Fundamental Attitudes With Regard To Nature

Petran Kockelkoren

Quoted with light editing to improve the English from: Part 5 of 'Ethical Aspects of Plant Biotechnology – Report to the Dutch Government Commission on Ethical Aspects Biotechnology in Plants', *Appendix 1 of Agriculture and Spirituality – Essays from the Crossroads Conference at Wageningen Agricultural University* 1995. International Books, Utrecht. ISBN 90 6224 980 9, pages 99-105

By means of our fundamental attitude we position ourselves emotionally in the world somewhere in a precarious equilibrium between remoteness and involvement. Fundamental attitudes are basic value orientations which guide us in our interpretations of the world. They are therefore the source of our mental images or thoughts and form dispositions to action. Starting from concepts of nature, we can check back to the underlying fundamental attitudes. The relevant concepts must be representative. Initially, they are defined according to typical ideals, as was done above in contrasting traditional and modern society. The term 'ideal type' originates from Max Weber, who considers that social reality is replete with meanings. If we want to understand this reality, we must make a selective cross-section by drawing up a suitable ideal type.

The fundamental attitudes sought are linked in a special way to the typically ideal concepts of nature presented here. Depending on the fundamental attitude, only certain cross-sections of meaning will be accessible to us. In one fundamental attitude (namely domination) it will be, above all, meanings of cultural origin that emerge, while in the extreme opposite case (namely participation) it will be mainly nature meanings.

The art of interpreting meanings is called 'hermeneutics'. Coupled to that, fundamental attitudes could be regarded as hermeneutic keys. The various fundamental attitudes open different access roads to nature (understood as a 'semantic context') and accordingly different concepts of nature correspond with them.[4] As there is a direct correlation between fundamental attitudes and images of nature, they can both be plotted on an axis, the two extremes being 'anthropocentrism' at one end and 'ecocentrism' at the other. The first variant is called 'domination', the opposing variant 'participation'. In the domination attitude, nature is assigned a functional value which has its origin in culture. In the participation attitude, the intrinsic value of nature is recognised and culture is assumed to comply. Between the two extremes, a position on the axis is marked to represent the partnership attitude: there an attempt is made to make the functional assignment of value and the recognition of intrinsic value mutually compatible. In view of its extensive and historically influential nature, there is a special variant of fundamental attitude that calls for special mention: stewardship. The steward is situated between the dominator and the partner. This accountability should be expressed in all spheres of life for which accountability is due. Generally for religious reasons (accountability towards the Creator) but also from comparable secular motives (accountability towards future generations), the steward accepts the duty to care for nature. The steward is therefore anthropocentric, but takes care of nature insofar as any form of intrinsic value is recognizable in it.

Accordingly, four fundamental attitudes are distinguished in a range running from anthropocentrism to ecocentrism. The debate on fundamental attitudes was introduced into environmental philosophy in the Netherlands by Zweers.[5] He distinguishes six fundamental attitudes in the same range. Lest the extremes become caricatured, he names two additional 'outposts': the 'despot' on the side of the dominator, and the '*unio mystica*' on the side of participation. This releases the domination attitude from the odium of tyranny over nature; the dominator is introduced as an enlightened ruler. In the same movement, the participant is freed from mythical or natural religious characteristics. We confine ourselves to four fundamental attitudes, but preserve the sympathetic view of dominator and participant.

One fundamental attitude is no less ethically justified than another. All four are ethical points of departure, only they proceed under different signs. Below, an attempt is made to define the value of specific biotechnological applications as seen from the various fundamental attitudes. This method is intended to clarify the ethical debate between the representatives of the various fundamental attitudes, not to make a judgement of Solomon on who is ultimately in the right. Assessing the merits of the fundamental attitudes is left to public debate and – following that – to politics. Incidentally, the attempt made here to assign policy relevance to thinking in terms of fundamental attitudes should not be allowed to arouse the impression that the variety of fundamental attitudes in themselves should be defined in terms of a different appropriation of resources for each attitude. Rather, an outline of the content of fundamental attitudes precedes the attempt to identify their policy relevance. A brief definition of the four fundamental attitudes, focused on the problems of cultural history with which biotechnology confronts us, as observed above, therefore serves as a first step towards an ethical assessment of a number of separate problem areas of biotechnology in the vegetable kingdom.

A. The Dominator

The dominator believes that nature is completely at his disposal in support of the continued existence of the human race. Nature therefore is merely a source of raw materials, functionally related to human goals. The dominator's attitude is dynamic, for in his appropriation and improvement of nature he is constantly pushing back frontiers. The dominator seeks maximum utility and profit; at the same time he observes democratically the boundary conditions of the existing legal and economic system. By its unpredictable aspects (earthquakes, floods, plagues) the dominator views nature as something to he conquered and controlled. Nature is best enjoyed in domesticated form. Left to itself, living nature follows a course of trial and error by the process of natural selection. In this way, successful genotypes become dominant. Which genotype is successful depends on the environment, in other words the effect of light, nutrition etc., but also parasites, predators etc. Biotechnology performs the trial and error process more efficiently, from a limited pool of starting material, and at the expense of fewer misfits.

By means of technology, instruments are developed to make the earth hospitable and to keep it so, in the first place for people but, while not involving unnecessary suffering caused to people, also to other forms of life capable of suffering. The social acceptability of technology is a derivative of the risks which it entails. If the risks are predictable and controllable within reasonable margins, then there is nothing to bar the introduction of new technologies.

[....]

B. The Steward

Although the steward perceives nature from an anthropocentric perspective, there are definite limits. The steward has been entrusted with the use of nature, not with its consumption. This curbs the dominator's expansiveness. As a minimum, the steward will endorse a duty to care for organisms other than humans, quite apart from the extent to which they resemble humans in their capacity to suffer. The problem then lies in the relative ranking of the intrinsic values which are recognised. [For example, g]enetic manipulation of plants in the service of man is permitted, but not for just any arbitrary reason. Human interests prevail over the vital interests of animals and plants, but vital interests prevail in turn above purely economic interests. This debate has been continuing for some time with regard to the use of animals for experimental purposes: which is permitted for the purpose of testing important medicines, but not for testing cosmetics. As a general rule, vital interests of animals and plants may not be sacrificed to economic interests unless they serve a 'higher interest'; it is debatable from case to case what this higher interest means.

Technology is not a neutral instrument that can be applied in a good or bad manner. With technology, an instrumental relationship towards nature is implicitly exported to the Third World. For that reason, a plea is made for 'adapted technology', in other words, technology rooted in the local socio-economic context and adapted to a specific relationship between culture and nature. In this relationship, nature is not normative, but care has to be taken not to disrupt the organization of individual species and ecosystems as self-contained entities. If that nevertheless threatens, human interests must yield, or at any rate restraint is called for[, e.g.] with regard to horizontal gene transfer, to ensure that Creation or nature is not wrenched out of joint. The integrity of Creation or of nature, as it has become by itself in the evolutionary process, represents a great good for the steward.

The conservative steward, in matters of physical planning, is in favour of functional separation of agriculture, urban development, recreation, industry. The progressive steward endeavours to reconcile and combine nature and useful space as far as possible. For the conservative steward, that means it is essential to designate nature reserves, where nature is left to itself. The progressive steward opts for 'nature development' according to the ecological model. In principle, the steward is not opposed to humanisation of nature provided it is done with due respect.

[...] Ethical considerations take precedence above economics and politics. Technological interventions must also be based on respect and receptivity for the limits which self-organization of life imposes on it. Mankind can only impose its order on nature within the constraints of a meeting – fully defined in terms of quality – between culture and nature. Scale enlargement may not lead to the levelling of natural differences in the landscape.

C. The Partner

The partner looks on life forms other than man as potential allies. This presupposes animals and plants having their own input in the interaction with humans. Nature is conceived of as an interplay of different life forms, in which each life form invests its own expressiveness and its intrinsic value. Such a conception of nature need not in itself conflict with the scientific approach. It does demand a respectful relationship with nature. In this vision, mankind distinguishes itself from other life forms in that it not only participates biologically in nature but, in addition, has a relationship with nature. Because man therefore does not totally correlate to his biological origin, he may choose to belong to nature in an even more embracing sense than just biologically. That freedom is expressed its an ethical attitude, in this case a self-chosen partnership with the concomitant respect for the other life forms. The partnership will generally be asymmetrical, because it consists of the interaction between life forms at different levels of organic complexity. Ecological farming in particular (as distinguished from the more cosmologically inspired biodynamic agriculture, which is to he classed in the participation attitude) satisfies these requirements.

Mankind may exploit nature, so understood, by means of technological designs and interventions up to a certain extent, as long as it does hot involve unnatural forcing of the life forms involved. Such exploitation may even be of mutual benefit. In such a 'natural enterprise', however, in some cases human interests will have to yield to animal or vegetable interests. That decision may be made for example on the basis of the question as to whether, within the human framework concerned, the species-specific development of the life form concerned is beneficially or adversely affected. Such an assessment imposes limits on technological intervention in nature. Respect for natural equilibria is the norm here. By this route we arrive at the notion of 'sustainable technology', that is to say, in the non-organic sector resource chain management (closing the substance cycles) and, also in biotechnology, techniques which operate within the margins of the self-regenerative capacity of nature.

The form of physical planning demanded by partnership depends on whether the metaphor of partnership is interpreted in a strong or weak sense. Conservative partners share the tasks and allow one another scope for themselves on those matters where agreement is not yet possible, in other words

conflicts are avoided, cooperation takes place where possible and separation where necessary, all in the interest of harmony. Progressive partners, on the other hand, see conflict rather as a constructive mode of relationship or as an opportunity for mutual growths: integration is pursued intensively. [...]

Scale enlargement may not degenerate into extensively monocultures, because that destroys the interaction between mutually supportive life forms. In agriculture, just as in human society, pluriformity is appreciated. 'Biodiversity' – in a mutual interdependence of life forms – is the key word.

The Third World problems can only be solved by means of solidarity coupled with variety. Developing countries are given rights to their natural gene pool. The traditional cultivation techniques must be protected. [...]

D. The Participant

For the participant, nature represents the totality of interdependent and interwoven life forms. Mankind is an integral part of this nature. For that reason respect is owed to the various life forms, not only because of the intrinsic value of other organisms, but also because of the complexity of nature: the countless relationships between organisms have a surplus value that exceeds their usefulness to mankind. From the interplay between life forms in natural balances, the participant draws more far-reaching consequences than the partner. He makes a number of principled choices its order to set limits on man's interventions in nature. Although the participant must also inevitably intervene in nature for the purpose of food production, in doing so he nevertheless endeavours as far as possible to make use of the inherent dynamism of natural processes. Biodynamic agriculture is an attempt to give shape to this approach on the basis of a spiritual vision of the relationship between man and nature.

In the case of the participant, science and technology are based on a holistic approach. Participation and high technology are not necessarily incompatible with one another. For example, the participant will support the growing of crops for non-food uses, that is to say energy production from vegetable materials. The central principle is that technology should guide rather than force the processes taking place in the soil and in the crop. A moderate use of finite energy resources is a precondition. Technology remains subject to local self-sufficiency in energy and to support by agriculture for natural self-regulation.

In this approach to physical planning, the participant tries to follow the natural scheme of things as closely as possible. Cultural interventions in nature for farming or housing purposes must create optimised conditions permitting nature to develop itself. Scale enlargement (for example, by means of land reform) is objectionable because it forces nature to observe economically profitable production methods; in that case, the machinery employed threatens to be the factor determining the size of plots. Cultivation techniques are biological in nature. Diseases, pests and weeds form part of the natural balance; they can be counteracted for example by matching suitable crops together. In agriculture, the participant makes use of biological and physical cultivation measures to ensure the quality and quantity of the harvest, without introducing alien and disruptive elements such as agricultural chemicals into the environment. [...]

Agriculture and the food industry both feature their own optimal scale. Global industrial networks and matching transport systems are both energy-intensive and inefficient. Smallness of scale is the standard. It is associated with a preference for the food in season and from the region.

Third World problems must be addressed on an integrated basis by means of economic and social reforms, both in the North and South, if a sustainable society is indeed to emerge. Changes its that direction may he expected in part from Western subcultures which adopt a position of solidarity with cultural minorities in the Third World.

This review of fundamental attitudes now enables us to practise reasoning on the basis of fundamental attitudes relating to specific ethical problems.

Bibliography

4. For a hermeneutic approach to the problem, see also: Günter Altner 1992, 'Gutachten: Ethische Aspekte der gentechnischen Veränderungen von Pflanzen, Wissenschaftszentrum Berlin für Sozialforschung'.

5. Wim Zweers, 1989, 'Houdingen ten opzichte ven de natuur", (attitudes towards nature) (in Dutch) in: Heidemijk tijdschrift, Vol. 100, No. 3, pp. 774-80. For a more recent version see W. Zweers, 1995, "Participeren an de natuur", Uitgeverij Fan van Arkel, Utrecht.