical thinking insists that while functional correctness constitutes an integral moment of responsible action, its scope is much greater insofar as it includes compatibility with human, social, and environmental requirements. With regard to the formulation and application of these criteria, the Report goes no further than developing a grammatical approach which, in view of the degree of abstraction and complexity involved, is inferior in attractiveness to other environmental-ethic designs which aim at defining in substance what is good for man and nature, and what is not. It is, however, just this seeming drawback which ensures that the fundamental considerations about ethical matters contained in the Report can be integrated and/or operationalised in a variety of socio-cultural fields.

Only by restricting itself to the grammar of activity coordination does environmental ethics become compatible with the structure of a modern society, which with all its functional differentiation, its complex divisions of labour, and its plurality of world views resists any attempt to formulate injunctions defining goals, value codes, or motivations that are qualified in content. On the other hand, such a consensus which involves an entire society is only rarely met with, and becomes increasingly difficult to achieve. However, besides establishing a unified code of values and a hierarchy of goals to co-

ordinate social action, there is another option by which complex societies might be integrated – coordination through rules, through formal regulations governing interaction. While this process, to some extent, is also predicated on consensus, the position is different: What we are concerned with here is the extent to which procedures, processes, and structures are capable of winning acceptance, thus permitting societal actors to follow their own motivations and goals without endangering the cohesion of the whole. In fact, the emergence of this type of social integration and coordination is nothing less than one of the defining characteristics of modernity: Although the goals and motivations of individual action are heterogenous, the existence of generally-accepted rules of action and formal arrangements of interaction enables the achievement of socially-desirable results. This does not necessarily mean, however, that ethical rules of action apply only in the private context. Even under modern conditions, societal interaction may well be coordinated by ethical rationality, which is to be found primarily in the political and economic framework. Its concept should ensure that ethical demands are implemented not against the functional logic of the economy or the law but are translatable into its relevant terms. Moreover, the achievement of eco-ethical goals would surely be assisted if it could be demonstrated that any action that follows eco-ethical principles follows those of economic rationality as well. Why should an enterprise set up a facility to recycle its production waste while its competitors do not, thus saving expenses and acquiring competitive advantages? Using ethical arguments to demand that economy should be ecological makes sense only if it is reasonably certain that everyone obeys the behavioural maxims that have been postulated. To an economical mind, this implies that incentives must be created that are compatible with the logic of the competitive system and of the market. This, in turn, is easiest to achieve by re-arranging the economic framework accordingly, so that the profitability calculations of competing enterprises begin to show that 'it figures' for everyone to protect the environment.

The effects produced by the economy and by technology can be compatible with environmental and social requirements only if the forces of these two elements are permitted to develop within an order framework that defines economic and technical processes. While the Report does make allowance for this fact to a large extent, it is nevertheless irritating to note that the Report mentions that environmental ethics comprises a structural and a personal level, which are interrelated, while at the same time stating that 'the true ethical challenge' presents itself on the personal level. In view of the fact that in a complex society, the individual is enmeshed in an intricate network of anonymous and incomprehensible events and structures, environmental ethics can no longer be allowed to focus on the responsibility of the individual for his actions but must be made to consider how a society in its en-

tirety must be organised so as to ensure that ethically-motivated action on the personal level is not counteracted. The twin-level model suggested in the Report makes inadequate allowance for the middle range of society, although it is of particular importance in this very context. The actions of individual and collective societal transactors (institutions, associations, enterprises, social movements) is not given its own eco-ethical qualification, although it is in this very area that processes of decisive importance are going on. That the Report focusses on an ethical catalogue of criteria to be applied in the manner of a regulatory ethical code in reviews of social and environmental compatibility gives rise to the impression that the ultimate goal in this instance might have been to set up standards of acceptability for risky technologies independent of any societal policy and decision-making processes. But investigations of environmental and social compatibility essentially depend on political institutionalisation and democratic legitimation by the individuals and/or groups concerned. Frequently, considerable political pressure 'from below' is needed to gain sufficient attention for environmental concerns in procedures like zonal planning, the specification of food contamination limits, regional traffic planning, etc. That such concerns have found room on the societal agenda in the past is due neither to the established political parties nor to the far-sightedness of those in government. These concerns have been put on the map by civic groups, by conservationists, by the whole ecology movement struggling against an alliance of ignoramuses and soothsayers. While the relevant ecological concerns did manifest themselves in the immediate environment of individuals, their causes were structural.

Political culture thrives on the repeated destruction of monopolies of definition and cartels of action. The crises and pathologies permeating our risk-oriented society demand a dispute over the exact connotation which the terms 'prosperity' and 'progress' should have in the future. To ensure that this dispute is societally productive must be one of the major goals of future institutionalised reviews of social and environmental compatibility. This target will be approached by overcoming dissent among the conflicting interests of societally-relevant groups like employers, trade unions, political parties, and environmental associations by achieving consensus about the procedures and rules to be adopted for conflict settlement. Even so, it will be inescapable in applying such formal rules to refer to certain role concepts that are both current and currently disputed like, for instance, 'quality of life', 'conservation', 'social security', 'social justice', etc. In this context, expert knowledge cannot replace societal discourses. Even modern medical science is unable to tell us how to live a healthy life; all it can do is tell us what sort of life we should lead if we are able to define the meaning of 'health' for ourselves. This, however, is predicated on both individual and collective eva-

luation. Similar things may be said about the standards of environmental ethics. The Report maintains that there are no ecological risks as such, and that their perception and appreciation depends on what a society regards as 'harmful' or 'reasonably acceptable'. To bring forth the environmental knowledge, responsibility and political pressure required to induce change, societal processes must be arranged so as to follow one of the fundamental principles propounded by the Environmental Report – that of retinity.