TRACING THE PATH OF SUSTAINABLE DEVELOPMENT THROUGH MAJOR

INTERNATIONAL CONFERENCES: A BRIEF HISTORY AND OVERVIEW OF

SUSTAINABLE DEVELOPMENT 1964-2002

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Starting with the idea that unsustainable practices contribute to issues of social justice and poverty as much as to ecological issues. Chapter 1 traces the origins of the terms sustainable and development individually to see how it is that they came together. Chapter 2 traces the major international conferences and documents and their use of the terms sustainable development. Chapter 3 takes a phenomenology approach to get a bit deeper into sustainable development. I examine the most commonly cited definition of sustainable development as well as a broader definition of sustainable development as a process of change. Chapter 4 examines the field of environmental ethics and argues that constant debates over value distract policy makers from the central question of what morally motivates people to support environmental ethics views. Chapter 5 examines the institution and regime building process, and the conclusion offers three questions to measure our progress.

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CHAPTER 1

INTRODUCTION

> Many present efforts to guard and maintain human
> progress, to meet human needs, and to realize human
> ambitions are simply unsustainable- in both the rich and
> poor nations
> *World Commission on Environment*
> *and Development*

These words, taken from the first few pages of what was once called the "most important document of the decade on the future of the world," are just as true today as they were when first written in 1987. Unsustainable practices contribute to issues of social justice, equality, and poverty as much as to ecological issues. It seems easy to recognize unsustainable practices, so why is it so difficult to identify sustainable ones? Defining sustainable development has proven to be difficult to say the least, discovering its origins is proving to be an equally daunting task. Most critics agree it is not clear what is meant by sustainability, development, or sustainable development. In part, this is due to the flexible and adaptable nature of sustainable development conceptualized as an ongoing process. Therefore, it is not surprising that, given their widely different objectives, economists, ecologists, and sociologists emphasize different aspects of sustainable development. Despite the amount of disagreement, nearly all of the conceptualizations and definitions of sustainable development share a social, ecological,

and economic element. That is, "sustainable development" has become an internationally accepted keyword for a political discourse committed to quality of life, the conservation of natural resources and a sense of obligation to future generations."[1] To understand why this is the case, it is necessary to trace the history or trajectory of the term sustainable development. There are of course many ways to do this. For example, Paul Thompson examines an extensive history of agrarianism dating back to Thomas Jefferson to create what he calls environmentally conscious communities.[2] In 2005 Bryan Norton introduced his 600 pages plus *Sustainability: A Philosophy of Adaptive Ecosystem Management*, which is a philosophical and linguistic analysis of what he calls the "environmental sciences."[3] These are just a few examples of the variety of approaches one can take when dealing with, or attempting to define sustainable development. The scope of this thesis is to provide a historical analysis of the rise of the concept of sustainable development. In the chapters to follow I trace the history and trajectory of the term sustainable development through what are generally consider to be key international conferences and agreements from 1964 to 2002.

In a certain sense, the term sustainable development simply emerged onto the political policy field in the late 1980s. More accurately, the term evolved from multiple uses of its individual parts, sustainable and development. Some of the key defining moments of the term sustainable development include the United Nations Conference on

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[1] Egon Becker and Thomas Jahn, *Sustainability and the Social Sciences: A Cross-Disciplinary Approach to Integrating Environmental Considerations into Theoretical Reorientation* (New York: St. Martin's Press, Inc., 1999), 1.

[2] Paul B. Thompson, *The Agrarian Vision: Sustainability and Environmental Ethics* (The University Press of Kentucky, June 21, 2010)

[3] Bryan G. Norton , *Sustainability: A Philosophy of Adaptive Ecosystem Management*
 (The University Chicago Press , 2005)

the Human Environment held in Stockholm in 1972 and the World Commission on

Environment and Development (WCED, also known as the Brundtland Report, in 1987).

More recently the UN Conference on Environment and Development held in Rio de

Janeiro in June 1992 led to the document called Agenda 21, which became the

centerpiece of The World Summit on Sustainable Development (WSSD), held in

Johannesburg in 2002. Each of these conferences and reports attempts to redefine and

conceptualize sustainable development, "to translate that definition into a unique

operational definition for the practical implementation of sustainable development."[4]

At times, the search for an operational definition has become more of an effort to

disentangle the term sustainable development from those who would supplant the

multiplicity of meanings with a more singular definition. According to the WSSD, "in the

mid 1980s, sustainable development began to be defined in important documents not in

terms of the sustainability of the natural environment or integrity of nature's life support

systems, but in terms of economic sustainability."[5] The singular emphasis on economic

aspects of sustainable development is responsible for a large amount of the criticism and

disagreement surrounding the term. Egon Becker and Thomas Jahn argue, "The

emergence of the discourse on sustainable development is closely linked to the erosion of

'development' and a narrow conception of economic modernization as prevailing models

for the management of social transformation."[6] The concept of sustainable development

is meant to address the many different aspects of modernization and development; it is "a

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[4] Luc Hens and Bhaskar Nath, *The World Summit on Sustainable Development: The Johannesburg Conference* (Dordrecht: Springer, 2005.), Introduction.
[5] Hens and Nath, *The World Summit on Sustainable Development*, Introduction.
[6] Becker and Jahn, *Sustainability and the Social Sciences*, 1.

rallying point of public debate, knowledge-building practices and political strategies to cope with a series of unprecedented world problems caused by major transformation processes."[7] When a singular aspect like economics is emphasized, it obscures and overshadows the other social and ecological aspects. At this point, sustainable development becomes just another type of "modernization" that is attracting "growing criticism, mainly from Third World activists, as a means to domination of non-Western societies and cultures."[8] As Moffatt points out, many authors believe sustainable development is not something to be defined, but rather something to be declared as an ethical principle.[9] Further still, it is tempting to describe sustainable development as simply an attempt to reconcile economics and ecology, yet this also falls short.

Brundtland writes, "Unless we are able to translate our words into a language that can reach the minds and hearts of people young and old, we shall not be able to undertake the extensive social changes needed to correct the course of development."[10] To fully understand the concept of sustainable development and its multiplicity of meanings we must look past its many singular definitions. We must look at the concepts of sustainability and development separately to grasp the full potential of sustainable development.

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[7] Becker and Jahn, *Sustainability and the Social Sciences*, 2.
[8] Becker and Jahn, *Sustainability and the Social Sciences*, 1.
[9] Ian Moffatt, Nick Hanley, and Mike D. Wilson, *Measuring and Modelling Sustainable Development* (New York: Parthenon Publishing, 2001.), 2.
[10] World Commission on Environment and Development, *Our Common Future* (New York: Oxford University Press, 1987), xiv.

CHAPTER 2

ORIGINS OF DEVELOPMENT AND SUSTAINABILITY

"Development," according to Ignacy Sachs, "entered the international agenda after 1945, out of two concerns: the need to reconstruct the economies destroyed by the Second World War and to assist the former colonies in their struggle for emancipation."[11] From the beginning, development has been linked to notions of progress and modernization, nearly always with an emphasis on economic development. The notion that progress means strictly economic development remained the prevailing model until the 1970s. Becker and Jahn argue, "the debate on the 'limits of growth' in the early 1970s also demonstrated that the resource-intensive path of development pursued by the Western industrial societies could neither carry on into the future at the same pace, nor could it necessarily be applied on a global scale."[12] At this point, it started to become clear that the idea of development contains not only economic dimensions, but also social, cultural, political, and environmental dimensions as well. As Sachs describes it, "development may be understood as an intentional, self-guided process of transformation and management of socio-economic structures, directed at guaranteeing all people an

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[11] Ignacy Sachs, "Social Sustainability and Whole Development: Exploring the Dimensions of Sustainable Development," in *Sustainability and the Social Sciences,* Becker and Jahn (New York: St. Martin's Press, Inc., 1999), 28.

[12] Becker and Jahn, *Sustainability and the Social Sciences*, 1.

opportunity to lead a full and rewarding life."[13] The movement from understanding development as simply economic progress to socio-economic transformations that entail societal choices was a major step forward toward sustainable development.

The history of sustainability follows a similar post-war economic growth path. In 1956, economic historian, W. Rostow introduced the concept of self-sustained growth as a substitute for Marx's historical materialism. According to Rostow's theory, developing countries should not be concerned with anti-capitalist revolutions but rather focus on creating institutional settings to promote private accumulation, thereby entering a continuous process of growth similar to the already industrialized nations.[14] This narrow conception of sustainability as sustained economic growth, much like the narrow conception of development as simply economic development, was also short lived. Sachs argues that, in its present form, sustainability can be traced back to the environmental revolution of the 1960s brought about by a conjunction of four major factors:

- The realization of the finiteness of our planet, a somewhat paradoxical reaction to a major technical feat, namely the landing on the moon
- The dangers inherent to the Faustian bargain associated with the nuclear race and, more generally, with the impossibility of finding a short cut to development through quick technological fixes
- The recurring Malthusian specter of mismatch between an exponentially growing population, especially in the poor South, and the limited stock of agricultural land and natural resources
- The environmental disruption provoked by the rapid economic growth of the 1950s and 1960s[15]

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[13] Sachs, *Social Sustainability and Whole Development: Exploring the Dimensions of Sustainable Development*, 29.

[14] Sachs, *Social Sustainability and Whole Development: Exploring the Dimensions of Sustainable Development*, 26.

[15] Sachs, *Social Sustainability and Whole Development: Exploring the Dimensions of Sustainable Development*, 26.

All of these factors reflect a post World War II sentiment focused almost entirely on scientific, technological, and economic considerations. Sustainability can be traced back to these factors, but also a growing recognition of these emerging factors is responsible for sustainability in its present sense. While sustainable development in its present conception certainly recognizes that a society oriented definition of problems is needed, this process has not been a linear one. In fact the post World War II sentiment mentioned earlier that focused almost entirely on science and technology is still the prevailing model of development embraced today. One needs only to look at the emerging field of sustainability science in academia to see that this is the case. This is clearly another plea for more science and technology, although sustainability science acknowledges that a new conception of science is needed. Robert Kates writes, "Research itself must be focused on the character of nature-society interactions, on our ability to guide those interactions along sustainable trajectories."[16]

It is the growing understanding that scientific, technological, economic, and ecological problems are social problems that transformed the understanding of sustainability beyond simply the economic or ecological. As Becker and Jahn argue, "Although sustainability is most prominently associated with ecological crisis phenomena, such as climate change, deforestation, soil degradation or loss of biodiversity, it nevertheless describes a field of investigation that is based in a society-oriented definition of problems."[17]

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[16] Robert W. Kates; et al; "Sustainability Science," *Science*; (April 27, 2001) 641.
[17] Becker and Jahn, *Sustainability and the Social Sciences*, 4.

I am not arguing that sustainability and development only came together as sustainable development when the economic element was overlooked; rather there came a point in time where it became obvious that other relevant circumstances needed to be considered. Economics as a model was not abandoned, but rather societal choices were then integrated. We can see this with the rise of ecological economics, as Becker and Jahn argue, "Ecological Economics stresses the need for cross-disciplinary cooperation with the natural sciences in order to take the underlying biophysical processes of economic activities into account more appropriately."[18] At this point the limitations of only an ecological economic view become obvious. That is, according to the society/nature relationship as seen from within an ecological economic view, social activities and processes are taken into account only as far as they are part of the economy.[19] It now becomes clear that notions of development must include aspects of social justice and political participation as well.

It is here that the individual parts sustainable and development begin to come together as sustainable development. Sustainability and development did not randomly collide—their union seems almost inevitable. They co-evolved over time due to many common factors. In a post-war era where science and technology are considered two of many possible solutions, ecological problems are seen as problems that affect everyone, and development is seen as a societal choice, the term sustainable development begins to emerge. In a context where all of the different spheres of existence (social, political,

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[18] Becker and Jahn "et. al." *Sustainability: A Cross-Disciplinary Concept for Social Transformations*, in "Report on the Results of the first phase of the MOST-Project" (UNESCO MOST Policy Papers 6, 1997), 18.
[19] Becker and Jahn "et. al." *Sustainability: A Cross-Disciplinary Concept for Social Transformations*, 18. Also for a complete analysis of Ecological Economics, see Mark Sagoff's "The Economy of the Earth"

economic, ecological) are seen as overlapping and interdependent, we begin to see other possibilities. In a certain sense, at this point we can see sustainability as modifying development on analytical, normative, and political levels. Becker argues that, on an analytical level, sustainability "breaks with, or at least weakens, the equivalence between development and economic growth…it also questions the assumption of continuous, linear and more or less harmonious development for societies along a given track."[20]

Sustainability also introduces a set of normative commitments to issues of development. Sustainable development should in no way lead to constraints on future generations to meet their own needs, and, as Becker states, "there is also a growing awareness that claims on intragenerational social justice, equity in gender relations and democratic participation in decision-making processes are essential with respect to the access to and distribution of natural resources and services as well as to the management of these resources."[21] When considered in terms of sustainability, this modification of development is at the heart of the concept of sustainable development. By asking such questions as what should be sustained, for whom, or for how long? By recognizing that questions of development and sustainability involve active societal choices, when we put the two together as sustainable development what emerges is a complex set of theories and practices, a combination of practical operational processes but also a theoretical framework from which to view the questions and choices that confront us. We begin to recognize that we must rethink or re-examine the society/nature relationship. When we put the two terms together, we arrive at any number possible futures. There is no longer

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[20] Becker and Jahn, *Sustainability and the Social Sciences*, 5.
[21] Becker and Jahn, *Sustainability and the Social Sciences*, 5.

one static model of development, but many different spheres where nature, the environment, economics, and politics, all overlap and become interdependent. In this sense sustainable development cannot be singularly defined, it becomes a way in which to view the world.

Where sustainability and development come together, we get recognition of development based on societal choices. This recognition is an evolving thought process. The discussion begins to emerge in all areas of thought, and does not have to be done in the specific terms of sustainable development in order to be valid. Take for example Garrett Hardin's famous "Tragedy of the Commons." Written at the same time that sustainable development was coming together, they are not unrelated. Although Hardin addresses the issue mainly from the "population problem" point of view (as he states it, "freedom to breed is intolerable"), what he argues for is a rejection of the commons in different aspects of human development; that is, in different spheres of human interaction, such as pollution, population, ecologically in the idea of national parks. This rejection involves a recognition that individuals acting for themselves can also act in detriment of the group. In a sense this is sustainable development, recognizing limits, but not just in simply economic terms. Hardin begins with the idea (from Wiesner and York) that the problems we now face are unique, and that there is no technical solution. This is also the origin of sustainable and development coming together. A rejection of the commons is also recognition that problems of human development have no singular technological solution. It is moving away from the post-war emphasis on science and

technology towards a realm of possibility that allows for the consideration of social, political, and cultural elements.

Hardin's argument here is similar to Becker pointing out the normative commitments entailed by sustainability. It is not enough to appeal to conscience; according to Hardin, conscience is self-eliminating. What is needed is, as he describes it, "mutual coercion mutually agreed upon." The difficulty lays in our ability or rather inability to balance statutory and administrative law, to legislate temperance. Hardin argues, "Analysis of the pollution problem as a function of population density uncovers a not generally recognized principle of morality, namely: the morality of an act is a function of the state of the system at the time it is performed."[22] This is not a veiled appeal to cultural or ethical relativism. Taken with Hardin's full argument, and in light of the analytical and normative levels of sustainability, we can see that "mutual coercion" becomes active societal choices. Social transformations that are at least in part mutually agreed upon become sustainable development. That is, development that attempts to navigate the narrow channels between statutory and administrative law, development that attempts to legislate temperance but is more than a simple appeal to self-eliminating conscience. Hardin quotes Hegel as saying, "Freedom is the recognition of necessity." This recognition is, in large part, the origin of sustainable development.

The path that I have traced of the origins of sustainable development is admittedly very general, but I believe it is enough to show the trajectory of the conceptualization of sustainable development. When the particular conferences and summits are examined, a

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[22] Garrett Hardin, "Tragedy of the Commons." *Science* 162 (December 1968): 1246.

similar trajectory can be seen. The individual terms began with singular definitions, one type of development and so on, stemming from a pre-war emphasis on science and technology being our savior. After the war, the intensity of these singular definitions increased, and the sole emphasis became economic development or economic sustainability. When this type of thinking reaches its peak, the water spills over the dam, and what emerges is an awareness of other important factors in growth or social transformations such as environmental, ecological, or social and political interests. These other factors emerge to the point where we begin to rethink our traditional culture/nature relationship. We can see this pattern develop by examining the many international conferences since the early 1970s.

CHAPTER 3

INFLUENTIAL CONFERENCES, STRATEGIES, AND COMMITTEES

Ian Moffatt comments that the "evolution (of sustainable development) is interesting in its own right as it has emerged as the result of public pressure and mass-media coverage, as well as conferences examining substantive environmental problems at international, national and local levels."[23] Moffatt traces the evolution of the concept of sustainable development from early versions referred to as ecodevelopment on through the major international conferences such as the Stockholm Conference on the Human Environment, the Brundtland Report, and Rio 1992. This chapter draws heavily from Moffatt's book *Sustainable Development: Principles, Analysis and Policies*, especially chapter 2 "The Evolution of the Sustainable Development Debate." The purpose of this chapter is not to come to a definitive definition of the term sustainable development, but rather to show in a more specific way than above that the history of sustainable development is not only complex, but also influenced by a number of different factors. Retracing the many steps of sustainable development may help to illustrate why it is so difficult to define or conceptualize.

While most analysis and trajectories of sustainable development begin with the United Nations Stockholm Conference on the Human Environment (Stockholm 1972),

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[23] Ian Moffatt, *Sustainable Development: Principles, Analysis and Policies* (New York: Parthenon Publishing, 1996), 8.

Moffatt notes that international co-operation in examining ecological problems from a scientific perspective began even earlier. In 1964 the International Biological Programme (IBP) was established to "examine the biological basis of productivity and human welfare." The IBP was quickly followed by the International Geosphere Biosphere Programme (IGBP) with many of the same goals. While these programs had limited funding, according to Moffatt they did produce substantial work on international environmental issues. Aside from any direct achievements, the IBP and the IGBP made two very significant contributions to the evolution of sustainable development. First, the reason why each program was created is significant, and second, the standard operating procedure of the IBP and the IGBP would become the model for international programs and conferences to come. The second of these seems so simple it could easily be overlooked; as Moffatt describes it "the modus operandi of the IBP and the IGBP was to define a problem, bring together a team of competent specialists, set up an action plan, put the plan into practice and then assess the results." While this was not a radical departure from the scientific method, nearly every major program or conference since has operated by the same basic principles. The first of these contributions of the IBP and the IGBP are a bit more significant, and deals directly with the thinking behind each program. As was stated above, their aim was to examine the biological basis of productivity and human welfare. According to Moffatt, "This interest in ecological dimensions of world natural productivity was a direct result of the then perceived threats to natural ecosystems from economic development."[24] As I have argued earlier, the

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[24] Moffatt, *Sustainable Development: Principles, Analysis and Policies*, 8.

trajectory of sustainable development began as a post-World War II emphasis on

development, driven by a belief that science and technology could solve all of our

problems. Initially this process involved singular definitions of development that centered

on economic development, and sustainable development only later emerges once these

economic motivations reach their peak. It is at this point, when economic development is

the single motivation, that it becomes apparent that there are other factors to

development, namely social-political, cultural, and ecological factors. It was recognition

of the link between ecological conservation and economic development that was behind

the establishment of the IBP and its successor the IGBP.[25] This was an important first

step in moving toward a conception of sustainable development.

Stockholm Conference

The next major step in this process was the Stockholm Conference on the Human

Environment (Stockholm 1972). According to the World Summit on Sustainable

Development (WSSD, also called The Johannesburg Conference or Johannesburg 2002),

Stockholm 1972 was a pioneering conference that had as its theme "that environmental

problems could be solved by science and technology, juxtaposed with Indira Gandhi's

contribution that 'poverty is the greatest polluter of the environment.'"[26] The agenda of

the Stockholm Conference was very broad and included topics such as soil erosion and

loss, desertification, tropical ecosystem management, water supply, and human

settlements. According to Moffatt, "the agenda of the Stockholm Conference

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[25] It is also significant to note that Rachel Carson's *Silent Spring* was published in 1962.

[26] Hens and Nath, *The World Summit on Sustainable Development*, 5.

demonstrated awareness that economic development without proper regard to environmental constraints was both wasteful and unsustainable."[27] In many ways the Stockholm Conference was an immense success, "resulting in the establishment of environmental ministries and agencies in over 100 countries and marked the beginning of the explosive growth in the number of non-governmental organizations (NGOs) dedicated to environmental protection and germane issues."[28]

Much like the model established by the IBP and IGBP, the Stockholm Conference produced a declaration, a set of principles, and an action plan. While significant, critics of Stockholm are quick to point out that the declaration was not meant to be a legal (and therefore binding) document. The 26 principles listed can at times be conflicting as well as leave a lot to be desired. For example, one principle states:

> Each country should establish its own standards of environmental management and exploit resources as they wish, without endangering other states…[29]

While this principle recognizes that it is wrong for one country or state to exploit natural resources at the expense of another country or state, it fails to recognize that political boundaries are not the same as ecological boundaries, as well as what is at the heart of sustainable development: that any exploitation of resources is unsustainable. Despite Stockholm's shortcomings, it was a major step forward. Along with the declaration and the 26 principles, an action plan was produced containing over 109 separate recommendations. This action plan has been summarized as a set of "internationally coordinated activities aimed first at increasing knowledge of environmental trends and

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[27] Moffatt, *Sustainable Development: Principles, Analysis and Policies*, 8.
[28] Hens and Nath, *The World Summit on Sustainable Development*, 5.
[29] Moffatt, *Sustainable Development: Principles, Analysis and Policies*, 9.

their effects on man and resources, and secondly, at protecting and improving the quality of the environment and the productivity of resources by integrating planning and management."[30]

Bucharest Conference

The next major step in the process came just two short years after the Stockholm Conference. In 1974 another conference was organized in Bucharest. While the Stockholm Conference emphasized the link between ecological development and economic development, the Bucharest Conference focused for the first time on the connection between population growth, environmental problems, and economic development. According to Moffatt, this conference broke new ground in that "it suggested a need for an integrated approach which attempted to take into account the inter-relationships between population growth, resource use, environmental problems and economic development."[31] These inter-relationships form the foundation of the ecodevelopment concept that would slowly be transformed into the idea of sustainable development.

Also in 1974, UNESCO launched the Man and the Biosphere Program (MAB) as an interdisciplinary research agenda "aiming to improve the relationship of people with their environment globally."[32] This agenda focused on, among other things, "the role of

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[30] Moffatt, *Sustainable Development: Principles, Analysis and Policies, 9.*
[31] Moffatt, *Sustainable Development: Principles, Analysis and Policies, 9.*
[32] http://www.unesco.org/new/en/unesco/

urban areas as ecological systems, and the impact of human interactions on ecosystems."[33] According to Moffatt, the MAB has four main aims:

- Identify and assess changes in the biosphere resulting from human activities
- Ascertain the effects of these on mankind
- Encourage greater global coherence in environmental research
- Develop reliable measures so that environmental monitoring could take place

By studying the inter-relationships between natural ecosystems and socio-economic processes it is hoped that the MAB will lead to better rational management of the resource-base. While the overall goal of UNESCO's MAB has not changed since it was launched in the early 1970s, the language was rewritten and refocused in 1995 in the wake of the United Nations Conference on Environment and Development in Rio de Janeiro 1992 (referred to as Rio 1992) and Agenda 21. I examine the implications of this refocusing a little later on, but for now it is enough to recognize that in the evolutionary process of ecodevelopment becoming sustainable development, UNESCO's MAB played a significant role. That is, the integrated and interdisciplinary approach by the MAB is a result of the conferences in Stockholm and Bucharest that came before it. The growing awareness of the many social, cultural, political, economic, and ecological factors that influence development can clearly be seen in the initial stages of the MAB, and most importantly through the Biosphere Reserve Network. Biosphere reserves became a practical way of implementing the MAB goals and initiatives. According to the Seville Strategy for Biosphere Reserves held in Seville Spain in 1995, "The network is a key component in MAB's objective for achieving a sustainable balance between the

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[33] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 10.

sometimes conflicting goals of conserving biological diversity, promoting economic development and maintaining associated cultural values."[34] This, of course, does not mean that a transformation from what Moffatt refers to as ecodevelopment to what we now call sustainable development happened overnight, or in a straight line for that matter. While the MAB's focus on inter-relationships between natural ecosystems and socio-economic processes lead to ecodevelopment emerging as a major planning concept, there was also a growing awareness that socio-economic development on a national or global scale could have significant implications on the same things on a local scale. Moffatt argues that "In 1981 the ecodevelopment concept was re-defined as the concern to conserve renewable resources, to pace or regulate the rate of exploitation of non-renewable resources and to control the discharge of residuals."[35] This was the beginning stages of a struggle to balance competing global needs with local needs, an impending conflict between local development and global development that the concept of ecodevelopment as it was understood before 1981 was ill equipped to handle. This conflict played out in the publications of the time as well as in the major conferences like Stockholm + 10 held in Nairobi, Kenya in 1982. The re-defining of ecodevelopment meant recognizing and labeling underlying ethical and moral assumptions behind ecodevelopment, as well as clearly identifying competing interests in the spheres of economic and social equality. Moffatt points to Farvar and Glaeser (1979) who conclude that "even when fundamental approaches, like land reform and restructuring of the relations of production, have been considered in the agenda of development, many of the

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[34] International Conference on Biosphere Reserves Seville, Spain, 20-25 March 1995
[35] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 10.

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real issues are hidden or swept aside in the debate over environmental compatibility…[issues such as] whose needs are going to be met and whose are not; who will participate and who will not; and which lobbies, interests groups and economic and political entities will be hurt by environmental compatibility?"[36]

It is here, in the attempt to balance all of these competing interests, that ecodevelopment begins its transformation from "a planning concept to a potential weapon in the fight against social injustice, economic exploitation and ecologically and technologically inappropriate development."[37] Balancing these interests simultaneously with environmental and ecological interest on a global, national, and local scale ultimately proved to be more than ecodevelopment could handle. This radical transformation of the concept of ecodevelopment was also more than world leaders and policy makers could bear, and resulted in, as Redclift points out, "advocating ecodevelopment in principle (which) does not commit governments or international organizations to list achievements in principle."[38] However, this is the next major step in the evolutionary process, when ecodevelopment finally gives way to sustainable development as the alternative way of organizing socio-economic development. As I mentioned above, this can also be seen in the major conferences post launch of UNESCO's MAB program. It should also be noted that some of these conferences and initiatives have had interesting, often unintended but extremely important consequences. For example, the MAB programs overarching goal was to better manage natural

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[36] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 10.
[37] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 11.
[38] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 11.

resources with an eye towards equitable distribution. It could be argued that in the implementation of that goal it also created a platform for the voice of local and indigenous people.[39]   The most influential conferences following the MAB program were the *World Conservation Strategy* and the *Brundtland Report.*

<div align="center">World Conservation Strategy</div>

Launched in 1980, the *World Conservation Strategy* was a joint collaboration between the United Nations Environmental Program (UNEP), International Union for Conservation of Nature (IUCN) and the World Wild Fund for Nature (WWF). It is considered by many to be the first comprehensive policy statement on the link between conservation and sustainable development.[40] The shortcomings of previous theories of ecodevelopment became painfully obvious with the launch of the *World Conservation Strategy*; it was an attempt to address the many issues of development economic or ecological, related to the competing interest of rich and poor. Moffatt cites the central tenet of the *World Conservation Strategy* as:

> …the combined destructive impacts of the poor majority struggling to stay alive and an affluent minority consuming most of the world's resources are undermining the very means by which all people can survive and flourish (IUCN, 1980).[41]

Its three main goals are:

- Maintain essential ecological processes and life-support systems
- Preserve genetic diversity

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[39] For more on this see United Nations Declaration on the Rights of Indigenous Peoples. http://www.un.org/esa/socdev/unpfii/en/declaration.html
[40] Hens and Nath, *The World Summit on Sustainable Development*, 3.
[41] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 11.

- Ensure sustainable utilization of species and ecosystems

While these are significant and important goals, the problem is that they are focused on a global level. The *World Conservation Strategy* may have been the first significant policy statement on the link between conservation and sustainable development, and it certainly recognized the growing disparity between rich and poor in the struggle for a balance between economic and ecological development. However, it did not involve or engage the average citizen on a local level. It was aimed at government policy makers, conservationists and developers. The lesson that the *World Conservation Strategy* taught us is, as Moffatt points out, "it is clear that it is much easier to talk about global environmental problems than it is to tackle the root causes of these problems at the international, national and local level."[42] The *World Conservation Strategy*'s focus on a global level may not have had much impact on the average citizen or transformed public attitudes in the way that was hoped for; the scale of response was quite impressive, with at least forty countries committing to it.[43] Given the trans-boundary nature of environmental problems, a certain amount of global awareness and recognition must be made in order to affect change on localized levels. This recognition began as ecodevelopment and slowly transformed into sustainable development as a method of socio-economic development that tried to reduce as much as possible the risk of environmental impact. Again we can see this transformation process playing out in the major conferences of the time. As Luc Hens and Bhaskar Nath explain:

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[42] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 12.
[43] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 13.

Whereas the approach of the Stockholm Conference of 1972 was technology driven, concerned mainly with local issues and problems and largely conditioned by Rachel Carson's *Silent Spring* (1962), the agenda of the Nairobi Conference reflected the practical and scientific concerns of the time. Indeed, it was at the Nairobi Conference that the social and economic drivers of environmental problems were recognized, leading to the establishment of the World Commission on Environment and Development (WCED).[44]

World Commission on Environment and Development

The WCED chaired by Gro Harlem Brundtland was commissioned in 1983 and published the *Brundtland Report* or *Our Common Future* in 1987. At the United Nations World Summit on Sustainable Development (WSSD) held in Johannesburg in 2002, Hens and Nath stated that the Brundtland report unraveled the relationship between environment and economy, and that "it not only popularized the concept of sustainable development, but also demonstrated most convincingly that anthropogenic environmental problems are fundamentally interdisciplinary and ought to be regarded as such."[45] While there is much continuing debate over the meaning, definition, and conceptualization of sustainable development, the significance of this conference cannot be denied. In a later chapter I examine in greater detail the implications for sustainable development in Brundtland's report, but for now let us just consider the general aim of the WCED and how it helped to further sustainable development as the popular model for socio-economic development.

In the foreword, Chairman Gro Harlem Brundtland outlines four main objectives:

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[44] Hens and Nath, *The World Summit on Sustainable Development*, 5.
[45] Hens and Nath, *The World Summit on Sustainable Development*, 5.

- Propose long-term environmental strategies for achieving sustainable development by the year 2000 and beyond

- Recommend ways concern for the environment may be translated into greater co-operation among developing countries and between countries at different stages of economic and social development and lead to the achievement of common and mutually supportive objectives that take account of the interrelationships between people, resources, environment, and development

- Consider ways and means by which the international community can deal more effectively with environmental concerns

- Help define shared perceptions of long-term environmental issues and the appropriate efforts needed to deal successfully with the problems of protecting and enhancing the environment, a long-term agenda for action during the coming decades, and aspirational goals for the world community [46]

These four stated goals of the WCED clearly demonstrate that the scope and aim of the Brundtland Report were much larger than any conference to date. According to Moffatt, "whatever the merits of the *Brundtland Report* it is quite clear that since its publication many governments and environmental organizations as well as industrialists would not view the environment as an externality to economic matters…"[47] While Brundtland may not have fully unraveled the relationship between environment and economy as Hens and Nath argue (WSSD p.5), the impact of the WCED is hard to deny. At this point it became painfully obvious that sustainable development does not simply mean economic development, and that various situations might call for various responses. That is, defining and applying the concept of sustainable development may be quite different between countries at different stages of economic and social development.

[46] WCED, *Our Common Future, ix.*
[47] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 15.

United Nations Conference on Environment and Development

By the time that *Our Common Future* was published in 1987, sustainable

development, despite its ambiguities, became firmly entrenched in the political agenda.

So much so, that it became almost the sole focus of the United Nations Conference on

Environment and Development (UNCED) held in Rio de Janeiro in 1992. The Rio

conference sought to further establish the link between environment and development, as

well as find a "practical interpretation of the rather theoretical concept of SD, seeking to

balance the modalities of environmental protection with social and economical

concerns."[48] Also in 1992, three other major conferences were held based on urgent

issues discussed at and related to Rio: The Framework Convention on Climate Change,

The Convention on Biological Diversity (CBD), and The Convention to Combat

Desertification (concluded in 1994). Along with these three related conferences, Rio 92

generated two very important outputs. The first is *The Rio Declaration on Environment

and Development*, a list of 27 principles on which SD policies are to be based (examples

include the precautionary principle and the equity principle). The second major output of

the Rio 92 conference is Agenda 21. According to the WSSD, Agenda 21 "provides a

remarkably sharp analysis of both the symptoms and the underlying causes of global

unsustainability, as well as authoritative ideas on how to put SD into practice."[49]

Although the Rio Declaration and Agenda 21 significantly impacted the

advancement of sustainable development, it is difficult to determine exactly how much of

an impact was made. Perhaps the agenda of Rio was a bit too ambitious, as it attempted

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[48] Hens and Nath, *The World Summit on Sustainable Development*, 5.
[49] Hens and Nath, *The World Summit on Sustainable Development*, 5.

to do two things at once. The international community was still struggling to define the concept of sustainable development as it appeared in *Our Common Future*, and the Rio conference tried to further define this concept as well as develop a practical plan of implementation. According to Moffatt, "Agenda 21 was intended to set out an international programme of action for achieving sustainable development in the 21st century…[it] seeks to integrate economic development and environmental conservation locally, nationally and globally."[50] This helped expand the theoretical concept of sustainable development, but did not clear things up in a way that could be practically implemented or adopted by policy makers, at least not right away. The process of implementing the agreements of the Rio conference and Agenda 21 was more time-consuming than anyone expected. This should not take away from what was accomplished in Rio 1992 in the least. Agenda 21 further examined the link between economic development and environmental conservation, while also recognizing the impact of social and cultural values. It attempted to give a broad outline of the many problems of development, and then offered a number of possible solutions. It was a significant step forward when the many nations involved all agreed in principle to promote sustainable development in the twenty-first century.

The major drawbacks or faults that most critics find with Agenda 21 or the Rio Declaration are not really faults of the documents themselves. For instance, Agenda 21 is not a legally binding document and therefore the parties and governments that agreed to it in principle at Rio do not actually have to follow it, nor is there any way of enforcing the

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[50] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 22.

different countries to follow or implement it. Also, Hens and Nath point to three main factors that have thwarted the practical implementation of sustainable development since Rio 92: vagueness of how to measure sustainable development, unrealistic expectations placed on the creation of the Commission for Sustainable Development (CSD), and lack of funds.[51] Some estimates show over 90 % of the Agenda 21 issues have no financial means for implementation.[52] Without a clear and singular definition of sustainable development, it is no wonder that there are problems measuring it.

However, despite the lack of funding, Agenda 21 is still a remarkable achievement. Each chapter of the document (there are over 40) examines a major problem area, addresses concerns and efforts to date to deal with the problem, then offers general ways in which the issue can be tackled. According to Moffatt, "This leads to an identification of the activities that specific bodies should undertake. These activities are, by implication, to be undertaken by the organizations noted, such as international organizations, governments, non-governmental organizations and the private sector."[53] This is the real strength and contribution of Agenda 21. By indicating specific groups for action, and stressing co-operation, Agenda 21 emphasized a bottom-up rather than top-down approach to sustainable development which, according to the WSSD "is having a considerable impact on the democratic process itself."[54]

This bottom-up approach to sustainable development has proven to be both a plus and a minus for Agenda 21 specifically, and the Rio conference in general. A bottom-up

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[51] Hens and Nath, *The World Summit on Sustainable Development*, 6.
[52] Hens and Nath, *The World Summit on Sustainable Development*, 6
[53] Moffatt, *Sustainable Development: Principles, Analysis and Policies,* 23.
[54] Hens and Nath, *The World Summit on Sustainable Development*, 6.

approach is more democratic, and raises a wider social consciousness, but as mentioned

earlier, this is a slow and time-consuming process. According to the WSSD some

progress towards sustainable development with regard to Agenda 21 issues has been

made in the ten years since Rio 92. Most notably, they point to slower population growth,

reduced mortality rate, improved health, wider access to education, and strengthened role

of women. Despite this, the WSSD also notes that "since Rio much greater progress has

been made world-wide in environmental institution-building than in actually protecting

the environment or pursuing effective policies for sustainable development."[55]

Specifically the WSSD mentions:

> a proliferation of institutions and organizations (including NGOs) of major groups
> such as women, indigenous communities, local authorities, business and industry,
> and scientists to support, promote and deal with environmental and sustainable
> development issues at local, national, regional and global levels.[56]

Again, this is seen both as a strength and a weakness of Agenda 21 and the Rio

conference. While it is certainly frustrating that in the ten years since Agenda 21 was

agreed upon little progress in implementing sustainable development policies has been

made, it may be a bit naïve to think that practical implementation was possible without

proper institutional foundations. Perhaps what Agenda 21 really showed us was that we

had not come as far as we originally thought. This introspective thinking set the stage for

one more very important major conference.

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[55] Hens and Nath, *The World Summit on Sustainable Development*, 7.
[56] Hens and Nath, *The World Summit on Sustainable Development*, 8.

The World Summit on Sustainable Development (WSSD) held in Johannesburg in 2002 was primarily concerned with why so little progress had been made towards achieving the Rio goals of sustainable development. The three main outputs of the WSSD include the Johannesburg Declaration on Sustainable Development (Political Declaration), the Johannesburg Plan of Implementation (JPI), and Type II partnerships.[57] Without going into great detail, each of these three outputs can be summarized fairly quickly, and I will only briefly discuss them here. As I stated above, the WSSD was convened with the expressed intentions of revisiting and achieving the goals of Rio 92, so the JPI reaffirmed Agenda 21 and focused on the best ways to implement it. What are called Type II partnerships were proposed to stress the importance of partnerships between countries as well as between governments and civil society. And the Political Declaration was provided to "overarch all the WSSD aspirations and to highlight its vision of global sustainability in an equitable world of peace and prosperity."[58]

The Political Declaration overarched and concluded the conference, with the intent to clarify the Johannesburg vision of sustainable development and to pave the way for new negotiations.[59] The bulk of the Declaration is a pledge to implement the sustainable development program detailed in the JPI, and after much negotiation what finally emerged was a somewhat watered-down text of 37 articles (from an original 69). It outlines the path taken from Stockholm, to Rio, to Johannesburg, examines the many

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[57] Hens and Nath, *The World Summit on Sustainable Development*, 4.
[58] Hens and Nath, *The World Summit on Sustainable Development*, 14.
[59] Hens and Nath, *The World Summit on Sustainable Development*, 15.

present challenges we face, and expresses a commitment to sustainable development, and

emphasizes the need for implementation. According to Hens and Nath:

> …although it refers to strategic approaches to the realization of the JPI, it is not clear as to which doors, if any, it opens for new international negotiations. Therefore, the impact of the Declaration on the future negotiations of sustainable development would probably be limited.

The JPI on the other hand is a negotiated document on which a consensus of all

the UN members was reached. It is a list of actions (some with quantified targets) to be

implemented to realize the Agenda 21 objectives.[60] Although the JPI does little to add to

Agenda 21, what are referred to as the WEHAB commitments and initiatives do stand

out. WEHAB is an acronym for the subject areas: water and sanitation, energy, health,

agriculture, and biodiversity. While these are not entirely new commitments or areas of

focus, they are significant in the fact that the JPI places specific time limits on achieving

and implementing them. As Hens and Nath point out, this is significant because

"although there is no legal obligation to meet the targets by the specified time limit, these

limits have nevertheless been negotiated by the parties concerned. And to that extent they

impose a moral obligation on the parties to comply."[61]

Perhaps the most interesting and least developed output of the WSSD is the Type

II partnerships. The definition given for these "partnerships" is:

> A series of implementation partnerships and commitments involving many stakeholders…These would help to translate the multilaterally negotiated and agreed outcomes into concrete actions by interested governments, international organizations and major groups.[62]

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[60] Hens and Nath, *The World Summit on Sustainable Development*, 16.
[61] Hens and Nath, *The World Summit on Sustainable Development*, 28.
[62] Hens and Nath, *The World Summit on Sustainable Development*, 26. (opening statement by chairman of 3rd precom)

While a procedure has been discussed for registering Type II partnerships, little has been done to elaborate how these partnerships would actually work. As Hens and Nath point out, "The proposed partnerships are fundamentally an excellent idea. For, if one is serious about implementing sustainable development, it makes much sense to operate under a framework that allows civil society to make its contribution."[63] However, without further explanation of how these partnerships would work, three major concerns have limited the international community from fully accepting this idea. The major concerns are summarized as:

- Worry of the NGOs that these partnerships may substitute governmental obligations
- Authorities fear that they might lose control over their sustainable development policies and programs
- Implementation of sustainable development is not a core activity of business or industry, neither of most of the other major groups[64]

Despite these concerns, and despite the fact that the UN has done little to elaborate on how these partnerships will work or how they would be maintained after the WSSD, Type II partnerships may turn out to be the most lasting outputs of the 2002 Summit. When evaluating the separate parts of the WSSD especially in comparison to the UNCED (Rio 92) it seems to fall a bit short. When evaluated as a whole, on the other hand, the WSSD has great potential to make lasting progress in the sustainable development arena. The JPI and the Political Declaration clearly are not as strong as the Rio Declaration or Agenda 21, primarily because their focus was on implementing the Rio Declaration and achieving the goals of Agenda 21. And as I commented earlier, the

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[63] Hens and Nath, *The World Summit on Sustainable Development*, 27.
[64] Hens and Nath, *The World Summit on Sustainable Development*, 27.

institution building and lack of implementation in the years between the Rio and

Johannesburg conferences illustrated that we had not made as much progress as we

thought, the outputs of the WSSD may show just how much progress we have made.

Mutually agreed upon time limits for initiatives and commitments is a significant step

forward. And the idea behind Type II partnerships definitely shows progress in the sense

of sustainability and development coming together to form sustainable development as a

concept of development that is conscious of not only economic but also the social,

cultural, political, and environmental aspects of society. As Hens and Nath state it, "To

this extent Johannesburg can be said to have been a milestone in democratizing the

approach to sustainable development."[65]

Kyoto Protocol

This more active and wider societal participation in the sustainable development

debate and the development process is illustrated by example with the events surrounding

the Kyoto Protocol in the years just before and after the WSSD. It is argued that the

general international spirit in 2002 impacted the events of the WSSD as much as anything

else. And this spirit was characterized by a growth of economic globalization and global

security issues.[66] This is not surprising, especially for the United States given the terrorist

attacks of September 11 2001. At this point America choose to emphasize security and

short term economic interests above almost everything else. Under these circumstances, it

seemed as if a concept like sustainable development could not possibly be maintained,

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[65] Hens and Nath, *The World Summit on Sustainable Development*, 33.
[66] Hens and Nath, *The World Summit on Sustainable Development*, 13.

but incredibly when the United States, for reasons of short term economic interest refused to sign the Kyoto Protocol, incredibly a number of individual states, cities and even counties agreed to it and adopted it in principle. This surely would not have been imaginable before the bottom- up rather than top- down approach, and institution building and idea of Type II partnerships of the Rio and Johannesburg conferences respectively.

Prior to the WSSD (and Rio to an extent) one of the major issues in the sustainable development debate was how to separate or distinguish it from simply economic development. Since the Johannesburg conference the problem has shifted to globalization and development, more specifically, how to address sustainable development with an ever increasing gap between north and south, developed and developing countries. While there is clearly no simple answer to this question, by tracing the path of these many international conferences and seeing the progression of the concept of sustainable development a few things become clear. Before we can begin to answer, we must first recognize that sustainable development is not about one type of development, it is about societal choices, and given this fact, the entire process needs to be more democratic.[67] We need to also be aware of sustainable development at various scales that is, not only in a spatial sense of globally or locally, but also temporal scales in the sense of short term and long term goals. And maybe most importantly, we need to recognize that even so called developed countries often need to learn to develop in a

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[67] Democratic in the sense of bottom-up approaches that include all parties with an interest at stake.

sustainable manner, especially given the fact that there is still much debate and tension

around the terms "developed" and "developing." [68]

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[68] Arturo Escobar examines this idea further in his book *The Invention of the Third World*. Arturo Escobar,
La Invención del Tercer Mundo, Construcción y Deconstrucción del Desarrollo,
(Grupo editorial norma, aug 2000)

CHAPTER 4

WAYS OF UNDERSTANDING SUSTAINABLE DEVELOPMENT

As I have shown in previous chapters, the concept of sustainable development is complex and attempts to find a common definition are hampered by restrictive narrow interpretations that ignore the many related social and political factors involved. Even without a consensus definition, sustainable development continues to be a very popular topic in environmental and social sciences. It has also become an influential concept with policy makers, which is why it is imperative that we are all working form a common understanding. According to Robert Goodland, there are three types of sustainability that should be recognized; social sustainability, economic sustainability, and ecological sustainability.[69] Reginald Victor also discusses what he calls traditional sustainability while asserting that sustainability is "an old concept that has been receiving face-lifts in the context of present day environmental consciousness."[70]

So what is sustainability or sustainable development? Is there, or can there be a clear definition? Listed above are types of sustainability, descriptions of actions, not definitions of sustainability and certainly not a singular definition of sustainable

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[69] Reginald Victor, "Traditional Sustainability: A Case Study of Floodplain Fisheries Management in West Africa" in *Ecological Sustainability and Integrity: Concepts and Approaches* Lemons, John, Laura Westra, and Robert Goodland (Dordrecht: Kluwer Academic Publishers Group, 1998), 182.
[70] Victor, *Traditional Sustainability: A Case Study of Floodplain Fisheries Management in West Africa,* 182.

development. Maybe what we should be looking for is an explanation of sustainable development, not a definition. That is, when we search for a definition what we are looking for is something finite and distinct. When we search for an explanation of sustainable development, we come to understand that it is a process not limited by singular methods. What we are looking for is an understanding of sustainable development, and to grasp this we must turn our attention again to the most common definition cited. That is, sustainable development as defined by the WCED is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[71] Although this is the most common definition of sustainable development, it is certainly not a universal definition.

This move from a definition to an understanding of sustainable development may be better understood in light of Ludwig Wittgenstein's language-games argument. That is, "…A meaning of a word is a kind of employment of it…when language-games change, then there is a change in concepts, and with the concepts the meanings of words change."[72] For example, when philosophers, ecologists, public policy makers, or the public at large use the term sustainable development, it is quite possible that they mean entirely different things. More specifically, when an ecologist uses the term sustainable development they are more than likely referring to ecological sustainability, and likewise when an economist uses sustainable development it is reasonable to assume that they mean economic sustainability. In order for the term to have any meaning at all for policy

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[71] WCED, *Our Common Future*, 8.

[72] Ludwig Wittgenstein, *On Certainty*. Edited by G.E.M. Anscome and G.H. Von Wright. Translated by Denis Paul and G.E.M. Anscombe (New York: Harper Torchbook, 1972), 10.

makers, we must be careful to clarify our use of the term. That is, if only economic sustainability is meant then that is what should be used. If only it were this simple! Given the abundant use of the term sustainable development in environmental/social sciences today, and the less abundant use of more singularly specific terms such as economic sustainability or ecological sustainability, we can only assume that when authors use sustainable development, their intended use contains some notion or understanding of all of these relationships (economic, ecological, social/cultural development).

To further complicate the matter, Laura Westra points out that many people view ecological sustainability as inimical to economic or social sustainability. She states, "It is the short-term economic advantage that policymakers most often seek and deliberately contrast with ecological imperatives."[73] It is for this reason that Goodland argues that the three types of sustainability are "clearest when kept separate" but in fact the opposite is true. The different types of sustainability appear inimical because their relationship is not emphasized enough. Again, this leaves much scholarly work to be done if sustainable development is to become a useful term and not an empty meaningless catch-all phrase.

Setting aside for a moment the fact that different people come up with different definitions of the same word, let us first consider how it is possible that so many people can have different interpretations of one definition. In her book, *Safeguarding Our Common Future*, Ingrid Stefanovic takes a phenomenological approach to attempt to

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[73] Laura Westra, "Why We Need a Non-Anthropocentric Environmental Evaluation of Technology for Public Policy" in *Ecological Sustainability and Integrity: Concepts and Approaches* Lemons, John, Laura Westra, and Robert Goodland, (Dordrecht: Kluwer Academic Publishers Group, 1998), 269.

answer these sorts of questions. Stefanovic argues that this type of approach is uniquely suited for the task because:

> Phenomenology aims to maneuver between two extremes: On the one hand, it tries to avoid the naïveté of assuming that simplistic, unilaterally imposed and universal answers to complex environmental problems can be conclusively defined once and for all in an accomplished state of sustainability. On the other hand, phenomenology is also uneasy with a postmodern skepticism that simply accumulates plural interpretations of the world.[74]

At this point, the role of philosophy in general and a phenomenological approach specifically is to "expose taken-for-granted assumptions, value judgments, and even cultural paradigms and language structures that condition our way of seeing the world."[75] When we begin to expose these assumptions, we begin to see just what a mess we are in. Rajni Kothari points out that "Economic growth, propelled by intensive technology and fueled by an excessive exploitation of nature, was once viewed as a major factor in environmental degradation... [ironically it] has suddenly been given the central role in solving the environmental crisis."[76] We live in a time where scientific facts are absolute.

Stefanovic reminds us that scientific judgment requires the interpretation of facts. As she states it, "Facts are not merely value neutral, ahistorical entities that the expert divines once and for all. The meaning of a fact depends on the question you ask and on the context that is presupposed in order to ask the question in the first place."[77] Sadly this is not the world we find ourselves in. We have forgotten that the interpretation of facts entails certain presuppositions. "A dichotomy is, therefore, set up between apparently

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[74] Ingrid Leman Stefanovic, *Safeguarding Our Common: Future Rethinking Sustainable Development* (New York: State University of New York Press, Albany, 2000), xvii.
[75] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, xvi.
[76] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 6.
[77] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 7.

objective, empirically verifiable and immutable factual knowledge on the one hand, and subjective, historically variable philosophical opinions and values on the other."[78] Before we can begin to peel away the many layers of taken-for-granted assumptions engrained in our thinking as it relates to sustainable development, a bit more needs to be said about how we have arrived at these modern times where facts and values have become so fractured, and scientific knowledge defines our reality.

Following in the footsteps of other great phenomenologists like Edmund Husserl and Martin Heidegger, Stefanovic traces the roots of our modern worldview back to the origins of metaphysics itself. According to Stefanovic, "Heidegger's phenomenological investigations showed how metaphysics, from the time of the ancient Greeks, has supported a worldview that idealizes absolute certitude and the comfort of timeless truths- and it is such a metaphysical presupposition of the nature of reality that grounds the culmination of the tradition in science."[79] Phenomenologists reject the major metaphysical assumptions of Western Philosophy, at least the tradition that strives to make philosophy an exact science. The tradition that begins with, as Stefanovic describes Plato positing reality into forms and ideas and continues through the middle ages, and culminates in the Modern Era with Descartes' emphasis on pure reason. "Descartes' aspiration to invest philosophy with the certitude of a science was only further testimony to the search for order in rational principles. The power extended by technology to human beings similarly corroborated the appearance of human, calculative mastery over

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[78] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 8.
[79] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 8.

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nature."[80] The idea of a phenomenological approach here is a rejection, or rather re-orienting of philosophy that allows the world to be revealed in-itself. By attempting to suspend all epistemological and metaphysical presuppositions we allow the world to reveal itself in order to grasp those taken for granted assumptions that influence every aspect of our experiencing a lived world. By recognizing the interdependence of things Brundtland has already begun (whether consciously or not) the process of rejecting those metaphysical assumptions leftover from Descartes. As she states in the forward to the WCED, "the environment does not exist as a sphere separate from human actions, ambitions, and needs…environment is where we all live; and development is what we all do in attempting to improve our lot within that abode"[81] This simple idea is what gets us past the dangerous narrow definitions or conceptions of sustainable development. Being open allows for endless possibilities of understanding. What we have been searching for is not a definition, but rather a broader way of understanding sustainable development.

Brundtland's simple description of the relationship between environment and development begins to make the way clearer. Again, a phenomenological approach here serves us well. Stefanovic argues that "The irony of *Our Common Future* is that a foundational knowledge of the meaning of Being-human is largely absent."[82] While this is not surprising given that the aim of the report was a more broadly defined "global agenda for change," this does not mean that metaphysical assumptions are completely lacking from the report. Stefanovic's description of Heidegger's notion of history is quite

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[80] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 9.
[81] WCED, *Our Common Future*, xi.
[82] Stefanovic, *Safeguarding Our Common: Future Rethinking Sustainable Development*, 24.

similar to Brundtland's explanation of the relationship between environment and development. According to Stefanovic, "history was seen by Heidegger to consist of more than a clearly demarcated object of contemplation…the very essence of being human is history."[83] Just as one could not *be* in the absence of history and time, one cannot escape environment (as a place to *be*) or development (as a way of *being*).

This very fluid understanding of the meaning of sustainable development highlights many of the strengths and weaknesses of *Our Common Future*. The Brundtland Report is somewhat of a paradox in that it was simultaneously praised and blamed for the same things. As Stefanovic points out, "critics felt that it was precisely because the Brundtland Report did not present an expert's manual of dos and don'ts that too little was specified in a precise way." Yet many of these same critics recognized that "sustainability is more than a set of techniques that can be mechanically applied according to edicts from a handbook." [84] Critics of the Brundtland Report and its conception of sustainable development fall into two main categories: those who claim sustainability is popular precisely because of its lack of meaning and those who directly attack the most commonly cited definition of sustainable development (that it meets the needs of the present without compromising the ability of future generations to meet their own needs). [85] A more thorough examination of the Brundtland Report reveals that, for the same reasons, both groups of critics miss the mark. Once again we can return to Brundtland's notion of the interconnectedness of environment and development and see

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[83] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 22.
[84] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 18.
[85] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 18.

that throughout the report the commission clearly identifies a connection between social, political, economic, and ecological issues. The concept of sustainable development is most certainly not meaningless when we look beyond the oft cited definition of meeting present needs. Take for example this more comprehensive explanation of sustainable development found in the first chapter:

> Yet in the end, sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs.[86]

I believe that if explanations such as this were emphasized by the commission then there would be less confusion and critics may not be so quick to label sustainable development as a meaningless phrase. The broad explanation of sustainable development clearly incorporates an understanding of the interrelatedness of social, political, ecological and economic factors. This relationship is at times understated by the commission, especially when critics point to sustainable development as being synonymous with simply economic development. It is here that we need to recognize that the commission believes that poverty (or inequality) is a leading cause and factor in environmental issues. As they state it, "A world in which poverty is endemic will always be prone to ecological and other catastrophes."[87] Rajni Kothari distinguishes between sustainable development as a narrow economic ideal and as an ethical ideal, but according to Brundtland's broader

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[86] WCED, *Our Common Future*, 9.
[87] WCED, *Our Common Future*, 8.

interpretation of sustainable development, you cannot deal with one without dealing with the other.[88]

Implications of a Broader Understanding

The broader understanding and conception of sustainable development that is found in a thorough examination of *Our Common Future* far from simplifies things. By recognizing the interconnected relationship of ecological, economic, social and political factors involved and by stating that sustainable development is not a fixed state of harmony but rather a process of change, the report has in fact complicated matters greatly, but in a good way. For those that support or defend the report, the consensus is clear: what is needed at this point is not more technology, but more philosophy. Stefanovic writes "if the aim of philosophical analysis is to bring to light the structure of our beliefs…then philosophy becomes the prerequisite for wise environmental policy formulation and decision-making."[89] The Brundtland Report clearly recognizes that sustainable development is a global issue, but solutions must be in part, contextual and historically rooted. This is what leads to more philosophy, not simply more science or technology. The process of change becomes dependent on and determined by a combination of institutions in place and prevailing values of those involved. As the Report states, "The concept of sustainable development does imply limits- not absolute limits but limitations imposed by the present state of technology and social organization

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[88] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 6.
[89] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 6.

on environmental resources…"[90] It may not be an easy task, but the Brundtland Report recognizes that social organization along with human values and attitudes towards nature are manageable. The question remains how or where do we begin this managing of social organization? What process of change is needed to arrive at a broader understanding of sustainable development that is useful or tangible for policy makers? Most importantly, how do we affect this change without simply imposing a Western view of appropriate development on Non-Western developing nations? Also, how can we do all of this without perpetuating the myth that it is humanity's legacy to dominate nature?[91]

Once again, Stefanovic's phenomenological approach will serve us well. As she points out, in Heideggerian terms the metaphysical worldview that has dominated the understanding of sustainable development thus far has been essentially calculative. That is, "In calculation, one studies, organizes, and computes explicitly given, empirical realities without pausing to inquire originatively about the essential meanings that sustain these investigations."[92] The sustainable development debate has been framed in a very anthropocentric manner focusing on resource use and management, filled with scientific and economic data all comfortably quantifiable. The debate has been narrow in conception focusing only on growth. I previously cited Stefanovic's reading of Kothari who laments the fact that:

> Economic growth, propelled by intensive technology and fuelled by an excessive exploitation of nature, was once viewed as a major factor in environmental degradation. Ironically, that same paradigm of economic growth and

[90] WCED, *Our Common Future*, 8.
[91] Lynn White, Jr., "The Historical Roots of Our Ecologic Crisis," *Science* 155 (March 1967): 1203–1207.
[92] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 23.

technological progress has suddenly been given the central role in solving the environmental crisis.[93]

But it is not the same paradigm. Previously the discussion of sustainable development was lacking an awareness of many important relationships. The debate did not recognize that poverty and inequality, ecosystem health and management, and social organization are all related. *Our Common Future* does not offer this same tired paradigm. There is now a holistic understanding of sustainable development, one that sees sustainable development as a process of change. It is not just another plea for more science and more technology. *Our Common Future* is not simply more calculative thinking. I will grant that much of the language is the same. The Brundtland Report offers pages and pages of organized data that can be quantified and classified into neat little packages of empirical realities, but it is also more than that. The broader conception of sustainable development, the understanding that sustainable development is a process of change, lays the foundation and opens the way for more (again borrowing from Heidegger) meditative thinking. As Stefanovic describes the term:

> Meditative thinking…does not simply seek to compute *things* but, rather, it is more oriented toward investigating the complexity of relations among things…[and] returns us to an originative contemplation of the grace of existence and the recognition that all things in the universe are not present merely for the sake of their utility and for our control.[94]

The Brundtland Report may not ever get this deep or philosophical (hence the need for more philosophy) but it is the beginning of the process of change. The Commission is thinking meditatively when it describes the interconnectedness of

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[93] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 6.
[94] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 23-24.

economic, ecological, social, and political factors related to sustainable development. Many critics argue that the Brundtland Report is "an enthusiastic and unquestioning reaffirmation of the system, lifestyles and values that are causing the problems under discussion."[95] They also claim that the Brundtland Report (with its emphasis on economic development and tendency to reduce humans to mere resources) continues the status quo of anthropocentric and utilitarian thinking, which is a contentious idea. The Commission stresses more democracy in international policy making, which can easily be seen as promoting a Western worldview, but it is also hard to argue with the idea that rigid top-down management styles should be discarded in favor of a bottom-up approach that promotes equality and incorporates localized knowledge that may otherwise be overlooked or forgotten.

With its conception of sustainable development as a process of change, *Our Common Future* should be seen as a call to action, a call "for new norms of behavior at all levels and in the interests of all."[96] Perhaps one of the reasons why the Brundtland Report has not been more effective is because of the emphasis on the need for developed nations to act responsibly and within limits. For example, the Commission states "Sustainable global development requires that those who are more affluent adopt life-styles within the planet's ecological means."[97] The fact is that no one group is singled out by the Commission, this is made clear when they write, "…human ambitions are simply unsustainable - in both the rich and poor nations."[98] To some, the Brundtland Report may

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[95] Stefanovic, *Safeguarding Our Common Future: Rethinking Sustainable Development*, 22.
[96] WCED, *Our Common Future*, xiv.
[97] WCED, *Our Common Future*, 9.
[98] WCED, *Our Common Future*, 8.

appear to support the status quo, but it is only because we have not accepted the call to action. We are only now beginning to think of sustainable development in meditative as well as calculative terms. According to Brundtland, "The changes in attitudes, in social values…will depend on vast campaigns of education, debate, and public participation."[99]

As I have stated previously, the attempt by the humanities and policy makers alike to define sustainable development and their subsequent criticism of both the idea of sustainable development and their direct critique of WCED are very much related. *Our Common Future* has been criticized for doing two seeming contradictory things at once. First, the report has been criticized by some for not giving a specific concrete definition of sustainable development. And second, the report (as well as the idea of sustainable development itself) has come under fire for promoting a singular definition of sustainable development that narrowly focuses on economic development. This singular emphasis on economic development has led to further criticism by developing nations that the report simply supports the status quo, and is nothing more than a thinly veiled attempt by organizations like the United Nations and the World Bank to force western ideals on non-western nations.

So which is it? Does the report offer only a singular definition of sustainable development, or does it define it so vaguely as to render the term meaningless? Well, the answer seems to be a little bit of both. As I discussed above, *Our Common Future* does focus primarily on economic development, but with good reason. The fluid understanding of sustainable development as a process of change offered by Gro Harlem Brundtland is

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[99] WCED, *Our Common Future*, xiv.

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key to understanding the reports emphasis on economic development. The commission recognizes that social, political, cultural, economic, ecological, and technological issues are all intertwined. Environment and development are as difficult to separate as Heidegger's *being* and *time*. We exist, this much Descartes has right. What should come next is not a question of what else can we prove with absolute certainty, but rather, what is the nature of our existence. In this sense, while critics fault the WCED for lacking in philosophical rigor it is the beginning of a much larger metaphysical question. Sustainable development is not a "fixed state of harmony" it is a process, a journey whereby we discover a way to progress and develop within our environment. In the broadest understanding of sustainable development it is metaphysics. Sustainable development is a "philosophical investigation of the nature, constitution, and structure of reality."[100] It becomes an ontological worldview or mode of being whereby one recognizes the interdependence of all things on multiple spatiotemporal scales. To say that sustainable development is metaphysics does not mean that it abandons science or empirically verifiable statements at all. In the next chapter I will argue that sustainable development is related to systemic thinking in ecology, but for now it should suffice to say that sustainable development understood as ontological or metaphysical investigation does not reject scientific empirically verifiable data or calculative thinking, it simply means that it is not limited by it.

By identifying sustainable development as also a metaphysical investigation, it seems we have made it more difficult for policymakers to deal with. In part this is true,

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[100] Robert Audi, ed. *The Cambridge Dictionary of Philosophy* (New York: Cambridge University Press, 1995), 489.

but only to emphasize the fact that there is still much work to be done. There is still the normative question of how we ought to progress or develop, and the remaining major criticism of *Our Common Future* which is that it is anthropocentric, but this does not necessarily have to be the case. The reports emphasis on resources use and management does not have to be understood in terms of controlling and dominating nature, but can just as easily be interpreted in terms of stewardship with an ethic of responsibility (see definition that emphasizes future generations). Critics who demand a more rigid explanation of sustainable development are bound to be disappointed. While it is certainly appropriate to demand a common working definition to achieve common goals and ends, those who want a single definition that they can then apply to a given situation again will be left wanting. Sustainable development is simply a way of understanding human and nature relationships. It is often considered to be anthropocentric since so much of the language is related to utility and function based on human values, but this again is to overlook the context of sustainable development within the rest of the Brundtland report. The report clearly states, "Utility aside, there are also moral, ethical, cultural, aesthetic, and purely scientific reasons for conserving wild beings."[101] These reasons are not static; they are not going to be the same in every instance, which is why sustainable development should be understood not as vague and meaningless, but rather as a fluid process. It must become a conscious decision that permeates through every level of social, cultural, economic and ecological development.

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[101] WCED, *Our Common Future*, 13.

It is for this reason that I argue that sustainable development is a metaphysical question. The idea of sustainable development strikes at the heart of our understanding of the world and our relationship with nature. The flaw of *Our Common Future* is that it does not discus foundational issues, merely distributive ones. Problems of poverty and justice are dealt with based on how to distribute equitably. The same goes for ecological issues that are discussed primarily in terms of resource use and management. What is needed is a reexamination of lifestyles. More accurately, what is needed is a reexamination of self, our role within nature. Sustainable development requires a shift in thinking at every scale; individually, collectively, nationally, internationally, locally and globally. It is beyond the scope of, and unreasonable to think that the World Commission on Environment and Development could address all of the foundational issues related to this needed paradigm shift. The report does well to get us started, and in the short term, dealing with distributive problems may make it easier to discover our many foundational issues. The Commission is fully aware of the immensity of the task at hand; as they state it "We do not pretend that the process is easy or straightforward. Painful choices have to be made. Thus, in the final analysis, sustainable development must rest on political will."[102] Some might see our lack of progress as an indication that we lack the political will to achieve this transformation or political reformation. It is more likely that we have made little progress because we have yet to fully embrace the worldview presented by sustainable development in its broadest sense. The idea that environment and development are as inseparable as being and time, that social and cultural factors are as

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[102] WCED, *Our Common Future*, 9.

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much a part of sustainable development as ecological and economic factors, and that all of these things influence our relationship with nature.

The search for better/new science and technology will continue to yield the same old results unless we change the question, or rather change our perspective. Policymakers have made little progress with the idea of sustainable development even with new science and technology because we have not shifted our thinking. Philosophers are not entirely without blame here either. Continuous theoretical debates about how or where to find value in nature have only served to confuse policymakers who seem to always be looking for a reason not to act. The Commission's Mandate states that a more just and prosperous future is possible if based on policies and practices that sustain and expand the ecological basis of development, but this will not happen without:

> Significant changes in current approaches: changes in perspectives, attitudes and life styles; changes in certain critical policies and the ways in which they are formulated and applied…[103]

Sustainable development is becoming a meaningful concept for policymakers, and society in general is well on its way to embracing the wider implications of this process of change. The Commission's report outlines many proposals for institutional and legal change (again at every scale), but little attention is paid to the actual structure of these institutions and the influence that might have on policymakers. In order to make this transition possible (and lasting) there are a few things that must be done. We must first adjust our perspective and attitude to better understand our relationship to nature and the world around us. Only then can we re-examine the social political institutions

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[103] WCED, *Our Common Future*, 356.

themselves. With this in mind, in the remaining chapters I examine an ecologically grounded way of understanding our relationship with nature that overcomes the value theory debates that policymakers hope to avoid (for practical reasons) before finally turning my attention to the nature of the institutions themselves that *Our Common Future* proposes we change.

CHAPTER 5

ENVIRONMENTAL PHILOSOPHY AND SUSTAINABLE DEVELOPMENT

Compared to other genres in the philosophical field, environmental philosophy is relatively new. By most accounts, its impetus for creation was given by the influential writings of Rachel Carson, Garrett Hardin, and Aldo Leopold (whose seminal work *A Sand County Almanac* was republished in 1970 by the Sierra Club) and the celebration of the first Earth Day in 1970. Up until that time, most writings surrounding environmental issues were generally historical, religious or scientific in nature.[104] As philosophers began to look into questions involving environmental issues, they proposed and developed an array of ethical systems with which to understand and combat the environmental crisis. What came out of these analyses were naturally questions of value; most importantly, how does one determine value and where precisely does value come from? As the Environmental Pragmatist Andrew Light states it, "Since the inception of environmental ethics in the early 1970s, the principal question that has occupied the time of most philosophers working in the field is how the value of nature could best be described such

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[104] For a brief outline of the origins of environmental ethics see the Center for Environmental Philosophy's website: http://www.cep.unt.edu/novice.html

that nature is directly morally considerable, in and of itself, rather than only indirectly morally considerable."[105]

To answer these fundamental questions of value, philosophers generally found themselves aligning into two opposing camps: anthropocentrism or ecocentrism, depending on where they determined the source of value to be, or whether they considered nature morally considerable directly, indirectly, or at all.[106] Anthropocentrists consider humans to be the sole source of value whereas ecocentrists regard non-human entities as sources of value as well.[107]

Pragmatism, Value and Public Policy

To look at these two views from a policy standpoint, one recognizes the philosophical attempt to create some moral groundwork for the protection of the environment in both the personal and political realm. For example, consider the United States' historical and present environmental policies, which have been justified implicitly by the anthropocentric model. Wetlands cleared for farming, whole rivers diverted to grow crops in desert regions, mountains chopped in half to support the ever-growing energy consumption, habitat gobbled up by subdivision and sprawl, and on and on. Reviewing a study of U.S. water usage practices alone would show the extent of

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[105] Andrew Light, "Contemporary Environmental Ethics from Metaethics to Public Philosophy," *Metaphilosophy* Vol. 33, No. 4 (July 2002): 426-449.

[106] Though there are a number of other theoretical areas where anthropocentrists and ecocentrists diverge, the source and *loci* of value is a *defining* characteristic of each perspective and thus one of the most important to concentrate on.

[107] I say generally because there are exceptions to this rule, for example J.B. Callicott who is a nonanthropocentrist who sees human beings as the source of value. Bryan Norton, "Environmental Ethics and Weak Anthropocentrism," *Environmental Ethics* 6 (1984): 133

anthropocentrism's indifference to the rest of the biological world.[108] However, this indifference makes perfect sense under the traditional anthropocentric model for if nothing but humans have value, we can do what we want so long as we do not interfere with other humans.[109] Consequently, it appeared to many philosophers that for any significant environmental protection to take place we would need a change in not only economic and social policy, but in personal ethics as well. As Leopold argued in *The Land Ethic*, we need to develop an ethic such that we see ourselves not as masters of the natural world but rather "citizens" in the "biotic community."[110] One of the results that came from Leopold's essay was a strong basis for the development of ecocentrism, because it necessarily called for the recognition of value in our fellow community members. As explained by Dale T. Snauwaert:

> It can be argued that an expansion of the moral community to include the natural world cannot be achieved on anthropocentric grounds… [Because] moral community by definition is based upon the recognition of the intrinsic value of each of its members. If an individual is deemed not to have intrinsic value, then that individual cannot in principle be a member of the moral community. The individual may possess value, but it is contingent upon its utility to the members of the moral community.[111]

Thus, the idea that inherent value can be found in both individual organisms and non-organismic entities (such as species, populations, and ecosystems) was an attractive one. The result of widespread acceptance of ecocentric thinking would necessarily lead to a change in environmental policy, as policy makers would be forced to reconsider

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[108] Among others, see *Rivers for Life* and *Blue Gold.*
[109] For a fully developed articulation of this type of anthropocentrism, see Baxter*, People or Penguins: The Case for Optimal Pollution* (Columbia University Press, 1974).
[110] Aldo Leopold, *A Sand County Almanac* (Oxford: Oxford University Press, Inc., 1966).
[111] Dale T. Snauwaert, "The Relevance of the Anthropocentric-Ecocentric Debate," in *Philosophy of Education* (1996): 264-7

decisions based on both human and ecosystemic concerns. Though this seems to be a perfectly logical way of achieving the goal of policy change, it has arguably not been terribly successful. For one thing, there has been much philosophical opposition to the notion of ecocentrism and consequently a revisiting and redefining of anthropocentrism.[112] While this opposition has fallen short of satisfying the many critiques of ecocentrism, it has proven successful at allying many top thinkers to its side.

As a result, the field of environmental ethics finds itself in the midst of a seemingly deep and impassible dichotomy. The debate about ecocentrism and anthropocentrism, or the metaethical and metaphysical debate surrounding values as they directly or indirectly relate to nature, has led to a very significant and critical analysis of the field of environmental ethics itself. Many notable environmental philosophers are beginning to question the relevance and effectiveness of environmental ethics as a sub-discipline of philosophy as it relates to affecting public policy. This inevitably leads to the dispute about theory and application. The majority of those who are beginning to question the effectiveness of environmental ethics do so on the grounds that it, as a discipline, has been consumed with answering only theoretical and not practical problems. These critics can generally be identified as environmental pragmatists. It should be noted of course that there is not simply one form of environmental pragmatism, but for the purposes of this discussion, and in a general sense, they have the same critique of environmental ethics.[113] The environmental pragmatist's critique of environmental

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[112] Bryan Norton has redefined anthropocentrism in terms of strong and weak, see Norton, "Environmental Ethics and Weak Anthropocentrism," *Environmental Ethics 6* (1984): 131-48.
[113] For a more detailed explanation of the differences between environmental pragmatists, see the Introduction to Andrew Light and Eric Katz, *Environmental Pragmatism* (Routledge: New York, 1996), pp.

ethics can be seen on multiple levels. On a more general level, they are frustrated with, as we briefly touched on earlier, the emphasis on theory as opposed to application. Mark Sagoff writes:

> [W]e have to get along without certainty; we have to solve practical, not theoretical, problems; and we must adjust the ends we pursue to the means available to accomplish them. Otherwise, method becomes an obstacle to morality, dogma the foe of deliberation, and the ideal society we aspire to in theory will become a formidable enemy of the good society we can achieve in fact.[114]

In short, environmental pragmatists are concerned that theoretical debates are hindering environmental ethics ability to develop or affect practical environmental policy. This leads us to the more specific charges of environmental pragmatism. According to Andrew Light, environmental ethics has failed to develop its practical task because of methodological and theoretical dogmatism. He argues that mainstream environmental ethics has developed under a narrow predisposition such that only a small set of approaches in the field will yield a morally justifiable environmental policy. Light states that, "[T]he consensus it seems, is that an adequate and workable environmental ethics must embrace non-anthropocentrism, holism, moral monism, and, perhaps, a commitment to some form of intrinsic value."[115]

Now we are coming to a place very near to where we started. In a certain sense, the criticism of environmental pragmatists is a continuation of the same anthropocentrism/non-anthropocentrism, instrumental/intrinsic value debate with the

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1-21. Most notably, Light mentions that environmental pragmatists hold to a theory of metatheoretical pluralism or openness to the plausibility of divergent ethical theories working together in a single moral enterprise.

[114] Mark Sagoff, *The Economy of the Earth* (Cambridge: Cambridge University Press, 1988), 14.

[115] Andrew Light and Eric Katz, *Environmental Pragmatism* (New York: Routledge, 1996), 2.

pragmatists falling onto the anthropocentric or non-intrinsic value side.[116] Again, Light makes this point clear when he writes, "debates about the value of nature as such have largely excluded discussion of the beneficial ways in which arguments for environmental protection can be based on human interests."[117] This is very clearly a plea for at the very least a consideration of environmental ethics that does not reject anthropocentrism. I say that this is the same old centrism debate in a certain sense for two reasons. First, as was mentioned above, there has been recently much revisiting and redefining of anthropocentrism. And, second, environmental pragmatism does not necessarily embrace anthropocentrism; rather, it cautions about dogmatically thinking the only way to do environmental ethics properly is from a non-anthropocentric standpoint. Specifically on the charge on anthropocentrism, Anthony Weston defends environmental pragmatism by arguing that it is a form of subjectivism in that it makes valuing an activity of subjects, but subjectivism is not necessarily anthropocentric. As he states it, "Even if only human beings value in this sense, it does not follow that only human beings have value; it does not follow that human beings must be the sole or final objects of valuation."[118]

Furthermore, environmental pragmatists argue that in an everyday or practical (read environmental policy) sense the traditional environmental ethicist's insistence on placing value in nature is not only unnecessary, but it is also harmful. As Light describes it, "[T]he focus on somewhat abstract concepts of value theory has pushed environmental

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[116] For a similar and historical analysis of this same debate in terms of conservation/preservation, see also, Bryan Norton, *Toward Unity among Environmentalists* (New York: Oxford University Press, 1991).
[117] Light, "*Contemporary Environmental Ethics*," 427.
[118] Anthony Weston, "Beyond Intrinsic Value: Pragmatism in Environmental Ethics*," Environmental Ethics* Vol. 7, No. 4 (Winter 1985).

ethics away from discussion of which arguments morally motivate people to embrace more supportive environmental views."[119]

How then do we reconcile this dichotomy? How can we begin to push environmental ethics into the public policy arena with all of these theoretical and metaethical disputes still undecided? Simply put, how do we answer the practical question of which arguments morally motivate people to embrace environmental views? If we begin with this seemingly simple task of identifying what arguments do actually morally motivate people, it may yet be possible to bridge this gap between environmental ethicists. It will not be as Light might suggest a continuation of the familiar old rejection of anthropocentrism, and embracing of some form of holism, moral monism, or even a commitment to intrinsic value. Instead, it will be enough to show possible overlap between the two theories at the practical or policy level. In order to accomplish this task, it is not necessary to show agreement on a theoretical level, like the appropriate loci of value for example. Furthermore, once this overlap is identified on a practical policy level the placement of value may come to be seen as a rather minor point.

We are getting a little ahead of ourselves here. First, we must discover what it is that might make people more inclined to think ethically towards nature. Light cites a number of large studies that show people "overwhelmingly indicated that the reason they most thought the environment should be protected is that they think we have positive obligations to protect nature for future human generations."[120] While these appeals to

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[119] Light, "*Contemporary Environmental Ethics,*" 427.
[120] Light, "*Contemporary Environmental Ethics,*" 445. The citations given by Light are Willett Kempton, et al. 1997. *Environmental Values in American Culture*. Cambridge, Mass. : The MIT Press. And, Ben Minteer and Robert Manning. 1999. "Pragmatism in Environmental Ethics: Democracy, Pluralism, and the

future generations are undeniably anthropocentric, from a policy perspective and with a little maneuvering, claims to any sort of centrism will become irrelevant given the common stated goals of nearly all environmental ethicists. For his part, Bryan Norton also sees the merits of future generational appeals. He states:

> . . .it seems likely that environmentalists will achieve more by appealing to the relatively non-controversial and intuitive idea that the use of natural resources implies an obligation to protect them for future users—a sustainability theory based in intergenerational equity—rather than exotic appeals to hitherto unnoticed inherent values in nature.[121]

As well intentioned as he is, Norton does not believe that this approach will be successful on a policy level, partly because he is as embedded and entrenched in this debated over "theoretical dogmatism" as anyone else. Norton clearly states, "These obligations are anthropocentric and cannot, apparently, be comprehended in a monistic non-anthropocentrism, even though abiding by these less controversial obligations would lead to most of the environmental protections favored by inherent value theorists."[122]

Just when it seems that both sides of this dichotomy are forever going to remain in opposition, we begin to see the smallest common thread that may yet tie them together. If we can find a belief that is common to both ecocentrism and anthropocentrism, then this belief could become the basis for a particular policy or strategy that answers the demands of both centrisms. Once this has been done, we shall be able to reevaluate the policy in terms of the underlying beliefs of both ecocentrism and anthropocentrism to show that the policy does not violate any other fundamental sets of beliefs of each view

Management of Nature." *Environmental Ethics 21*: 191-207.

[121] Bryan Norton, "Integration or Reduction" in Light, Andrew, and Eric Katz, . *Environmental Pragmatism*. (New York: Routledge, 1996), 121.

[122] Bryan Norton, "Integration or Reduction" in Light, Andrew, and Eric Katz, . *Environmental Pragmatism*. (New York: Routledge, 1996), 122.

respectively. It is the appeal to some sort of intergenerational equity that seems to be common to both types of centrisms. Conservation, preservation, restoration, whatever the aim may be, and wherever one is tempted to place value, recognizing a moral obligation to future generations, if it is to be a coherent or consistent theory, must be based on some understanding of sustainability. That is, before we begin to talk about intergenerational equity, and future generations, we must understand human's impact on the environment. We must evaluate the full implication of Brundtland's notion of environment and development. More specifically, when discussing resource management, we must first recognize that humans are a key component of ecosystems.

Seeing Humans as Components of the Ecosystem

While Leopold's writings on the land ethic may have generated much thought on intrinsic value for non-human beings, his idea of biotic citizenship can be taken in an entirely different direction. Rather than thinking of biotic citizenship as the grounding for holism (as J.B. Callicott argues for example), it can also be seen as a contextual grounding for ecological thinking.

There is a common, albeit often unspoken and unrecognized belief of a strong metaphysical distinction between humans and nature. This belief is manifested in a variety of ways, from the attempt to master and change the environment to suit humans "needs" (Genetically Modified Organisms for example) to the notion of natural parks or reserves, where nature is protected from the degrading influence of human touch. This belief has strong undercurrents in western culture and can be traced along the historical

philosophical path. Ancient philosophers who subscribed to a school of Platonic thought continually denied the existence of an external world while medieval scholars like Origen and Augustine saw nature as subordinate and distinct from humans. Modern thinkers such as Francis Bacon and Descartes defined a mechanistic world-view that ultimately described the earth as "dead and passive." [123] Leibniz wished to subject nature to the rack, to expel her secrets from her and Marx hoped to use the exploitation of nature ultimately to achieve human emancipation from the fetters of capitalism. These different thoughts have all compounded the overarching view that humans are in a strong sense metaphysically and ontologically separate from the world. It has lead to the further belief that humans not only control nature but also operate outside of it: that the workings of humans and the workings of nature essentially operate independently of one another.

This division between humans and the environment has been one of the greatest concerns of environmentalists, and reasonably so. If it is true, as Hume thought, that morality is ultimately based on empathy, or as Christopher Stone states "the more 'we' have recognized that another person, family, or tribe is like us both in the properties 'it' possesses and the common fate we share, the readier we have been to connect our common relations with moral filament," then the weaker the relationship we feel with the environment, the weaker our concerns for it will be.[124]

The recognition and renunciation of this divide is something that ecocentrist theorists have done much work on, and they often describe it as ultimately emanating

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[123] Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution*, 2nd ed. (New York: Harper & Row, 1990), xvi.
[124] Christopher D. Stone, *Earth and Other Ethics: The Case for Moral Pluralism* (New York: Harper and Row, Publishers, 1987), 20-27.

from and resonating within the anthropocentric mindset. Robin Eckersley, a well-known political theorist, sees the idea of "humans as either separate from and above the rest of nature" as being one of main philosophical premises underlying anthropocentrism.[125] But is this division of humans from the rest of nature an essential part of anthropocentrism?

Balancing the Ecocentric and Anthropocentric Positions

With any well-established philosophical theory, one is certain to find differing formulations and degrees of belief within the general definitional framework. As a result, the term anthropocentrism can be used to define values ranging from utter disregard, such as William Baxter's, to the views of strong importance such as Peter Singer.[126] Because this thesis deals with each position generally, it will be wise to focus on the fundamental criteria necessary to declare a position. This criterion for anthropocentrism is the source and location of value. As mentioned earlier, anthropocentrists see humans as the sole source of value. Keeping this criterion in mind, is there anything *fundamental* to anthropocentrism that would require the division of humans from nature? On the surface, it may appear so because the location of value would seem to justify a distinction between humans and nature. Nevertheless, this is not a logically necessary conclusion. Value, much like sentience, rationality, or emotion might be used as a way of showing the uniqueness of humans, but it cannot show a *separation* from nature.[127] Ecocentrists

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[125] Eckersley, Robyn, *Environmentalism and Political Theory: Toward an Ecocentric Approach* (State University of New York Press, 1992), 51.

[126] See Baxter, *People or Penguins* and Peter Singer, *Practical Ethics* (2nd ed. Cambridge, U.K.: Cambridge University, 1993), 264-88.

[127] At least those humans who qualify as persons, i.e., *not* humans who are infants, the severely mentally handicapped, senile individuals, etc.

have attempted to make this argument in terms of value but perhaps it is time to try a slightly different approach.

Rather than attempt to place value, I argue that the Ecosystem Approach, as proposed by the Convention on Biological Diversity, is a more holistic worldview that transcends the traditional dichotomy by balancing ecocentric and anthropocentric interests. I have already argued that traditional pragmatists such as Light want to avoid any sort of holism, but this stems from the anthropocentric fear of placing value somewhere other than with humans. Holism, as it appears in the Ecosystem Approach, has more to do with ecological management rather than with specifically placing value. To put this more clearly, the Convention on Biological Diversity describes an ecosystem approach as on that is:

> …based on the application of appropriate scientific methodologies focused on levels of biotic organization, which encompass the essential structure, processes, functions and interactions among organisms and the environment…it recognizes that humans, with their cultural diversity, are an integral component of many ecosystems.[128]

the ecosystem approach is an approach that both ecocentrists and anthropocentrists should be able to embrace. It is holistic (in this sense inclusive), recognizes the interdependence of humans and nature, and can be adapted to any given situation without having the prerequisite of placing value. According to the Preamble to the Convention, it is "conscious of the intrinsic value of biological diversity and of the ecological, genetic, social, economic, scientific, educational, cultural, recreational and

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[128] http://www.cbd.int/ecosystem/

aesthetic values of biological diversity and its components."[129] An ecosystem approach is able to bridge the gap between centrisms because there is no need to show that humans are the sole source or location of value once you recognize that humans and nature are components of the same ecosystems. As Westra states it, "at the basic survival level only, we have no interests that are completely separate from those of all other life, so that their 'values' and our 'values' coincide."[130] As components of ecosystems, humans and nature are interrelated, interconnected, and interdependent. At times they may be seen as being in competition (competing for resources) and this competition is almost as central to the ecocentric- anthropocentric debate as where to place value, but it does not need to be this way. With an ecosystem approach it is possible to find a balance between these needs, so long as one position is not favored or emphasized dramatically more than the other. That is, the placement of value becomes irrelevant so long as the health of the ecosystem as a whole remains the primary concern.

This is of course not an entirely new idea. From Norton's analysis of Leopold we can already see the beginnings of this balancing act. That is, Leopold recognized the need for an integrated theory of management that considers both resource management as well as environmental management.[131] Leopold attempted to replace strictly scientific resource management strategies that tended to rely on very static "balance of nature" models with something more dynamic and process oriented. As Leopold states it:

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[129] http://www.cbd.int/ecosystem/
[130] Westra, *Why We Need a Non-Anthropocentric Environmental Evaluation of Technology for Public Policy*, 279.
[131] Bryan G. Norton, *Toward Unity among Environmentalists* (New York: Oxford University Press, 1991), 51.

> All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in that community, but his ethics prompt him also to cooperate.[132]

For Leopold, this new land ethic "simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land."[133] This is exactly what an ecosystem approach strives toward. That is, it is an approach that attempts to balance both ecocentric and anthropocentric concerns, without having to locate an ultimate source of value.

<div align="center">Changing Our Perspective</div>

Our Common Future stresses the need for change. The Commission repeatedly states that sustainable development is a process of change that incorporates ecological, economic, social and political concerns. It is a way of developing ourselves within a given environment, and it awakens a broader way of understanding nature and our connection with it. To make this transformation process possible, changes need to be made at every level and scale possible. The Ecosystem Approach addresses this process of change on a scientific, ecological and practical level that should yield positive result for policymakers.

But again, sustainable development is not a fixed state of harmony; the process of change needs to take place on many different levels, so too will our approach need to vary. If we are to change policy, science, economics, ecology, and our lifestyle choices,

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[132] Leopold, *A Sand County Almanac, 239.*
[133] Leopold, *A Sand County Almanac*, 239.

more than one approach to the problem will be necessary. In the short-term, anthropocentric thinking can have a positive impact on conservation and preservation efforts. Arguments based on obligations to future generations are very compelling, and the language of resource use, management, and distribution is ready made for policymakers. The ecological foundation of the Ecosystem Approach makes it well suited to aid policymakers in much the same way without being stalled by theoretical debates on value.

Having said this, without the corresponding paradigm shift in social, cultural, and personal perspectives that *Our Common Future* also calls for, these positive impacts will be short lived. This explains why Leopold's Land Ethic attempts to broaden the circle of things that are ethically and morally considerable.[134] In order to achieve long-lasting, positive change, despite the objections of many, some form of holism appears to be necessary. Leopold's notion of biotic citizenship helps us to recognize that we are a part of something greater than ourselves, and this is a necessary step towards sustainable development on social and cultural levels. The Ecosystem Approach gets us started down this path from an ecological perspective, but we can take this much deeper philosophically.

Traditionally, the ecocentric anthropocentric debate has revolved around finding value in nature; we have never considered the possibility that the value we find in nature may just be our own. From being a part of nature, a component of ecosystems, we recognize value in ourselves. Robert Nozick expresses this sentiment on many different

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[134] Leopold, *A Sand County Almanac*.

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levels. From an ecological perspective he writes, "This existence of ours, moreover, is permeated by the very same scientific laws and ultimate physical material that constitutes all the rest of nature; a representative piece of nature, we encapsulate its sweep."[135] On an almost metaphysical level Nozick claims that once we identify ourselves as part of nature's ongoing process there is a:

> …deepening [of] our own reality as we come in contact and relation with the rest, [of nature] exploring the dimensions of reality, embodying them in ourselves, creating, responding to the full range of the reality we can discern with the fullest reality we possess, becoming a vehicle for truth, beauty, goodness and holiness, adding our own characteristic bit to reality's eternal process.[136]

Nozick claims that once we appreciate this relationship, "we will not wantonly exploit animal or plant life; [and] we will take some care to minimize the damage we do."[137] This is exactly the type of change in perspective that *Our Common Future* pushes us towards.

Critics may argue here that I am redefining intrinsic value and I previously argue that the point of highlighting the Ecosystem Approach was to avoid having to place and locate value, but again, as *Our Common Future* points out, sustainable development is a process of change that must take place on many different levels. If environmental pragmatists are uncomfortable with the idea of defining human value in terms of nature, then at the least we can agree to call it contributory value[138]. And concerning the Ecosystem Approach, holism need only be embraced on an ecological level for policymakers, but it must be understood on a deeper philosophical level in order to bring

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[135] Robert Nozick, *The Examined Life* (New York: Simon & Schuster, 1989), 297-302.
[136] Nozick, *The Examined Life*, 297-302.
[137] Nozick, *The Examined Life*, 297-302.
[138] Definition of contributory value from Cambridge Dictionary of Philosophy

about a more complete understanding of sustainable development and real change in our behavior. Westra cites Norton as claiming that in practice, "holistic/intrinsic value arguments are impotent." [139] By this we are to take him to mean that they are not very effective arguments with policymakers. Nevertheless this does not make them any less true or valid. At this point it becomes clear what we must do. Rather than change, or avoid possible true arguments, we must examine and reevaluate the nature of these institutions to see why they have become so restrictive.

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[139] Westra, *Why We Need a Non-Anthropocentric Environmental Evaluation of Technology for Public Policy*, 279

CHAPTER 6

EXAMINING POLICY IMPLICATIONS OF EMBEDED INSTITUTIONS

Just as *Our Common Future* urges us to change our thinking regarding

environment and development, there is an equal call for institutional change. As the

Commission states it,

> The objective of sustainable development and the integrated nature of the global
> environment/development challenges pose problems for institutions, national and
> international, that were established on the basis of narrow preoccupations and
> compartmentalized concerns.[140]

The Commission goes on to state that the institutions facing challenges tend to be

"independent, fragmented, [and] working to relatively narrow mandates with closed

decision processes."[141] In order to reach the broad understanding of sustainable

development with all of its previously mentioned interdependent relationships,

institutional change becomes necessary. *Our Common Future* focuses its proposals for

institutional and legal change at the national, regional, and international levels in six

priority areas:

- Getting at the sources
- Dealing with the effects
- Assessing global risks
- Making informed choices

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[140] WCED, *Our Common Future,* 9.
[141] WCED, *Our Common Future,* 9.

- Providing the legal means
- Investing in our future[142]

The Commission lists numerous actions to be taken with respect to each of these priority areas in order to put us on a path towards sustainable development. Without going into each priority area in detail, it is important to note that the Commission does state "we are aware that such a reorientation on a continuing basis is simply beyond the reach of present decision making structures and institutional arrangements, both national and international,"[143] which serves to further reinforce the need for institutional change. In the face of ever present globalization and transnationalism, the struggle to develop in a sustainable manner seems to be twofold; first, we need to recognize that seemingly local problems of environment and development are also global issues, and second, we need to examine and transform current institutions or develop new institutions into ones that are capable of creating and enforcing policies on a global scale.

Our Common Future calls for institutional change and acknowledges that current institution forms are inadequate to deal with the nature of increasingly global problems, but still the Commission must make recommendations within the current framework. What does this process/ framework look like? As Ken Conca describes the process, governments convene to "negotiate multilateral agreements on specific problems" with the goal of "creating formal agreements to be signed and ratified by individual states."[144] While there are many problems with the process, it is not a total waste. For example the Ecosystem Approach is a product of the Convention on Biological Diversity, and of

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[142] WCED, *Our Common Future,* 314.
[143] WCED, *Our Common Future*, 22-23.
[144] Any one of the conventions listed in chapter one fit this description.

course the precautionary principle to come out of Agenda 21 is one of the most significant guiding principles in dealing with problems of environment and development. But these international conventions and agreements have a major criticism that must be dealt with, namely that they are not (or rarely ever) legally binding.

Conca explains that the standard response to this is that "what matters is not the legal instrument per se but rather the institutionalization around that legal instrument of a bundle of common understandings, shared expectations, and cooperative norms."[145] This process is what Conca refers to as regime building. Through an examination of the institutionalization process we may better understand the need for change itself, in that, as Conca claims "it is no exaggeration to say that regime building has become the grand strategy of global environmental protection."[146] In light of *Our Common Future*'s recognition of challenges that are both "interdependent and integrated, requiring comprehensive approaches and popular participation"[147] international regime building sounds like the perfect solution. As Conca describes them, "Regimes are thus instruments of governance without government; they promote rule-conforming behavior in an international system marked by the absence of centralized governmental authority."[148]

This is exactly what *Our Common Future* calls for: a way of bringing about change in attitudes and social values as well as a change in the nature of co-operation between governments and peoples. In chapter 10 of *Our Common Future* the Commission goes so far as to say that sustainable development can only be secured

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[145] Ken Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, (Cambridge, Massachusetts: The MIT Press, 2006), 11.
[146] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 12.
[147] WCED, *Our Common Future*, 9.
[148] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 11.

through "international co-operation and agreed regimes for surveillance, development, and management in the common interest."[149] These international regimes seem to answer the Commissions call for action on multiple levels; they help to bring about change on an individual level as well as aid in the governance and management of the global commons.

Despite the appearance (and many successes) of regime building, Conca points out that the regime approach suffers from an inherent limitation. As he argues, the problem is that international regimes only attempt to govern "physically local systems when they are tied to a particularly obvious, immediate, and physically tangible transnational effect."[150] Conca argues that when we see the world as a set of life-supporting natural cycles and ecosystem services, the genuine global dimensions of local ecosystem health becomes apparent.[151] This is why understanding sustainable development in terms of an ecosystem approach is so important, and also why *Our Common Future* stresses the need to address the causes as well as effects of environmental issues. Remember that Brundtland's broader definition of sustainable development includes an awareness of the relationships between ecology, economics, social/cultural and political factors. Conca revisits this idea while investigating other global dimensions to local environmental degradation that has hindered an institutional regime approach. As he states it, "Our physically and biologically integrated world is fragmented by political division into sovereign states, but it is also constantly being reassembled by massive, rapid flows of people, goods, money, ideas, images, and

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[149] WCED, *Our Common Future*, 261.
[150] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 14.
[151] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 16.

technology across increasingly porous borders."[152] If it is true that the regime building approach has become the primary strategy of global environmental protection, despite its failure to account for the world's increasingly transnational character and globalization then we must look deeper into the regime approach to find out why it has failed so often.

As it did in previous chapters, once again taking a phenomenological approach will serve us well here. To achieve the sought after institutional change that *Our Common Future* calls for, we must unpack and uncover the roots, embedded meanings, and foundations of this international regime building approach. These specific institutions that have become the prevailing model of global governance are framed by what Conca calls the metanorms of authority, territoriality, and knowledge. Each of these informs and influences regimes and institutions in crucial ways. To understand the ways in which the taken-for-granted, culturally embedded assumptions of regimes can hinder a more informed understanding of sustainable development, we must examine each one individually.

The first limit to the regime approach is its position on authority and legitimacy in the process of governance. These regimes institutionalize a strong statist authority and legitimize the states actions when dealing with environmental issues while marginalizing the relevant contributions of remaining actors. Two major problems with a regime based approach quickly emerge. To being with, legitimizing the position and role of all relevant actors ignores the fact that often times a struggle over authority is at the very heart of environment and development issues.

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[152] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 17.

Secondly, emphasizing the sovereign state authority over local issues undermines the overall effort for global governance. State-based authority (whether legitimate or not) appears to be ill-equipped to deal with local issues that have global effects. Despite this, Conca points to the fact that *Our Common Future* offers twenty-three principles for environmental protection and sustainable development with "an initial principle defining the individual's right to a sound environment, the remaining twenty-two principles each begin with the same phrase: 'States shall….'"[153] The Commission is aware of its limitation as evidenced in their Call for Action which immediately precedes the principles that Conca cites: the commission states, "We have been careful to base our recommendations on the realities of present institutions, on what can and must be accomplished today. But to keep options open for future generations, the present generation must begin now and begin together, nationally and internationally."[154] The question remains whether this awareness of limitations is enough. Conca's point is well taken, and in instances where the central issues of environmental problems revolve around contested power/authority relationships, these institutionalized regimes are largely ineffective.

The second metanormative aspect of these environmental regimes that Conca highlights is closely related to the first. In much the same way that regimes institutionalize a view of power and authority roles that is fixed and static, they also view nature as something easily divisible into fixed and separate domestic and international spheres. The idea of state –based authority and the territorialization of nature are both

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[153] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 22.
[154] WCED, *Our Common Future*, 344.

issues of sovereignty. As Conca states it, "Authoritative agents become sovereign only when authority is given a place as well as a face."[155] The institutionalization of narrow views of authority leads to specific roles concerning who is able or allowed to govern, the territorialization of nature draws similar physical and political boundaries. This is problematic for many reasons. By attempting to draw these distinct boundaries, the governing roles of obligation and responsibility become further defined. States have a clearly demarcated place in which to govern, but now they are only responsible for what falls within that border, and are only held accountable for what escapes. Viewing nature as territory only serves to reinforce the authority of the state, but it is based on a false premise and is counterproductive to a systemic approach and the broader understanding of sustainable development. As Conca explains, the emphasis is on a set of "decontextualized flows instead of integrated systems and cycles" which can lead to recognition of the transnational character of some physical systems but not the transnational character of corresponding social, political and economic institutions.[156] The international regime process of viewing nature as territory only works if nature, as well as people are fixed and static (respect the physical or political boundaries), and clearly this is not the case.

The third metanormative aspect of regime building is its stance toward knowledge, and it is perhaps the most problematic. It is in this area that we also see the most conflict within *Our Common Future*. Conca argues that, "One of the biggest challenges facing regime builders is to create a foundation of officially sanctioned

[155] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 46.
[156] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 49.

knowledge."[157] Nearly all of the twenty-three principles proposed by the World

Commission on Environment and Development either call for or rely on this type of

foundational knowledge. The Commission's calls for institutional change on national and

international levels are predicated upon the gathering and sharing of this foundational

knowledge. They even recommend that "Each agency will need to redeploy some staff

and financial resources to establish a small but high-level centre of leadership and

expertise."[158] The contradiction here as Conca points out is with the "precautionary

principle" because "regimes tend not to form when the understandings of a problem and

its solution remain highly contested for an indefinite period."[159] While problematic, the

precautionary principle has not exactly halted the regime building process entirely.

Environmental regimes may never reach the sought after finite or definitive answers and

a level of uncertainty may remain, but certain "truths" will emerge as knowledge

becomes stabilized.

The process of knowledge stabilization is complex and pivotal to the regime

building process and as influential as anything else when it comes to embedded and take-

for-granted assumptions. As Conca describes it, "much more than just a set of rules is

being institutionalized; so too are the currencies of knowledge as power…"[160] It is

important here to remember that these currencies that Conca describes can also take

many forms. That is, knowledge stabilization can be in the form of officially agreed upon

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[157] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 22.
[158] WCED, *Our Common Future* 317.
[159] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 22. Also this might not be a major problem – that is it may not be so bad if regimes cannot form around a certain environmental issues given the many problems we have been discussing.
[160] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 53.

empirical scientific data, or in the form of dominant constructions of a problem. Either way once this becomes embedded within the regime, our options for solutions to specific environmental problems become extremely limited.

The problem with all of these embedded metanorms of authority, territory and knowledge is that they fail to recognize that the fundamental nature of sustainable development, the interconnectedness of relationships, and the intertwining of economic, political, and social institutions must be considered. Even when physically local issues are tackled we must be aware that they have global implications, hence the broader understanding of sustainable development that is overlooked time and time again. Because of the structure of these regimes or institutions themselves, only certain environmental issues are even addressed. The three metanorms of authority, nature as territory, and knowledge stabilization combine to influence regimes into exposing a very narrow worldview. Conca writes, "governments have increasingly reaffirmed state authority and the territorialization of nature by forming regimes primarily around problems of pollution beyond borders."[161] Environmental regimes have created a framework wherein only certain people or institutions have authority to deal with narrowly conceived problems of environment and development tied to a fixed and static understanding of nature and people that do not exist, and because of the way problem is framed and official knowledge is constructed, solutions will be equally limited. This regime-building process with its embedded presumptions closes doors that need to

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[161] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 49.

remain open; multiple ways of knowing can only enhance our experience of the world which will in turn offer new pathways to a sustainable future.

As an example of how this can play out, Conca argues that conflicts revolving around water are "rooted in the fact that water has become three things at once: a critical ecosystem, a central element of local livelihoods and communities, and a marketable commodity."[162] This is how environmental issues should be seen. Viewing water from these different perspectives is the first stage of the knowledge destabilization that Conca is looking for. Understanding that water has multiple meanings may push us towards global controversies, but again this is actually a good thing. In terms of sustainable development as a process, recognizing that water has different meanings and function based on use is an important first step towards conflict resolution or effective policy making. As uncomfortable as some might be with viewing water as a marketable commodity, even this moves us towards a more inclusive conversation about water and its related conflicts. When environmental issues like water enter the marketplace and become subjected to things like supply and demand, it forces us to reevaluate it entirely. Many of the current discussions of water as a commodity, a right, or a luxury stem from it entering the marketplace to begin with. If we are to develop sustainably or have practical and effective environmental policy we must embrace rather than shy away from multiplicity of meanings. This work must be done by philosophers, scientists, anthropologists, NGO's, committees, organizations, groups, individuals, and the public at large on social political cultural ecological and environmental levels before policy

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[162] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 377.

makers even attempt to deal with the issue, otherwise the end result will be narrow and static, and more than likely not address the multiple understandings or definitions of the problem to begin with.

CHAPTER 7

HOW FAR HAVE WE COME?

Conca discusses a process of continuous language shifts related to the evolution

of international relations. As he states it,

> In each instance, a term emerges to help scholars interpret a seemingly important
> but poorly understood phenomena rooted in the increasingly trans-state character
> of social and political life. A definitional struggle soon follows, and a narrow and
> specific definition asserts its supremacy. The narrower definition lends itself to
> testing and measurement, but crowds out the complex, informal, and the
> unmeasurable. Soon thereafter, a newly broadened concept is sought by those
> who reject the resulting constraints.[163]

This is the process I have attempted to trace with the concept of sustainable development,

from the initial and vaguely conceived notions of ecodevelopment through to the

narrowly defined concept of sustainable development understood simply as economic

development. Sustainable development that is narrowly defined to mean economic

development that encourages calculative thinking certainly lends itself to testing and

measurement, but crowds out the meditative, complex conception of sustainable

development as a process of change. We have begun the process of rejecting the

constraints of a narrowly defined conception of sustainable development, and a more

broadly defined conception is beginning to emerge. I believe this is an important first

step. Conca writes that "We must allow ourselves to conceive of institutions that

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[163] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 388.

construct more complex, diverse, or fluid spaces for fair and effective responses to a growing class of socioecological controversies."[164] The question then becomes twofold: has this happened, or is it happening now, and what will facilitate this process? Conca offers us a very concise critique of the institutionalization of knowledge, and examines the politicalizing of socioecological issues, but in the end what he offers us is little more than a detailed analysis of the problem that *Our Common Future* already recognizes in their call for institutional reform. I believe we may be able to more accurately measure our progress by asking ourselves three specific questions. First, have we found an operational definition of sustainable development that lends itself to effective policy making? Second, is the institution/regime building process as explained by Conca helping or hurting? And finally, have we begun the broader and deeper process of cultural self examination that *Our Common Future* also calls for?

All of these questions are related but perhaps it is best to start by examining the last question first as it can only really be measured or answered indirectly via the first two. The idea of sustainable development as a process of change intentionally chosen as a mode of development from an individual perspective as a consequent of self examination will be reflected in the institution or regime building process. Similarly the regime building process will be reflected by policy. So once again we return to the question of defining sustainable development for effective policy making. As I attempted to show previously, there are inherent problems with defining sustainable development give that it is best understood as a process of change. I believe that the best way to avoid the narrow

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[164] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 389.

and static conceptions of sustainable development is to shift the question and task just slightly. Instead of looking for a definition of sustainable development, we should be examining the way in which it is being translated. As is often the case when moving from one language to another, literal translations can be quite meaningless. Sustainable development by nature is fluid and not static, it has multiple meanings and will be understood and implemented in unique ways given the specific situation, problem and actors involved and should adapt and grow as their common and shared understandings emerge. In this light, the task becomes one of translation. How can our shared experiences and understandings of sustainable development be translated into effective and practical policy making decisions? We are already beginning to see the translation of sustainable development into many different spheres including the regime building process.

This leads us back to our second question of whether the institution/regime building process is helping or hurting. Again this question needs to be refined. What we are really asking is whether or not the regime building process as Conca defines it, allows for effective translation of sustainable development conceptions. Conca writes that "Regimes are thus instruments of governance without government; they promote rule-conforming behavior in an international system marked by the absence of centralized governmental authority."[165] As Conca's analysis highlights, there are certainly problems with the regime building process, but the institutionalization of knowledge seems to be a necessary part of the policy making process, and as long as we are aware of the

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[165] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 11.

metanorms of authority, territoriality, and knowledge that Conca describes we can prevent the negative effects of singular static definitions and conversations that are not inclusive of all relevant parties.

Having come full circle we can now see that we have indeed found an operational definition of sustainable development. In terms of the language shift mentioned above and the path of sustainable development that I have traced, we can see this regime building process is in fact working. We have come through the narrow definition phase and are beginning to see sustainable development translated into broader contexts. This is happening on multiple levels and would not be possible at all if we were not already engaged in the deeper process of cultural examination. Brundtland writes "The changes in attitudes, in social values, and in aspirations that the report urges will depend on vast campaigns of education, debate, and public participation."[166] We are seeing a significant number of changes in the sphere of education. One prime example is the Association for the Advancement of Sustainability in Higher Education (AASHE) launched in January of 2006. According to the AASHE website their member list includes 8 k-12 institutions, 15 systems offices, 48 non-profit organizations and government agencies, 138 business members, 203 community colleges and 2 year undergraduate institutions, and 540 4 year and graduate institutions.[167] Many of the 540 4 year graduate institutions included among the member list are top tier universities where you can now pursue Bachelor's, Master's, and Doctoral degrees in sustainability. At the University level the institutionalization of knowledge process that Conca describes is well underway, and this too is happening on

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[166] WCED, *Our Common Future*, .xiv.
[167] http://www.aashe.org/

multiple levels (academic as well as administrative). Offices of Sustainability are becoming more and more common at major universities. At my own institution, the University of North Texas (UNT), the Office of Sustainability is an administrative department founded in 2006 that grew out of a student organization. What began as like minded individuals and students with common goals is in the process of becoming institutionalized. I mentioned before that this regime building process is somewhat of a necessary evil to be monitored. While the concept of sustainable development may now benefit from becoming officially licensed in a sense (knowledge stabilization or legitimized) the danger of the concept becoming static and narrow once again arises. This regime building process and translation of sustainable development is also being balanced at the university level by an increased emphasis on interdisciplinarity. The Office of Sustainability is working from the narrower but traditional understanding of sustainable development as growth that meets the needs of the present without jeopardizing the ability of future generations to meet their own needs and this is fine given their role and function within the university setting.[168] UNT also has a newly created Center for the Study of Interdisciplinarity (CSID) founded in 2007 that takes into account the broader understanding of sustainability as a process of change that considers all relevant social, cultural, economic, and ecological issues[169]. In essence, the broadest understanding of sustainable development is interdisciplinarity. In addition, on a programmatic level, UNT has various programs that are engaged in the sustainable

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[168] The Office of Sustainability focuses on four areas of action: research, education, outreach, and operations. http://www.sustainable.unt.edu/
[169] http://www.csid.unt.edu/

development discourse on interdisciplinary levels. A few of these include The Sub-Antarctic Biocultural Conservation Project[170] and The Philosophy of Water Project.[171]

According to the CSID's vision statement, the most pressing challenge before us "is to understand 'interdisciplinarity' as giving voice to a set of questions concerning the overall viability of our knowledge society in an age of massive cultural transformation."[172] Similarly, defining or translating sustainable development into effective public policy is about giving voice to a multiplicity of understandings and constructions of knowledge. For sustainable development to be effective it must be interdisciplinary. Offices, centers, programs, and departments like The Office of Sustainability and CSID along with organizations such as AASHE show that multiple conceptions of sustainable development are entering the institutional/regime building process quite effectively, and by the varied approaches to this process of change that *Our Common Future* calls for it is also clear that the deeper process of self examination is also ongoing. The task now is to keep this process moving forward, so that the trend does not become a fad. Conca writes that "We must allow ourselves to conceive of institutions that construct more complex, divers, or fluid spaces for fair and effective responses…"[173] I believe that we have and are continuing to do this, but again we must remember that to institutionalize and thereby legitimize some knowledge without excluding other possible understandings, delicate balancing act is required. A window frame is necessary, but we must remember to leave the window open.

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[170] http://www.chile.unt.edu/
[171] http://www.water.unt.edu/
[172] http://www.csid.unt.edu/about/missionandvision.html
[173] Conca, *Governing Water: Contentious Transnational Politics and Global Institution Building*, 389.

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