THE STATE OF THE ART IN ENVIRONMENTAL ETHICS AS A PRACTICAL ENTERPRISE: A VIEW FROM THE JOHANNESBURG DOCUMENTS

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INTRODUCTION

In this chapter I focus more on what could be referred to as the practical task of environmental ethics, rather than on what could be described as its theoretical task. Formulated in very general terms, the practical task of environmental ethics can be described as establishing an ecologically responsible society (De Geus, 1999); while its theoretical task could be formulated as finding a value theory that is nuanced and sophisticated enough to support this practical task. My reasons for giving prominence to the practical task of environmental ethics will become clear as I go along.

Focusing on the state of the art in environmental ethics today as a practical enterprise, I have taken as my point of departure a set of documents that were produced for, or emanated from, the World Summit on Sustainable Development that was held in Johannesburg in August-September 2002. I have chosen this set of documents in the first place because they were prepared, discussed and adopted (in the case of official United Nations documents) by a large international audience of policy- and decision-makers that converged on Johannesburg for the very practical task of putting frameworks and measures in place to implement effectively the ideals of sustainable development that were already adopted in 1992 at the Rio Summit but somehow failed to be put into effect. This World Summit was attended by 17 000 delegates,
including 105 heads of state. A total of 180 countries were officially represented. In their deliberations and the results thereof in the form of declarations and implementation plans (generally referred to as the Johannesburg documents), I believe we will be able to discern the contours of what could be referred to as a dominant consensus in environmental ethics today.

The second reason for choosing the Johannesburg documents as my point of departure is because they delineate the context of a practical environmental ethics as one of joint, multilateral international action. In the official Johannesburg Declaration on Sustainable Development (WSSD, 2002a) and in the Johannesburg Plan of Implementation (WSSD, 2002b), a large number of concrete targets were set, in an effort to enhance the project of sustainable development in a global, international context. I believe that close analysis of targets such as these, as well as the justifications that were given for setting them up in the first place, can help us to determine how far environmental ethics has really evolved as a serious consideration on the agenda of those world players whose decisions and actions determine whether environmental issues are addressed or not. These world players are national governments, international business corporations and international organs of civil society, including non-governmental organizations such as the World Conservation Union (IUCN) and the World Wildlife Fund (WWF).

My third reason for focusing on the Johannesburg documents is that they represent something of what the practical task of environmental ethics could entail within an international arena, where agreement has to be sought beyond narrow national interests or ideological differences. As the Johannesburg Summit was attended by representatives of 180 countries, the consensus documents that emerged from it, I believe, represent what countries in different situations and with different interests can at present agree upon with regard to measures to respond to our environmental problems; at the same time, these documents will also help us to determine what still needs to be done – what we still have to agree upon as a global society in order to address our environmental problems.

So the Johannesburg documents will be used as a heuristic device to help us focus on points of convergence in the arena of action, instead of on division in the realm of abstract philosophical ideas. However, as the consensus points of the Johannesburg documents are
not above criticism, they will also help us to identify gaps in the current international responses to our environmental problems, which need to be worked on in the future.

To achieve these aims, I first draw a sketch in broad outline of the practical environmental ethics that can be found in the Johannesburg documents, based on the assumption that any environmental ethics, whether practical or theoretical, will have to say something about the nature and extent of our environmental problems: what the basis of our concern about these problems are, what the specific objects of our concern are, what we should do to address these concerns, and what we would like to achieve by addressing these concerns.

In the process of drawing this outline, I explain why the ideals and principles of sustainable development are currently seen as the answer to addressing our environmental problems on a practical level in all spheres of action. After having shown where and how sustainable development fits into the broader picture of the current consensus on the practical task of environmental ethics, I turn to a discussion of what the dominant consensus is concerning sustainable development, and to an analysis of this dominant position. I argue that there are major problems in the dominant notion of sustainable development that need to be overcome. In my criticism of the dominant notion of sustainable development, and in my suggestions of ways to overcome its deficiencies, I believe I have laid the foundations for a discussion of the challenges that we still have to face to respond adequately to our environmental problems.

On the basis of this overview, I then suggest some ways that UNESCO can help its Member States move environmental ethics forward from where, as a practical enterprise, it currently finds itself.

THE CONTOURS OF A PRACTICAL ENVIRONMENTAL ETHICS

The deliberations and official results of the Johannesburg Summit on Sustainable Development should be read and interpreted within the framework of the values, principles and targets that were accepted on 8 September 2000 in the United Nations Millennium Declaration (UN, 2000), in which six fundamental shared values were stipulated as essential to international relations in the twenty-first century: these are popularly known as the Millennium Development Goals. Respect for nature was listed as one of these values, along with freedom, equality,
solidarity, tolerance and shared responsibility. To translate these values into action, protecting our common environment was singled out as one of the key objectives to be assigned special significance: other key objectives were peace; security and disarmament; development and poverty eradication; human rights, democracy and good governance; protecting the vulnerable; meeting the special needs of Africa; and strengthening the United Nations.

It is therefore appropriate to start an analysis of the current state of international consensus in environmental ethics as a practical enterprise with a look at what the Millennium Declaration says about the nature of our environmental problems, the basis of our concerns, what the objects of our concerns should be, how we should go about addressing them and what we would like to achieve through our actions in this area.

The nature and extent of our environmental problems
According to the UN Millennium Declaration, the core of our environmental concern has to do with 'the threat of living on a planet [that is] irredeemably spoilt by human activities, and whose resources would no longer be sufficient' for the needs of all humanity and, above all, 'the needs of our children and grandchildren'. Of concern is the thought that we may fail to preserve and pass on to our descendants the 'immeasurable riches provided to us by nature' (UN, 2000). Thus formulated, the Millennium Declaration captures what is today widely accepted about the nature of our environmental problems: They have to do with resource depletion and resource destruction.

These concerns were reiterated in the Johannesburg Declaration on Sustainable Development (WSSD, 2002a):

The global environment continues to suffer. Loss of biodiversity continues, fish stocks continue to be depleted, desertification claims more and more fertile land, the adverse effects of climate change are already evident, natural disasters are more frequent and more devastating, and developing countries more vulnerable, and air, water and marine pollution continue to rob millions of a decent life.

At the same time, equal concern is expressed about the growing gap between the rich and the poor of the world – meaning that the costs and benefits of globalization, the opening of new markets, the mobility
of capital, significant increases in investment flows and advances in
technology are unevenly distributed among the countries and the
people of the world (WSSD, 2002a). As such, the consensus point is
that issues of justice and equity are part and parcel of our environmental
problems, and not something separate from it.

The basis of our environmental concerns
From the above it is apparent that ‘our future welfare and that of
our descendants’ – that is, the interests of our children and our
grandchildren (UN, 2000) – form the basis of our concern about
resource depletion and destruction. This same focus on the interests
of humans, rather than those of the natural environment for its own
sake, is found in the Johannesburg Declaration. When environmental
protection is mentioned it is in the context of ensuring a resource base
for economic and social development. In fact, when the challenges we
face are listed in the Johannesburg Declaration, the ‘deep fault line
that divides human society between the rich and the poor and the
ever-increasing gap between the developed and developing worlds’
(WSSD, 2002a) is mentioned before any direct reference is made to
issues concerning the state of the global environment.

The objects of our concern
In the Millennium Declaration, the object of our environmental
care is clearly spelled out in general terms as ‘current unsustainable
patterns of production and consumption’ (UN, 2000). From references
in the Johannesburg documents, however, it is evident that the
primary objects of our environmental concern include activities that
lead to resource depletion and destruction along with unfair and
unjust patterns of distributing the costs and benefits of production
and consumption. Thus, besides actions that lead to environmental
deterioration, anything that prohibits access to basic requirements
such as clean water, sanitation, or adequate shelter, energy, health care
and food security becomes something we have to work on to achieve
sustainable development. Similarly, the Johannesburg Declaration
identifies the risk of entrenching global disparities as another focus
of concern (WSSD, 2002a). International trade agreements and
local working conditions thus become part of the objects of concern
within the scope of the practical environmental ethics espoused in the
Johannesburg documents.
Our environmental responsibilities and obligations

The Millennium Declaration prescribes prudence, or the wise use of resources, as one of our primary duties to address our environmental concerns: ‘prudence must be shown in the management of all living species and natural resources, in accordance with the precepts of sustainable development, and we have a duty to change the ‘current unsustainable patterns of production and consumption’ into sustainable patterns (UN, 2000).

What does this prudence mean in practice? Spelled out in terms of targets, the Millennium Development Goals (UN, 2000) state that a new ethic of conservation and stewardship should be adopted and that the first steps towards this should entail:

- ensuring by 2002 that the Kyoto Protocol on measures to curb global climate change is put into force, and embarking on the reduction in emissions of greenhouse gases as required by the Kyoto Protocol [it should be noted that at the time this paper was written – November 2004 – the Kyoto Protocol had not yet been enforced];
- intensifying collective efforts for the management, conservation and sustainable development of all types of forests;
- pressing for the full implementation of the Convention on Biological Diversity and the Convention to Combat Desertification in those countries experiencing serious drought and/or desertification, particularly in Africa;
- stopping the unsustainable exploitation of water resources by developing water management strategies at the regional, national and local levels, which promote both equitable access and adequate supplies;
- intensifying cooperation to reduce the number and effects of natural and man-made disasters; and
- ensuring free access to information on the human genome sequence.

On the same basis, the Johannesburg Declaration sees sustainable development as the creation of a new and brighter world of hope. To achieve this, it calls for decisions, targets, timetables and partnerships to ensure the protection of biodiversity and to speedily increase access to basic requirements such as:
- clean water,
- sanitation,
- adequate shelter,
- energy,
- health care, and
- food security. (WSSD, 2002a)

With the focus on eradicating underdevelopment, the Johannesburg Declaration also envisages partnerships between countries to assist one another to:

- have access to financial resources,
- benefit from the opening of markets,
- ensure capacity building,
- use modern technology to bring about development, and
- make sure there is technology transfer, human resource development, and education and training. (WSSD, 2002a)

Other areas singled out in the Johannesburg Declaration for priority attention include worldwide conditions that pose severe threats to the sustainable development of people:

- chronic hunger,
- malnutrition,
- foreign occupation,
- armed conflict,
- illicit drug problems,
- organized crime,
- natural disasters,
- illicit arms trafficking,
- trafficking in persons,
- terrorism,
- intolerance and incitement to racial, ethnic, religious and other hatreds,
- xenophobia, and
- endemic, communicable and chronic diseases, in particular HIV/AIDS. (WSSD, 2002a)
The Johannesburg Declaration further calls for a fundamental change in the lives of the affluent to prevent the poor of the world losing confidence in their representatives and in democratic systems (WSSD, 2002a). This mirrors the injunction expressed in one of the documents prepared for the Johannesburg Summit by the NGO sector, an 'alleviation of wealth' is necessary in the world today before we can effectively implement sustainable development (Sachs, 2002).

The 170-page Johannesburg Plan of Implementation was formulated with these objectives in mind. This document explores these objectives in more detail in terms of setting specific targets linked to clear timelines, translating them into specific regional initiatives (for instance, for small island developing states, for Africa, for Latin America and the Caribbean, for Asia and the Pacific, for West Asia and for Europe), and linking them to means of implementation and institutional frameworks. This is not the place to go into these implementation plans in any detail, except to mention that they reflect the values and principles made explicit in the Millennium Declaration and in the Johannesburg Declaration, including:

- women's empowerment and emancipation;
- equitable access for all to the benefits of natural resources and technology, in particular for women, youth, children and vulnerable groups;
- support for regional initiatives and alliances;
- special emphasis placed on the development needs of the least developed countries;
- recognition of the vital role of indigenous people to achieve sustainable development;
- an acceptance of the importance of long-term perspectives and broad-based participation in policy formulation;
- support for income generating employment opportunities within the framework of the Declaration of Fundamental Principles and Rights at Work of the International Labour Organization;
- corporate accountability;
- the strengthening and improvement of governance at all levels;
- peace, security and stability;
- respect for human rights and fundamental freedoms, including the right to development; and
- respect for cultural diversity. (WSSD, 2002a, 2002b)
What should we try to achieve?

Although not much is said explicitly in the Millennium Declaration about what we should try to achieve, this is implied in its reaffirmation of the principles of sustainable development adopted in 1992 at the United Nations Conference on Environment and Development in Rio de Janeiro (UN, 2000). This is repeated in the first sentence of the Johannesburg Declaration on Sustainable Development, and in the next paragraph is closely linked to a commitment to building a ‘humane, equitable and caring global society cognizant of the need for human dignity for all’ (WSSD, 2002a). What sustainable development, formulated in these terms, then clearly wants to free us from is ‘the indignity and indecency occasioned by poverty, environmental degradation and patterns of unsustainable development’ (WSSD, 2002a).

With this in mind, it is abundantly clear that sustainable development is conceptualized in the Johannesburg Declaration as predominantly entailing a very broad agenda of social development – in which the eradication of poverty and equitable access to resources and information stand central, while environmental protection in the sense of protecting the biophysical environment clearly plays a secondary role – as a supporting objective, or at most a prerequisite for something else that is to be achieved. While protection of the biophysical environment is not ignored in this agenda, a clear shift can be discerned away from sustainable development as a green agenda with a key focus on fauna and flora and ecosystems. This was strongly emphasized in the introduction to the Johannesburg +2 Conference held in Johannesburg from 1–3 September 2004 to commemorate the World Summit on Sustainable Development (WSSD) of 2002 and to assess progress made on the Implementation Plan. In a very bold statement, the introduction highlighted the fact that, with its emphasis on social development, the Johannesburg Summit ‘created the correct balance of the three pillars of sustainable development, which are social development, economic growth and the protection of the environment. This is a decisive shift from the predominantly wrong perspective over the past decade that sustainable development equals the protection of the environment’ (DEAT, 2004).

The concrete, practical environmental ethics embedded in the Johannesburg documents thus hinges on the meaning and content given to sustainable development. In the next section, consensus regarding
‘sustainable development’ is further discussed insofar as it is expressed in the Johannesburg documents.

**POINTS OF CONVERGENCE IN THE DOMINANT MODEL OF SUSTAINABLE DEVELOPMENT**

The UN Millennium Declaration provides no explicit explanation as to what sustainable development entails, apart from a reference in paragraph 22 reaffirming support for the principles of sustainable development, ‘including those set out in Agenda 21’, agreed upon at the 1992 United Nations Conference on Environment and Development held in Rio de Janeiro.

Section VIII of the Millennium Declaration, which discusses the key objective of meeting the special needs of Africa, does shed some light on the subject. It mentions sustainable development as a prerequisite to bringing Africa into the mainstream of the world economy, together with the need to assist Africans in their struggle for lasting peace and the eradication of poverty (UN, 2000). Further on in the same section, the challenges of poverty eradication and sustainable development are linked to measures including debt cancellation, improved market access, enhanced official development assistance and increased flows of foreign direct investment, as well as transfers of technology. These points are followed by expressing a resolve to help Africa build its capacity to tackle the spread of the HIV/AIDS pandemic and other infectious diseases (UN, 2000).

I mention these points to demonstrate that they are all ways of giving concrete content to the dominant definition of ‘sustainable development’, a concept originally formulated in the Brundtland Report (WCED, 1987). There, sustainable development was defined as development that meets the needs of present generations without compromising the ability of future generations to meet their needs. The concrete content mentioned above are in strong accordance with the two important qualifications noted in the Brundtland Report:

- the needs of the poor are central in sustainable development; and
- the only constraint on sustainable development is the state of technology and social organization in society.

There is no doubt in my mind that this dominant definition is a major point of convergence in the world today within the environmental
debate. Heads of state and policy-makers in government and corporate circles seem to agree that this definition captures the central meaning of sustainable development. This is demonstrated not only in the manner in which the Brundtland definition of sustainable development resonates throughout Agenda 21 and its supporting documents (Robinson, 1993) but also in numerous documents published by governments and the private sector.

A similar consensus is found in the graphic portrayal of this dominant definition of sustainable development. In most, if not all, of the official Johannesburg documents, sustainable development is visualized as the integration of three elements. The classic representation of this is found in the image of three overlapping circles, representing the economic, the socio-political and the environmental spheres. This Venn diagram of sustainable development is usually represented in the following way:

Figure 1: The classic representation of sustainable development

While this image can be criticized for being incomplete, as it leaves out the spheres of technology and governance, it serves the valuable purpose of articulating the consensus point that sustainable development entails an integration of these three spheres. Alternative visualizations of sustainable development that do incorporate the technological and governance dimensions, however, still tend to present an image of three elements that need to be integrated with one another, supported by a foundation comprised of technology and governance.
Figure 2: Another classic representation of sustainable development: the three-pillar model

Numerous formulations within the Johannesburg documents imply that these three elements are conceptualized as standing apart from one another, although interdependent and mutually reinforcing (WSSD, 2002a). Interdependence and mutual reinforcement presuppose different spheres in interaction with one another. Similarly, we often find references to ‘the three components’ of sustainable development that need to be ‘integrated’ with one another (WSSD, 2002b). Within the sphere of corporate decision-making and governance, the same model of three elements is found in the notion of triple bottom-line of accounting, auditing and reporting (Elkington, 1998). A management decision is then acceptable if it makes sense in terms of all three ‘bottom lines’: financial, social and environmental.

Probing this image a little further and asking what the ‘integration’ of these three pillars or spheres might entail, the common language that seems to dominate is that of finding either the right balance or the optimal trade-off among them. This clearly begs the questions ‘Who determines what the right balance or the optimal trade-off among the three spheres of sustainable development are?’ and ‘How do they go about determining this?’ and ‘On the basis of which assumptions and considerations?’

While acknowledging that these images of sustainable development are very useful for capturing the imagination of a corporate audience (Zadek, 2003) and policy-makers, and while these images
will continue to express the dominant conceptualization of sustainable development in the world, it is important to note that this very image of three pillars or spheres can help identify certain problems in what has emerged as a worldwide consensus on practical responses to our environmental problems.

PROBLEMS IN THE CONSENSUS ON SUSTAINABLE DEVELOPMENT

Three separate spheres

The three-pillar model of sustainable development creates an impression of three separate spheres, each with its own set of values and working according to its own internal logic, which has nothing to do with that of the other spheres.

Simon Zadek (2003) notes that this separation of the ‘three pillars of sustainable development’ supports the notion of three separate sets of values functioning according to their own rules which are external to those of each other – meaning that these three sets of values have no internal links to one another. Thus the set of values promoted in the economic sphere, conceived of in isolation from the other two spheres, is that of creating material wealth and ensuring growth. Similarly, the central values of the social sphere taken on its own could be construed as directed towards improving the quality of life of people and ensuring equity among people, communities and nations. Accordingly, the goals of protecting and conserving our natural, biophysical environment will be found only in the environmental sphere.

These points of criticism clearly suggest that environmental protection and conservation, within the framework of the dominant three-pillar model of sustainable development, runs a very real risk of being construed as an add-on, something to attend to after all our other priorities in the economic and social spheres have been dealt with. The dangers of such a notion are obvious, as it places environmental issues in a tertiary position of importance where it will always come last in any process of public decision-making in which competing value claims are to be considered.

So instead of working with an image of sustainable development where environmental protection and conservation runs the risk of always losing out to ‘more important’ economic and social considerations, a far more accurate but also far more complex portrayal of sustainable development would be one in which these three spheres were
conceptualized as embedded within one another, with values that are internally linked to one another and a logic that inseparably intertwines them. One advantage of such an image would be that thinking about environmental protection and conservation would start the moment we considered economic or social issues, and vice versa. We would then be working not with three separate agendas (a triple bottom line, according to Elkington) that need to be integrated after they have been distinguished and set apart from one another, but rather with a single agenda in which economic, social and environmental considerations are seen as dimensions of a single problem that need to be addressed.

**Mutually exclusive**

The three-pillar model of sustainable development also strengthens a perception that some aspects of economic activity fall outside the social and environmental spheres, and that in certain areas there is only some overlap.

This point has already been covered briefly in the section above, but it remains to be said explicitly that there is not a single aspect of social and economic life that does not lie wholly within the environmental sphere. Not a single economic or social act is not in some way embedded within the biophysical environment in the sense of being made possible and sustained by it. Similarly, there is not a single economic or social act that has no consequences for the biophysical environment. Accordingly, it is far more accurate to maintain that the three spheres, rather than being separate as in the dominant model of sustainable development, are embedded within one another; where wider spheres are functioning as holding spaces, making the existence of narrower spheres possible and sustaining them (Zadek, 2003).

**How do the three pillars interact?**

The three-pillar model says nothing about the manner in which the three pillars interact with or affect one another, or how they are dependent on one another. The Venn diagram portrayal of sustainable development is handy insofar as it helps to make the general point that integration of the three overlapping circles is required to achieve sustainable development. ‘Sustainable development’, it is usually said, ‘is found where the three circles overlap’. This vague statement does
not help us, however, to determine how such an overlap could be achieved, or how the economic, social and environmental spheres should interact with one another under conditions of ‘sustainable overlap’.

The image of three overlapping circles also does not help us to conceptualize adequately the notion of environmental risk associated with negative impacts on the natural environment created by human actions in the economic or socio-political spheres. Severe soil erosion following from overgrazing pasturelands or serious water pollution created by industrial activities established by authorities but not properly monitored by them for economic or political reasons could serve as examples in this regard. In both cases, the three-sphere model creates an impression that these environmental impacts are external to the economic or socio-political spheres, thereby obscuring the internal connections between negative environmental impacts and what appear to be purely economic or socio-political decisions.

**Trade-offs within and among the economic, social and environmental spheres**

In policy- and decision-making, interaction between the different spheres is usually reduced to making trade-offs within and among the different spheres – where costs in one sphere, for example the social or the environmental, are offset (rendered acceptable) by benefits in the economic sphere.

The language of trade-offs within and among the economic, social and environmental spheres is often presented in a much softer form – in terms of finding the ‘correct balance’ among the different spheres. However, what counts as a correct balance is usually a function of the set of values that is given priority by policy- and decision-makers. From the point of view of the dominant consensus about sustainable development sketched above, the set of values that receives precedence is that of social justice and human development. In terms of this priority, the world economy should be geared towards the development needs of the poor in the world while, similarly, environmental protection and conservation could only be justified if it served a development agenda aimed at eradicating poverty. The reverse side of this coin, however, is that such a development agenda, important as development is to meeting the needs of the poor, does not help us to determine what areas or aspects of the biophysical environment should not be encroached
upon. On the contrary, with a human development agenda setting the priority principles, no area or aspect of nature is ultimately safe from exploitation for human purposes. As a head of state of one of the poorer nations in Southern Africa once quipped: ‘If I have to sacrifice the last example of wildlife in my country in order to feed my people, I will do so.’

Management optimism

The three-pillar model locks us into the language and practice of a management optimism in which the default position is that of mitigating inevitable social and environmental costs related to economic and human development.

Given the priorities of ensuring economic growth and social development, the dominant model of sustainable development sketched above accepts that there will inevitably be negative impacts on the biophysical environment and, accordingly, its main contribution to achieving sustainable development is seen as being in the mitigation of these negative impacts. The assumption informing this view is that we possess the knowledge and technical know-how to manage all environmental risks, provided, of course, that the cost of doing so is not excessive or, at least, that the benefits of mitigation outweigh the costs involved. This is another way of saying that favouring economic growth and social development represents the default position in the dominant model of sustainable development, and that environmental risks and the precautionary principle are underplayed. This means that mitigation comes as a second step, of secondary importance, embarked upon only to ensure that growth and development can go ahead. Once again, this underlines the point made earlier that the dominant model of sustainable development does not really help us to determine which areas and aspects of the biophysical environment should be left completely alone or handled with extreme care. On the contrary, the dominant model in fact says that nothing in nature should be left intact if humans can benefit from it and if we, somehow, can mitigate our impact on (that part of) nature – even if this causes nature to function at less than optimal levels. The basic challenge to this kind of management optimism is that we simply do not know exactly how nature functions and how our actions impact on it. Accordingly, we simply do not know exactly how to manage the impact we have on the natural environment.
Resources viewed as infinitely interchangeable

The three-pillar model assumes that resources are infinitely interchangeable, leaving us with no basis to argue for safe minimum standards and non-negotiable social and environmental thresholds.

From the critical points raised in the foregoing sections, it follows that some, if not all, aspects of nature could be ‘traded in’ for some kind of human benefit. A natural resource like a forest, for instance, can be cut down and the wood sold for a cash income, and this cash in turn could be used for further purposes such as education or paying for amenities such as roads, hospitals or school buildings. Natural resources (or natural capital) are then interchangeable with social or economic resources (or social or economic capital). Infinite interchangeability is the notion that this process of ‘trading in’ one form of capital for another can continue indefinitely.

There are at least two major problems with assuming infinite interchangeability, though. The first is that we do not have an unlimited stock of natural capital to start with. Our natural resources may look as if they are unlimited, given the abundance in which some of them occur on Earth, but this is not true of coal, oil, copper or iron. All deposits of these minerals are finite, and it is not clear whether human ingenuity has yet developed so far as to have found replacements for them. The same applies to renewable resources, of which forest products and amenities are the prime examples. Forests, however, can only continue to exist indefinitely if they are harvested at a slower rate than their rate of regeneration. The facts of the matter, however, tell a different story: The world over, we harvest forests much faster than they can grow back again.

The second problem has to do with the fact that many ‘trade ins’ of natural capital for other forms of capital entail irreversible processes. Completely cutting down a whole rain forest on the slopes of a mountain to make room for a residential development is a case in point, because it could very well prove to be impossible to recreate a similar forest on another mountain slope nearby.

Instrumental rationality

The three-pillar model is embedded in a version of conventional, instrumental rationality that is not strong enough to resist current exploitation, depletion and destruction of the environment.

Instrumental rationality entails a model of means-ends thinking in which value is allocated to things and actions in relation to how
they contribute to an envisaged end. In the dominant model of sustainable development sketched above, the envisioned ends are those of justice, economic growth and social development. Accordingly, anything that serves these ends is valuable and everything that does not has no value, or very little. Thus, if protection and conservation of the natural environment cannot be demonstrated to have clear links with the agenda of social development, it will have less value than projects that entail the use of natural resources but have clear and direct benefits for the agendas of economic growth and social development. The problem with this, however, as we have indicated above, is that development and exploitation of the natural environment is seen as the default position and that almost any negative impact on the environment could be justified if it yields social benefits that cannot be achieved otherwise. The form of rationality underlying the dominant model of sustainable development is too weak to ensure protection of the environment from an apparently insatiable need for social development. On the contrary, instrumental rationality in the format that we have described creates the conditions under which the biophysical environment can be exploited to the point of irreversible depletion or destruction.

**A weak notion of sustainable development**

The points of critique raised above culminate in the observation that the three-pillar model of sustainable development supports a weak notion of sustainable development that leaves the world pretty much functioning as it currently does. The distinction between weak and strong sustainability is typically made within the context of environmental economics. Formulated in economic terms, weak sustainability entails maintaining a non-declining total stock of capital over time, while strong sustainability entails maintaining a non-declining stock of natural capital over time. In terms of what has been stated above, a non-declining stock of capital over time could mean that we could substitute human and human-made capital for natural capital and, according to this model, still stay within the confines of sustainability — because our total stock of capital has not declined. As we have also seen, this notion does not require us to curb our negative impact on the natural environment, but only to mitigate it where possible — it leaves the world pretty much in the state it is in today. On the other hand, a strong notion of sustainability emphasizes a non-declining
stock of natural capital over time: to achieve this, we will have to change drastically patterns of production and consumption as we know them today. A strong notion of sustainability would support strong measures to transform the way we use natural resources and how we relate to the biophysical environment.

**Highly anthropocentric**

The three-pillar model of sustainable development is highly anthropocentric and does not allow much room, if any, for considering what has become known as the intrinsic value of nature or non-human entities.

The dominant model of sustainable development as it has been sketched above is through and through anthropocentric. Anthropocentrism entails that humans and their needs form the point of departure for any consideration and that everything else acquires its value from its relation to the realm of human purposes. From this point of view, everything in nature is accorded instrumental value to the extent that it contributes to achieving human purposes. Now, while it can be conceded that anthropocentric arguments are the most convincing ones when it comes to persuading people to adopt an agenda of environmental sustainability – our very survival as a human race is at stake if we do not ensure the continued existence of nature – the irony is that these arguments are apparently too weak actually to achieve this aim. Many environmental ethicists argue that we need a different perspective in order effectively to protect and conserve the biophysical environment. Such a perspective is found in the concept of the intrinsic value of nature – which means, briefly stated, that nature as a whole, but also in its component parts, has a value in and of itself, regardless of any benefit that humans can derive from it. The debates about intrinsic value are far-reaching within the ambit of environmental ethics, but as these have been discussed in various other contributions to this volume, they will not be explored any further here – except to mention that the idea of nature or its components having intrinsic value has not yet penetrated the consensus sketched above that forms the dominant notion of sustainable development.

This brings us to the question of what an alternative conceptualization of sustainable development might look like, and how it would overcome the difficulties of the weak notion of sustainable development sketched above.
TOWARDS AN ALTERNATIVE NOTION OF SUSTAINABLE DEVELOPMENT

An alternative notion of sustainable development has been formed among scholars in environmental ethics where the image of three separate pillars or spheres is replaced by an image of three spheres embedded within one another. This alternative image looks something like this:

Figure 3: An alternative portrayal of sustainable development in terms of three embedded spheres

In this image, each wider circle serves as a holding space for the sphere embedded within it, not only making its very existence possible, but also sustaining it in the literal sense of the word.

This image further implies that activities or events in one sphere may have a negative impact on other spheres, even to the point of disruption or destruction. Economic activity – for example mining for precious metals such as gold or platinum for the sake of profit alone – could have devastating social and political effects if the health and safety of mine workers are not properly attended to, or it could poison the water supply of a whole region if effluence from processing plants is not properly managed. But things can also go in the other direction, for example a natural disaster such as an earthquake or a tsunami, or a human activity such as a war, can destroy not only vast areas of nature, but also human settlements, thereby disrupting...
socio-political and economic activities taking place in the ‘narrower spheres’.

This image of embedded spheres thus locks us into a language of impact prevention; instead of merely mitigation, as was the case for the dominant image described previously. Other language also associated with this image is that of complexity, incomplete knowledge, precaution and safe minimum standards, and even of non-negotiable thresholds in the social as well as the environmental spheres – thresholds we should not even approach through our economic activities.

The most important implication of the image of three embedded spheres, however, is that it does not present economic, socio-political and environmental considerations as each having their own logic and values separate from those of the other spheres. The three spheres are intertwined from the outset – to such an extent that a fundamental rethink is required of everything that up until now we have conceptualized as economic activity, socio-political engagement, and the protection and conservation of the environment. Yet, on the question of how such a rethink should take place, along what lines and from which assumptions, there is sadly still little if any consensus in the sphere of theoretical environmental ethics, nor in that of environmental activism. In this regard, the scene is rather dominated by lots of experimentation and intense in-fighting among different philosophical positions. It is possible, however, to highlight a few pointers that broadly suggest the direction this rethink is taking in a practical environmental ethics.

- Instead of taking independent individuals or entities as its point of departure, the model of embedded spheres emphasizes relations and interdependencies as they exist within larger wholes, contexts and systems.
- Instead of elevating humans and human interests above everything else as the only point of reference in our moral consideration of decisions and actions, supporters of the embedded model tend to emphasize that such anthropocentrism should make room for the notion of the intrinsic value of nature, or at least parts of it – suggesting, for instance, that the well-being and flourishing of human and non-human life on Earth have value in themselves, independent of the usefulness of the non-human world for human purposes (Naess, 2003).
Instead of following an abstract, theoretical approach in search of 'moral absolutes' (Palmer, 2003) that can be applied to all sufficiently similar cases under all circumstances, supporters of the embedded model tend to emphasize a contextual approach which makes allowances for a variety of particular values to be considered as they emerge from concrete relationships and interdependencies among entities, living and non-living, human and non-human, in particular settings in space, time, culture and history.

Instead of staying within the confines of the academic world's ivory towers in their efforts to rethink ideas of 'environmental risk', 'conflict', 'the individual', 'environmental problems' and the like, supporters of the embedded model tend to grapple with practical environmental issues as they exist in the concrete world, taking into consideration everything that constitutes an environmental 'issue' and its 'solution', including political and economic decision-making, ideologies, and the uses and abuses of power.

Instead of working with a narrow definition of environmental problems as nothing but threats to the natural world – that is, to fauna and flora – supporters of the embedded model tend to emphasize a much broader notion of environmental problems that includes, among others, issues of equity in the distribution of the benefits and burdens related to the use of natural resources and the preservation of indigenous knowledge systems that embody a diversity of modes of interaction with nature from which much can be learned by those of us who are preoccupied with a scientific mode of interpreting the non-human world.
CONCLUSION AND RECOMMENDATIONS

From my discussion so far, the current consensus in environmental ethics as it is captured in the Johannesburg documents appears highly valuable in that there is agreement that concerns about resource depletion and destruction should be placed firmly on the world agenda. While it may be conceded that this consensus sits squarely within an anthropocentric value theory, it is also highly valuable in that it combines the agenda of environmental protection with that of human development, in particular the development of the poor and the most vulnerable in society. Summits such as that of 1992 in Rio de Janeiro and that of 2002 in Johannesburg have linked the challenges of environmental protection with the challenges of justice and equity, which include ensuring that all human beings have adequate access to basic amenities such as clean water and sanitation, to mention only two examples.

Some conventional thinkers may resent the wide development agenda set in the Johannesburg Plan of Implementation, arguing that it relegates protection of the biophysical environment to a secondary level of importance. However, to my mind this wide agenda should be appreciated as an indication that everything we do (or do not do) has pertinent economic, social, political and environmental dimensions that are so intertwined and interlocked that the links and causal chains among them – when it is indeed possible to distinguish between them – are not fully known to us, let alone fully understood.

I believe that something of this complexity is understood in the Johannesburg documents, especially in the Johannesburg Plan of Implementation – in that every target, plan and strategy formulated to achieve the key objectives of sustainable development is meticulously broken up into numerous tasks and responsibilities, divided among a vast array of agents and institutions at different levels of social and political organization and with different institutional functions and responsibilities.

To me, this is a clear indication of the dilemma that environmental ethics as a practical enterprise faces today. On the one hand, it is highly aware of the world’s environmental problems, intertwined as they are with the challenges of ensuring justice, equity and human development without destroying the ecological basis of life on Earth, although at the same time highly aware of how complex it is both to conceptualize and to respond to these challenges. On the other hand, though, there seem
to be insurmountable obstacles to acting on our environmental concerns and to meeting the challenges they pose. One of these obstacles is conventional thinking patterns, which compel us, among many other things, to place items in abstract categories, separating things that are interrelated—locking them up in silos like the different spheres of sustainable development discussed above. Another one of these obstacles seems to be the institutional silos in which we function: The disciplinary boundaries we draw around us; the specialities we practice and the functionaries we have become, with clearly defined boundaries outside of which we are not authorized to act.

Faced with this dilemma, it seems that we are incapable of recognizing the paradigm(s) of thought and action that has propelled us into the environmental and human troubles that we face today, and it seems that we, collectively, are incapable of recognizing, conceptualizing and developing alternative paradigms that may help us out of these troubles. Thankfully, there is a small band of people, some of them philosophers, others activists, who, at the margins of power, can afford to experiment with alternative thoughts and actions and lifestyles.

This raises the question of why the majority of us cannot do the same, and it is on this point, I believe, that UNESCO could take some initiatives to help countries, policy-makers, corporate managers, consumers and ordinary people out of the environmental quandaries sketched above.

As I see it, and following from the foregoing discussion, there seem to be three areas in which academics/ethicists/philosophers/activists can help to enhance environmental ethics as a practical enterprise. Firstly, they can help establish a more consciousness awareness and understanding of the contours, assumptions and implications of the dominant consensus in environmental ethics (as a practical enterprise). Secondly, they can help to explore alternative paradigms of thought and action, to determine if and how they can dislodge dominant paradigms of thought and practice that, at best, may be aimed at addressing our environmental challenges but apparently are unable to do so very effectively or, at worst, may be the very sources of our environmental problems. Thirdly, they can help to reconceptualize what is currently still perceived in the dominant model of sustainable development as three separate spheres of endeavour, namely the economic, the socio-political and the environmental—portraying them instead as dimensions of our actions as humans.
that are fundamentally dependent upon one another and that can be differentiated from one another only on the level of abstract thought.

All three of these areas, I believe, can and indeed should be the basis and substance of engaging with the current incumbents of power – those in charge of environmental policy-making and management in the world’s governments and corporations as well as those who employ them, namely politicians, cabinets, ministers, heads of state – with a view to discussing with them what their current consensus concerning environmental and development issues entails and means, highlighting the strengths and weaknesses of their consensus, and helping them to understand possible alternative ways of conceptualizing and respond to our environmental and development challenges.

UNESCO, I believe, can help to create opportunities for this kind of engagement. The following are a few practical suggestions that could be pursued in this regard.

- UNESCO could assist member countries to do an audit of their policy documents and legal framework to determine whether sustainable development is given any recognition in these documents and, if it is indeed recognized, to answer further questions as to which model of sustainable development has been adopted and whether that model is strong enough to protect the biophysical environment as well as protecting people from being dominated and exploited for short-term economic gains. If the adopted model of sustainable development is shown not to be strong enough, proposals should be formulated to address this problem.

- UNESCO could assist member countries to do an audit of interactions among their government institutions, organs of civil society and business corporations active within their country, to determine whether sustainable development is given any recognition in their interactions and, if it is recognized, to pose and answer the same questions listed in the previous point.

- UNESCO could assist large international organizations such as the United Nations and the World Trade Organization to do an audit of their policies, practices and organizational structures with a view to obtaining a clear position on the same issues listed in the two preceding points.
BIBLIOGRAPHY


