CULTURAL RESOURCES, AUTONOMY AND SUSTAINABLE DEVELOPMENT

Introduction

In 1995, working in the Tesuque Environmental Department at Tesuque Pueblo, Louie Hena completed a study of air quality issues affecting Tesuque Pueblo. This was the first environmental air quality study for any New Mexico tribe. After an air quality inventory, Hena found significant levels of particulate matter 10 and CO2 that he attributed to increased vehicular use in the area, dusty roads and wind blown pollutants. Around the same time Hena heard Bill Mollison speak about permaculture. He was struck by the similarity between the concepts of permaculture and the way that they mirrored what the tribal elders had taught him. He began to study permaculture ideas and techniques with the idea of applying them at Tesuque. So when he went to the Tesuque Tribal Council to report on the findings and solutions for the community's air quality, he told them that there were two choices to solve the problem. Option one was that the community could invest in some very high-tech equipment to monitor the air quality 24 hours a day; or, they could use a permaculture approach and accomplish multiple objectives at the same time.

Hena's suggested that they plant a lot of trees, which naturally clean the air; and as they grow they offer the community multiple resources, e.g., aesthetics, micro-climates, wind breaks, shade, soil retention, nitrogen fixing, fruit, nuts, wood and climate

stabilizers. With the support of both the Tribal Council and the Governor, the Tesuque Pueblo permaculture program was initiated and Hena planted over 1,000 trees. In Hena's opinion they were creating biodiversity for vegetation on the landscape and hopefully sustainable development. His efforts led to the establishment of permaculture design courses to help re-establish native agriculture and science using permaculture methodology. Three years and three design courses later, Hena and a growing number of tribal members are continuing to use permaculture as a tool for community development that is sustainable, promotes their culture values and their community's sovereignty as well as contributing to the health and healing of the planet.

What is sustainable development? Does the meaning change depending on whom or what is being developed? What do we sustain? Is culture a "sustainable" resource? Are the politics of cultural sustainability different than natural resource sustainability? What would development be like if it was focused on culture and not on material resources? This genre of questions is qualitatively different than the normative parameters of sustainable development that focuses on how people use natural resources. Culture as a resource as an area of study is inherently subjective and brings our attention to the fact that development is a totally subjective process that cannot be easily categorized or controlled – or possibly even sustained. But this question also strains the normal operating parameters of Western science that needs objective data sets and quantifiable observables. This question, then, is totally problematic and will likely remain not resolvable within the Cartesian scientific tradition.

The issues of cultural autonomy and sovereignty are unique to sustainability because of the questions that they raise about equity, access to land, genocide, identity,

and even national boundaries. Furthermore, autonomy and sovereignty (or the lack thereof) affect the quality or experience of the present. I think it is important academically to create an analytical framework for sustainability that is focused on socio-cultural issues like autonomy in order to begin the necessary process of eschewing socio-political structures of oppression and building creative partnerships and synergies among all people. It also seems like the social sciences have matured to the point that people can readdress fundamental issues of inequality that exist between people. Further analysis that seeks to really address the bifurcation of socio-cultural needs among disparate groups is seriously needed.

The status of sovereignty for indigenous or native peoples in relation to development begs a reexamination of the underlying principles and morals that are driving economic globalization and development. Demands made by native peoples regarding their right for self-determination and ethics toward land management have not been sufficiently addressed by academia or politically. In my research, I found few references to the issues of sovereignty and autonomy in the academic literature related to development and sustainability. Yet, people like Wolfgang Sachs agree that cultural autonomy, along with power and democracy are the fundamental issues to consider. (1993:17) People's cultural identities play a pivotal role in the ability of any people to self-determine their own course of development. Thayer says that sustainability can only be possible "if there are stable and continuing human cultures and subcultures". (1996:249) The Declaration of Indian Purpose in 1961, states that, "We believe in the inherent right of all people to retain spiritual and cultural values, and that the free exercise of these values is necessary *to the normal development of any people*" (*in* De La

Cruz, 1989:7, *my emphasis)*. Indigenous sovereignty is a key concept to people working in the development field globally, but few direct linkages are made between sustainable development and the role that autonomy plays (outside of Native American literature) in developing interactive (local-regional-planetary) and co-evolving sustainable economies.

The aim of this paper is to draw out themes and ideas that influence development and likewise sustainable development. My objective is to further the dialectic of sustainability by bringing forward the link between cultural autonomy and development processes. I hypothesize that many of the bottlenecks to sustainability stem from the inability of people to recognize and functionally accommodate the emotional and spiritual aspects of any people's development. Hence I focus on autonomy and sovereignty because these are emotionally charged issues. Precisely because of the personalism and emotional/spiritual aspects they are generally ignored. This is because they are more difficult to deal with on the project basis, which has been the hallmark of contemporary approaches to development since 1949. I believe that the problem is further compounded by modern science and in particular modern economic science (which has been the primary driver of modern development). This problem exists because linear scientific paradigms generally steer clear of non-quantifiable or subjective data. Proponents of economic growth have prospered by supplanting local knowledge with Western scientific facts and theories; tradition and culture with institutions and political machinery; the culture of community with the culture of individualism; communalism with materialism; and finally, cultural and human heterogeneity with consumer and material homogeneity.

In Part Two (chapters two through five) I explore the historical evolution of concepts that helped define the modern idea of sustainable development. The complexity of issues involved in shaping the twentieth century is beyond my ability to fully characterize. Analysis at any level is complex and nearly impossible. I have limited my discussion to the role of the environment and nature and its relationship to society and how people have interacted with it socially and politically in the Western tradition.

Part Three is organized into four parts. The central theme of this paper, the link between sustainability and cultural autonomy is discussed in detail in chapter six. Specifically, I look at how modernization and global socio-economic changes are affecting both indigenous people's struggles for political autonomy and placing greater stresses on the planetary biosphere. Chapter seven shows how the historical European attitude toward nature shaped the colonists' notion of progress and civilisation for the next 500 years. I give a general background on the history of conquest of the Americas by the Europeans and how they related to the landscape. This is contrasted to perspectives on land and property held by Native Americans at the time of conquest in order to illuminate important attitudinal and cultural disparities that lead to different development objectives and ideals. Chapter eight characterizes the differences and assumptions of subsistence and market economies and how they relate to cultural and societal development. Whole books have been written on these two topics alone; therefore, my discussion should be seen only as an introduction to some of the politics surrounding indigenous autonomy and sustainable development. The fact that empirical data is difficult to gather on this theme, makes any definitive conclusion tenuous. One

question social science has to consider is how to properly consider and investigate the subjective or irrational without being accused of politicization, for example.

Finally, in chapter nine I discuss the connection between Native American values and sustainable development. Is sustainable development embodied in the beliefs and values of traditional Native Americans? How does the Western and/or institutional concept of sustainable development regard autonomy for indigenous people? How have Native Americans been able to blend Western ideas with traditional knowledge and science systems? One idea I will consider is the adoption of permaculture design systems by some Native American groups as a tool to build their own cultural knowledge and traditions and to hopefully increase their local autonomy.

CHAPTER ONE
Methods, Science and Epistemology

The science of community development is a blending of other sciences such as anthropology, sociology, history, political science, biology, medicine and even ecology. The study and science of community development seeks to learn what it means to be a community, what and how are communities identified and defined, why community is important for people, and what happens within and to communities through space and time. The range of study runs the gamut from localized research on community gardens or the politics of urban development to transnational issues like immigration and economic globalization. Despite the large array of issues, the thematic content is generally focuses on issues related to (the distribution of) power and access to (productive) resources, e.g., land, food, housing, decision making, and/or political representation. There is an assumption in the field that these factors are important in determining the level or standard of people's quality of life, which is the basic agenda for development programs and policies.

Methodologically, the study of community development poses interesting questions for social research. It is unlike other social sciences, for example, economics that employ a set of established research tools and analytical methodology rooted in Cartesian models to study the exchange of resources in human society. Nor is it like sociology which focuses on a particular aspect of human interactions and that has generated its own epistemological framework for research and analysis that pertains to particular categories of social/human interaction. But these fields are well-established and have evolved over four hundred years in the case of modern economics.

Community development is a young science - largely the product of "development" programs started after World War II. Eventually it became necessary to construct a field of study that could better assess development and development standards and could more accurately predict methodology for achieving development. Development is the net or aggregate of all exchanges between people and processes internal to individuals. At a meta-level, community development is a sub-set of economic theory, because we spend a lot of time and effort thinking about economic development and how to foment particular kinds of resource exchanges between people. Yet at the same time community development is more than just economics which become just another component of an overarching or more comprehensive phenomena. At this level, it becomes necessary to consider the influential role of social networks at every level that bind theories from the various social and natural sciences.

To examine a process of development means that researchers must consider myriad factors that affect core variables - economics, politics, households and society. These factors may include: methods of resource exchanges, household production, basis for societal relationships, environmental factors, ecological issues, power relations, forms of communication, epistemology, religion/spirituality, historical processes, age, gender, class and ethnoracial stratification, access to resources, land-use, tradition, culture, conflict, and intellectual capacity of the community in question. As a researcher in community development one of the most difficult problems to address is the mutable nature of the categories of study because they themselves are constantly developing.

To the degree transience occurs, a researcher can never uncover all of the facts despite his/her methodology: books, interviews, surveys, empirical data collection and

statistical analysis, or observation. This alone differentiates the types and categories of analysis possible in the natural sciences from the social sciences. Whereas, a physical experiment can be identically repeated anywhere, the same is not possible in the social sciences. For one, we can not experiment with people. And two, because people and circumstances vary. Thus we aim to derive approximate truths by enlarging our ability to uncover the linkages in society and the dimensions of social phenomena. We think about how people do things together, how they organize, govern, legislate and work the land. Three, because we study people and behavior through time and space, our research is riddled with uncertainty – axioms are less relevant in the social than the physical sciences. As time continues, the potential outcome for any community development process also evolves; what is possible today most likely was not possible 200 years ago. The uncertainty is exciting for me as a researcher because it necessitates a level of reflexivity and examination of knowledge and research methodology that stimulates the framework for the study.

Yet by and large social sciences are modeled after natural sciences and often they employ the same research methodology and analytical tools to explain concepts or processes like graphs or statistics. Because the subject matter of the social sciences deviates sharply depending on worldview, value, and bias, much of its analytical arena is overtly subjective and not easily codified. Still, the social sciences are absolutely scientific. The criteria for good social science are defined by the integrity of the researcher, the rigor of the methodology, the depth of the analysis. Every study has to be clearly defined and the categories clearly labeled in order to make it relevant for other researchers and for the science at large. Whereas social science tends not to form

axiomatic truths, it does however, generate definitions and articulated concepts so that people can understand each other and their analyses. But even the process of forming definitions can be awkward and arduous as the debate on the definition of sustainability demonstrates. Concepts with weak definitions are less useful to people because of their ambiguity. Definitions can also be hegemonic, ambiguous, exclusive, ethnocentric or political.

Something else occurs within community development where the potential for unfolding is dynamic and grows as a function of time. Whereas experimentation can be done in the natural or physical sciences repeatedly to produce the same results, this is largely impossible in social sciences and development. Certain aspects of community development can be studied as a natural science like reproduction health and biological issues, but much of what researchers are interested in lingers in the realm of ideas, attitudes, belief systems, values and cultural knowledge. These factors are important because they influence systems of power, resource exchange and distribution, organizations, social networks, political sovereignty and cultural autonomy. These are dynamic qualities that can be affected by multitudinous factors.

What is knowledge and how do we measure knowledge? Because knowledge is not physically tangible, it is even difficult to say that indeed knowledge exists. The debate over what people do and can know goes back to ancient Greece in the Western tradition.[1] Descartes answered this question of uncertainty with the now famous "*cogito, ergo sum*." For him, thinking indicated a certainty of being, which is a type of knowledge in and of itself, but knowledge becomes much more difficult to define when it

[1] I am unaware but am curious to know if there is a similar tradition in any other culture regarding the question of what is *knowledge*.

is situated in a group consciousness or a community context that may be informed by multiple views and perspectives. The understanding of knowledge within non-Western societies contrasts sharply as it is often coincides with the use of "shamanic techniques" like trance, dance, hallucination induced visioning and so forth (Narby, 1998).

In the Western tradition, through empirical tests, inductive logic and experimentation, one can establish a hypothesis and test its validity. The ability to disprove a theory forms the basis of the scientific method and justifies its methodological superiority other systems of knowledge. Likewise, the production of empirical facts, which serve to sway doubt, evidences knowledge. This worldview grew out of the work of people like Francis Bacon, Descartes, and Isaac Newton prior to industrialization in the nineteenth century. The work of these theorists and scientists has undoubtedly benefited humanity's ability to understand the natural world and to be able to communicate about the natural sciences. Yet the possibility exists that the scientific method is itself too narrowly defined to encompass all forms and methods of knowledge and understanding of the natural world and us in it.

One challenge for the social sciences is to overcome the tendency to mirror the natural and physical sciences, which has been done extensively especially in areas like economics, development and human ecology. In these areas, Cartesian logic is applied generally to analyze meta-phenomena socially with largely quantitative rational data. Emotive, spiritual or other transcendental or metaphysical issues that influence human decision making and networks at the local level are usually ignored. Modern economic science and theories are apt example because their entire framework rests on an assumption that people's wants are unlimited and people will always compete to get

more. Another tenet in their analyses worth noting is that economic theory largely ignores human qualities and processes of socialization focusing instead on abstract notions and social constructs like price, inflation, interest rates, or investments. Not all people have unlimited "wants" and many cultures have demonstrated high capacity for organization and satisfaction of needs through cooperative arrangements.

While falsification of a theory may lead to a greater quantity of empirical facts about a phenomenon, facts do not always equal pure or absolute knowledge. At the same time, it is possible to generate voluminous empirical data without using this process (Narby, 1998). Also, empirical data does not address what is the *meaning* of knowledge. People putting facts together construct meanings. Knowledge is a social construct. Epistemology is a branch of philosophy that is concerned with problems related to knowledge like perception or inference or even dreaming. Epistemology raises interesting questions about the differences between knowing and believing or surmising, for example. The difference is categorical because if I know something than I can't be wrong. If I say that I know something and I am wrong than what I thought was knowledge was only an opinion or a belief. One epistemological argument suggests that one cannot *know* outside of one's own sensory-perceptions. This is a fascinating argument because it transforms what we think about as knowledge to something outside our self into an opinion, belief, or assumption.

The empirical tradition found within Western science focuses on what can be observed. Intuition, for example, cannot be observed. We can agree that intuition exists, but we cannot measure what it is or how it works, e.g., if it is a sense. It is even more difficult to assess if information received through non-empirically driven research

methodologies can into knowledge, for example, information received through visions, trances or hallucinations.

Another epistemological issue considers the problem between branches of study that can be absolutely proven as opposed to those where there is only a high probability, e.g., mathematics versus astrology. From the Western perspective, branches of science that are more easily proven through empirical testing are better respected then those where knowledge is subjective and consequently more difficult to test, e.g., natural versus social sciences. This leads to a hierarchy of knowledge and power in society that influences what facts are considered important and those that are discarded by political and social institutions. For example, rationalists argue that we can only know what we can calculate and demonstrate; conversely, if something cannot be observed or experimented than it is impossible to know. They contend that new ideas are generated by reason or thought using through inductive logic processes. Only the exercise of pure thought can elicit certain truths or knowledge. One argument contradicting the concept of *pure knowledge* or *reason* is that that notion reflects an ethnocentric bias of the Western scientists and philosophers who were influenced by their own time and cultural experiences.

Jeremy Narby's book, *The Cosmic Serpent* (1998,) questions the traditional perspective of academia and social scientific methodology and epistemology. The book is a *factual* account of Narby's journey into the origins of knowledge during his anthropology dissertation research at Stanford in the 1980's. Narby's intent was to study the Ashaninca people in Quirishari, Peru to prove that they were rationally using the forest resources. This was important because international institutions and the state of

Peru wanted to privatize the forest citing that these people irrationally used and cared for the forest.

By participating in ritual with the people he experienced a hallucinatory state several times where a serpent appeared to him and instructed him to use certain plants for his health. A brew called *ayahuasca* that had been used by the indigenous peoples for millennia caused the hallucinations. What prompted him to try it was that the Ashaninca people repeatedly cited this substance as the source of their knowledge. It was during their hallucinations and communications with serpents that they learned how to use different plants in their environment. Indeed, Narby had discovered that these people had a massive array of empirical knowledge of their forest homes. This included medicine, food, tools, and shelter among other things. Through his field work and direct personal experience he corroborated the validity of the Ashaninca's information; yet he knew that it would all be discounted as irrational by Western anthropologists. Hallucinations are considered an aberration by Western science and as such could not possibly be the source of any *legitimate* facts or information.

Modern (Western) social science is rooted in evolutionary anthropology that began during the 1850's. The big question for the early anthropologists was why are there primitive people and why are civilized people civilized? Theorists sought to devise methods that might effectively transform or develop the primitive person into a civilized person. It took fifty years before people started to look at the values of people in their respective cultures and tried to get a better understanding of how non-Western people viewed their society and adapted to their surroundings.

The goal of (social science) research is to produce new knowledge. In the social sciences it is assumed that the pursuit of that knowledge is to be applied toward the benefit of humankind. There are many characteristics that distinguish social science from natural science but I think one of the most significant is the acquisition of empirical facts. Because social science methodology in its inception was based on the scientific method, much emphasis was placed on the use of surveys and statistical data generation.

Case studies and interviews, which emphasize qualitative aspects of the research, were not widely used until the mid-twentieth century. Early ethnographers had much to do with bringing case studies to the science as a valid tool. They are useful in comparative analyses to help broaden a scientist's understanding of human or community behavioral dynamics.

People have become more sensitive in recent years to the role that a person's worldview and bias can play in influencing their research. A scientist's cultural (or even age, class, gender, race and/or ethnicity) view may affect how s/he looks at the problems of the world, events in history, or the needs of the poor. Merlin Stone, author of When God was a Woman (1976), performed an extensive research of archaeological data in texts and archives, studied history, and reviewed anthropological information that had been recorded pertaining to the ancient pre-Judeo-Christian cultures in the geographic area of the Middle East. Her book is a good example of feminist scholarship but it is also a good example of how cultural bias and gender can affect data interpretation. Stone found that the predominant data collected on these cultures was by male archaeologists from Judeo-Christian cultures. She observed a consistent emphasis on particular aspects of the patriarchal focus of these early cultures with a consistent lack of emphasis on the

matrilineal cultures that existed prior-despite the voluminous data that suggested matrilineal cultures were pervasive, respected, and had survived for countless generations. She did relatively little new research but instead reexamined the data that had been previously unearthed. Stone was able to synthesize and analyze it to the extent that she drew totally different conclusions. I relate this as an example of bias that affects all research as exemplified both in the work by Stone as a woman interested in matrilineal ancient cultures and male archaeologists interested in patrilineal ancient cultures.

The social sciences differ from the natural sciences by the incorporation of qualitative research methods like ethnography, participant observation, participant action research, or literature analyses. For example, Stone's work exemplifies textual and archival research – a qualitative research methodology valid in Western social science. Ethnography is used by researchers to collect descriptive data of a group or community in order that s/he can make inferences about the socio-political and economic networks and linkages in a community. Hammersley (1983) notes that the use of ethnography has increased in response to the dominance of the quantitative method in social science, which is largely predicated on the methods of natural science. Hammersley compares the scientific views of positivism with naturalism. Whereas positivism supports quantitative methods, naturalism supports qualitative approaches like ethnography arguing that "the social world should be studied in its 'natural' state undisturbed by the researcher." Whether or not this type of objectivity is possible is a contested point. How can one study a phenomenon without affecting it and altering its natural state?

Hammersley's point still demonstrates an important aspect of ethnographic research as compared to the scientific method in the hard sciences where experiments can be performed repeatedly. Social science research is categorically different and necessitates wholly different research methodology. He shows that the emphasis on universal laws found within the natural sciences are problematic for the social sciences; instead "the search for universal laws is rejected in favour of detailed descriptions of the concrete experience of life within a particular culture and of the social rules or patterns that constitute it" (1983).

James Spradley (1980) says that ethnography is a tool used to understand another point of view. Spradley specifies, though, that is to understand the "native point of view". And as a methodology for field work, ethnography or specifically, participant observation, "involves the disciplined study of what the world is like to people who have learned to see, hear, speak, think, and act in ways that are different." The fact that Spradley qualifies the objective of ethnography with the word "different" implies a standard. That this thought is prefaced with a description of the "native point of view" implies that ethnography (from Spradley's perspective) is a tool for the Western investigator to understand the point of view of non-Western people (*see also* Narby, 1998). Is it possible for one person to understand or fully digest the *gestalt* of another's culture or experience through any scientific method? How can a scientist "factually" account for a person's life experience, for example, their childhood memories, dreams, emotions, or intuition?

Ethnography differs in orientation from other types of social research methodology because of the emphasis on reflexivity by researchers. This means that the

researcher attempts to uncover the tacit assumptions of himself and the subject of study (Spradley, 1980). Tacit assumptions are unconscious and culturally embedded, for example, how close people stand when they talk, if they make eye-contact, or certain values that they hold. But it also seeks to understand explicit assumption between the two cultures. Explicit assumptions are those that people can talk about or that they are conscious about. Reflexivity also means that the researcher recognizes that s/he is part of the world that they study (Hammersley, 1983).

Reddy (1987) argues that social research must be objective and that the researcher must be careful to use rigorous tests and data collection systems. He contends that "objectivity means knowing reality". While this methodology has utility in certain research programs, approaching social research from this perspective alone may limit what the researcher can know as a the subject of study may define their reality through a wholly subjective experience. One of the factors limiting objectivity in the social sciences is simply the size and complexity of the variables in social issues may be unwieldy or unknowable. Furthermore, unlike a laboratory experiment that can be reproduced repeatedly, the social arena is dynamic and rarely produces the same results. Morals, for example, cannot be understood objectively because they are often based on subjective phenomena. A researcher may be able to deduce the importance of the moral values espoused by an individual using an inter-subjective approach that requires the researcher to combine both his/her own perceptions with whatever facts they have been able to generate about the subject from other sources and their own experiences.

INSERT PARA ON INTERSUBJECTIVE KNOWLEDGE

Drawing on contemporary theories in physics, also, the entire notion of objectivity is challenged. The theory of quantum mechanics in physics states that neither objectivity nor determinism is possible. Another aspect of this theory is that once one observes a phenomenon, one is in effect changing the characteristic of that phenomenon. The Heisenberg Uncertainty Principle states that you cannot simultaneously know the position and momentum of an object. This infers that one cannot be objective in their observations. If objectivity is not possible, what implication does that have on subjective reasoning as a legitimate form of knowledge? Naturally there is more emphasis placed on deductive logic in social observations because we cannot separate ourselves from what we are witnessing. I have not read anything about social science or community development that incorporates these ideas but I have a feeling that they might be important to how people in the Western paradigm think about social phenomena, internalize problems and attempt solutions, i.e., development.

Niklas Luhmann (1989) poses an interesting critique on the problems internal to the scientific system with specific regard to objectivity and rational thought. One of the constraints on scientific analysis that Luhmann sees is that it is limited by its own constructed binary coding that makes up the scientific method. Things that can't be proven true or false are exceptionally problematic for the scientific system. In essence, these things will be discarded as irrelevant or ignored because they don't fit in the system. The process of formulating a theorem then "demonstrates the way in which abstractly formulated problems are transformed into concrete research plans and then create resonance within science"(1989:82).

A contrasting method to quantitative data collection used by social scientists is critical social research, which is "underpinned by a critical dialectical perspective" that focuses on the historical and contemporary social structures of oppression (Harvey, 1990). I like this approach because the researcher has an explicit agenda motivating the methodology. In order to be critical of the social processes the researcher is investigating, s/he considers theory (tacit/explicit assumptions), method, and epistemology. Harvey says that for "critical methodologists, knowledge is a process of moving towards an understanding of the world and of the knowledge which structures our perceptions of the world" (Ibid.).

The line distinguishing science and politics is fine. For example, science and the scientific method are used to increase crop production through the development of genetically engineered seed. The perceived need to increase the food supply (because of rising population and persistent starvation) by raising the yields per unit of land cultivated reflects a particular worldview. This is an interesting example because rather than focusing on better distribution and access to food that is currently cultivated, pressure is placed on bio-genetic engineering. Meanwhile, a significant percent of annual crop yields is lost to improper handling, inefficient transport, rotting in storage, or structural inequalities in the political organization of the market. Further, science has also proven that this form of agriculture poses deleterious effects to the environment. Monocropping leads to excessive soil erosion, depletion of soil nutrients, inefficient use of poor quality lands leading to desertification, air pollution, contamination of water supplies, urbanization in developing countries. It also relies on petrochemical inputs that pose a variety of health issues to human and non-human life. It promotes a rapid loss of

crop and plant genetic diversity and the displacement of traditional land race cultivars. As endemic varieties become extinct local knowledge systems are also threatened as well people's traditional cultures. These are drastic and alarming consequences of a particular manifestation of scientific discovery and innovation. The fact biologically life threatening situations are occurring and they are not heeded in economic policy decisions is political by deduction because these decisions are *not* scientific.

The question of autonomy and sovereignty is inherently one of ethics and morals. There is no positivistic or empirical rationale that I am aware of that can justify or delimit a group's autonomy. Nor is it possible to empirically measure the existence of autonomy. I can only perceive that people need to feel autonomous and to exercise their sovereign rights by the number of groups fighting for their sovereignty and autonomy around the planet. (This is an example of inter-subjective knowledge.) The extremity of these struggles that has resulted in massacres, bloodshed, terrorism, ongoing warfare, and in extreme situations, genocide or ethnocide tells me that peoples' experience of autonomy or lack thereof is one of the most serious issues affecting people worldwide. And even historically, people have fought battles to ensure their freedoms, self-determination, and to remove themselves from the forces of oppression that may be limiting the potential for their own development trajectory. The struggles for autonomy and sovereignty may indicate that these qualities are in fact needs for the *normal development* of a people across racial, ethnic and class groups and is a necessary prerequisite for cultural development.

Community development is affected both by the absence of autonomy – in extreme cases where people are willing to kill and die for it – and where autonomy is

fully present and community's can achieve their full potential. What, if anything, socially, politically or even scientifically, impedes the realization of autonomy? If people are trying to liberate themselves from the oppression of another group, then the answer to this question must lie in the political realm. If this is the case then one must consider the social structures that ensure or deny autonomy, which makes it a political problem and not a scientific problem. And even my own motivation to consider these issues is political as much as it is scientific. It is political because I regard cultural autonomy and sovereignty of distinct peoples as an ethical and moral right that all people's are entitled too. (This is an example of critical social research.) It is scientific from a community development perspective because the absence of autonomy delimits full cultural expression and contributes to conflicts that can lead to genocide and the destruction of environmental systems. These are undesirable and antithetical to community building since they detract from experience and do not assist the processes of maturation normally associated with the field of community development.

Moral philosophy is a branch of ethics that is concerned with normative values of good and bad or right and wrong. It might examine the opinions that are accepted by a society and then try to reduce them to a system and in this process create a data set to study the morals of a society (Urmson, 1960). This is important to deduce the meaning of different words and possibly a moral connotation. Questions pertaining to the meaning of moral words, for example, are considered an issue of ethics. Ethics differ from morals in that it examines the meaning of moral words rather than the moral norms.

Thus I can use my research as a tool to explore the *meaning* of autonomy by looking at how it is regarded by a society; I can compare or differentiate the meaning of autonomy for the modern nation state and for indigenous peoples.

Defining morals is difficult from a philosophical standpoint; neither universal accord nor the holding of a small group of a moral principle proves that either is right. The philosopher Hume questioned categories of acts in regards to morals. If an act is a certain kind (otherwise assumed to be a kind act), it does not necessarily follow that it is right or good. This is because the motivations driving the act do not correlate or it has varying repercussions for different people (or the earth). If a poor rural peasant is "helped" by the foreign banker to transition from subsistence farming into the market, the peasant is not necessarily receiving help even though the intentions of the foreigner are to have that effect. There is an issue between relativity and subjectivity. Others have contended that morals are correct, if a person senses they *ought* to do something. This is an individual moral doctrine. But by the same token, if two people hold two different moral doctrines that are contradictory, then they might both be correct. If we apply that argument to the case of autonomy where there are two opposing moral doctrines between the modern nation states and the indigenous nations, then how can this conflict be reconciled? What happens if individual *x* thinks that he ought to govern because he is more civilised and more capable, but his action results in the oppression of individual *y*?

Whereas traditional ethnography is oriented at understanding another culture through the cultural eyes of an observing culture, I tried to apply this research methodology to study my own culture. The approach I took is essentially *critical social research*. I am interested in trying to uncover the persisting systems of social oppression

that occur in the United States with specific attention on the question of autonomy and sovereignty for Native Americans. Harvey states that the difference of critical social research from other qualitative approaches is that it "tries to dig beneath the surface of appearances. It asks how social systems really work, how ideology or history conceals the processes which oppress and control people" (6). In a sense my methodological perspective can be described as a meta-ethnographic analysis. One of the problems ethnography tries to overcome is the process of eliciting the tacit assumptions of one's self while realizing the tacit assumptions of the other. I think that this is also an appropriate placing for my research questions in that I am of Western culture yet my own family has co-evolved with Native American cultures. Culturally I am not *mainstream* nor of the same persuasion politically or economically that establishes the norms for this society, but neither am I culturally Native American. How were my assumptions molded or shaped in such a way that I would experience any of these questions?

I have a feeling that economic values placed on land and the privatisation of resources is a central issue in denying political sovereignty to Native Americans and also to fomenting a sustainable development paradigm. My exploration of these issues is of an ethical and subjective nature; I am not interested in technical debates or mathematical models of resource availability – but I don't discount their usefulness in the discourse overall. Rather, I am intrigued by the problem of intersection between diverse cultural needs and their ethical and moral standards related to processes of development and political organization in the age of globalization. This path of study is influenced by my personal belief that as long as nations of people are displaced from their traditional lands

and therefore partially stripped of their cultural identities, a situation of social unsustainability will endure because the cultures are destabilized.

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CHAPTER TWO *PART TWO*

The Emergence of a Development Dialectic

The concept of development that popularly used today to describe a process occurring within a community, group, or nation to improve their quality of life has a long history in the European (and Western) mind going as far back as the 16th and 17th centuries. Indeed it even hearkens to the ancient philosophers like Plato and Aristotle. Development in this context has never found consensus within the Western societies although there has consistently been a dominant worldview. Some viewed the encroaching *development* of an industrial way of life as a threat to community values and humanitarian values. Others saw *development* as the natural course of man toward a more refined and civilized state where the constraints on man by natural phenomena would become less and less significant.

Nature's Economy (1994) written by Donald Worster, traces the origin of the contemporary Western view of nature to the fifteenth and sixteenth centuries where thought on nature bifurcated into two distinct trends, the Arcadian and the Imperialist. The former, which ultimately grows into a critique of modernization and "development", and the latter into the expansionary neo-liberal global economy we experience today.

In this chapter I hope to draw out some of the early threads and ideas that connected development to the environment that has only recently come full circle again with the 1992 United Nations Conference on the Environment and Development. In fact, the relationship between man and his natural surroundings has been at the fulcrum of debate on development be it philosophical, political, scientific, or popular for at least four centuries in the West. I am specifically focusing on the Western evolution of these

concepts because they have come to dominate globally the political discourse on development and the environmental. Having a broader conceptual understanding of some of the roots of the contemporary meanings of these words, I hope will serve to more effectively make the connection between the issues of cultural autonomy and the need for *sustainable development* in Part three of this paper.

The Arcadian View of Nature

Gilbert White was a pastor-Naturalist that lived in Selbourne, a small village near London in the late 1700's. During his life he made numerous observations about the *economy of nature*, and how the landscape's apparent permanence allowed individual species and places to perform multiple functions. He compiled his observations in a book published in 1789 called *The Natural History of Selbourne*. White advocated a simple life in order to restore a peaceful existence with other organisms that he felt was essential to maintain the integrity of the human community.

White's book became famous upon his death and influenced a number of natural essayists that developed an Arcadian critique of development. They criticized methods of scientific analysis and modern scientists for being isolated from the people and their morals (19). The first instances of the use of the words *organic* and *holistic* appeared in these essays to describe the ideal Arcadian landscape. A central theme in their writing was to reestablish the community as a counter measure to the anonymity produced by industrial society. The same theme appeared in the late 1960's and early 1970's by people calling for an *alternative path to development*.

In addition to the Arcadian critique, Doug Aberley in Futures by Design identifies no less than five streams of critique and resistance to the Industrial Revolution and

domination of the scientific world. Among them are the utopian socialists of the late nineteenth century and geographers like Vidal de la Blache from the mid-nineteenth century who advocated "stewardship of vital region-based cultures as the foundation of stable human nature interrelation." And finally Ernst Haekel (1834-1919) established the field of ecology in the 19th century. Haekel espoused "the belief that humans and nature were inextricably linked [which] became the centerpiece of a unified philosophy, science, arts, theology, and politics"(1994:6). Deep Ecology of the late 20th century also espoused this belief.

The Imperial View of Nature

Francis Bacon, who lived during the 16th and 17th centuries, wanted to recreate a man-made paradise on earth. Bacon, like others of his time, was influenced by the Christian pastoral belief that man is subservient to God, while nature, was beset to man. The analogy of the shepherd who defends his flocks from "the hostile forces of nature" (Worster, 1994:26) best describes the imperial view of nature. Bacon was convinced that science and human management would best enable man to live on earth. One of his most important contributions to the emergence of modern science and the scientific method was empirical analysis (Luhmann, 1992). Developments in modern science helped achieve technologies that in part fulfilled Bacon's vision. Vermeersch traces Bacon's ideas to the fourteenth century, where already

> "the development of technology was accelerating, a tendency which may be explained in part by geographical and political factors, but which was also due to the gradual formation of the capitalist way of managing the economy – the reinvestment of a considerable part of the profits" (*in* Zweers, 1994:277).

John Calvin, a French theologian in the 16th century, had a large influence on Christianity and development. He questioned the validity of any earthly authority vested in either state or church, arguing that man was directly connected to God. Calvinism

eventually garnered a large following of people who espoused the belief that only through self-interested or rational behavior would the greatest number benefit (Daly and Cobb, 1989:6). Daly and Cobb write in For the Common Good that the modern economy based on rational behavior and individualism grew out of the reforms made by Calvinism. This is the same idea expressed by 19th century ideology of *laissez-faire* and attempts being made today by the World Trade Organization to pass the Multi-lateral Agreement on Investment.

Hans Achterius in Global Ecology (Sachs, 1993) argues that the Western notion of progress is built on negative attitudes toward nature that he calls the "reign of scarcity"(105). Thomas Hobbes, secretary to Francis Bacon, had a powerful effect on the formation of Western ideology with his theory of power in the *Leviathan*. Hobbes studied the comparative relations of power and theorized that society was structured into hierarchies of power between individuals and groups (Ibid.). Hobbes conjectured that man's desire was unlimited, likewise, so was scarcity a phenomenon that naturally occurred among and between men. Acterhuis argues that although the present idea of scarcity (a lack of resources) did not exist until the 19th century, Thomas Hobbes was the first to articulate the notion of scarcity as a "general condition of humankind"(Ibid.106).

Acterhuis also notes the influence of philosopher John Locke (17th century) and credits him with giving society "the modern images of nature and the idea of unlimited progress and growth"(Ibid.107). Locke surmised that scarcity was a natural and absolute condition between man and nature. For Locke, however, progress could allow man to transcend earthly scarcity and natural limits by increasing productivity. Locke stated that nature had value only when man had transformed it;

"that of all the things useful to the life of man, when he divides what in them is purely owning to nature and what to labour, he shall find that in most of them ninety-nine hundredth were wholly to be put on the account of labour" (q*uoted by* Acterhuis:107).

Locke advanced the theory of the limitation of wealth; he supposed that with the advent of a monetary economy, the natural limit on wealth accumulation "disappears because money does not spoil, and wealth can be accumulated in the form of money" (Daly and Cobb, 1989:38). Daly and Cobb contend that "the concentration on money and the market rather than on physical goods, with the concomitant decision to model itself on the methods (but not the content!) of physics, has been characteristic of the whole of modern economics"(1989:38). Eventually Locke's theories led to the development of a social science that necessitated the construction of an impersonal and universal individual that was easily assimilated into society and likewise easily interpreted. Kearney suggests that the effects of this were later evidenced in the field of anthropology and economics that devised their own methods to explain social and individual inequalities against the standard of the "rational individual" (1996:48).

The imperial view was steeped in religious (Christian) beliefs; but by the 20th century, it grew into a totally secular view of the world of rational objectivity. Worster attributes that to Christianity itself which "has been the most insistently anti-natural" of all the religions; he references another writer, Nicholas Berdyaev, who claimed that (modern) "science in fact benefited the Christian faith by severing man from it emotionally" (*See also* Sale, 1990). Worster argues that "the domination of the earth in the name of a purely secular welfare" (29) eventually became the triumph of modern man.

During the 18th century, Swedish botanist Carl von Linne, *Linneaus* (1707-1778), added to the development of the Western notion of progress. He was widely known for a

book published in 1749 entitled, *The Oeconomy of Nature*. He theorized that hierarchical relationships are natural, e.g., food chains. He wrote that "all of animate nature is thus bound together in common interest by the chains of sustenance that link the living to the dead, the predator to its prey, the beetle to the dung on which it feeds." By deconstructing nature into parts and roles hierarchically, the implication arose that nature could (ultimately) be easily understood using rational observation and empirical research.

Thoughts on Nature and the Economy

Prior to the Industrial Revolution major transformations were occurring in European agriculture to support the increasing numbers of people moving to the cities. By the 1700's, the role of the environment was largely to supply sufficient land and water resources to meet the growing demand of expansionary agriculture. Jeroen van den Bergh in Ecological Economics and Sustainable Development (1996) examines the impact of theorists and economists during the 18th and 19th centuries on the evolution of economics and how economic theory related with the environment (12).

In 1776 Adam Smith (1723-1790) published the *Wealth of Nations*. Not only did his theories profoundly influence (economic) Western European development, but he also took a largely positivistic approach toward nature assuming that the market would always employ self-corrective measures ("the invisible hand") in order to ensure the best distribution of resources (i.e., nature). David Ricardo (1772-1823), also an economist, theorized that agriculture would experience decreasing returns to scale over time. His biggest impact on modern development and resource distribution (now horribly inequitable) is the theory of comparative advantage, which has been the primary focus of modern development economics for the past 150 years. Countries should produce

whatever they are best suited for based on available resources (labour and/or raw materials). This logic is applied today by institutions like the World Bank on developing countries, for example, Guatemala, whom they instruct to grow tropical fruit because it is ideally situated geographically to cultivate these products. By selling their fruit as an export commodity they will theoretically earn a higher price on the market due to their comparative advantage of growing tropical fruit against non-tropical countries where the demand for those goods remains high. With the foreign currency earnings they can then buy food staples from other countries that can grow it cheaper in their area, e.g., for example wheat from the United States. Theoretically, the best and most efficient distribution of agricultural products would arise. Measured in economic terms this is indeed the case, but seen from a perspective of sustaining cultural and natural resources this has proven to be terribly inefficient.

Thomas Malthus (1776-1834) argued that some part of society would always exist beneath the subsistence level. He cemented the ideas of absolute scarcity and natural limits in the Western mind. His theories had a huge impact on the late 20th century over-population theorists. John Stuart Mill (1806-1873) charged that the role of technology was to relax the environmental or natural limits on growth and progress. Finally, Karl Marx (1818-1883), who is much better known for his discussion on social theory and the politics of the proletariat, advocated the belief first put forth by John Locke, that nature has value only in that it has a function for man.

Evolution, Civilisation and Development

The idea and use of the word development as we use contemporaneously first appeared in the beginning of the 19th century. Previously, development referred to only

the biological process of maturation that occurred within an organism's lifespan allowing it to unleash its potentialities. But over the course of the 19th century, theorists in evolution, economics, and historians, transformed the biological metaphor into a social metaphor. Historical analysis tried to explain the process of unfolding affecting historical events and their outcomes (Esteva, *in* Sachs,1992). The words *evolution* and *development* were used almost interchangeably as the meaning of development was transformed, writes Esteva, from something "that moves toward the appropriate form of being to a conception of transformation that moves toward an ever more perfect form"(*original emphasis*:8). This notion of development was concretized during the Victorian Era and then again after World War Two into a project or a program that people could undergo in order to achieve a more perfect state or standard.

By the end of the Age of Reason (mid-19th century) Worster posits that there were three prevailing theories about ecology that helped shape our present ideas of modern (economic) development theories. First, nature was seen as a unified whole that had a singular purpose. Theorists attempted to rationalize all natural phenomena much as the natural philosophers of the ancient Greek city-states had attempted.

Secondly, every species in nature was assumed to have an assigned role (by God) and place in the social hierarchy. This led to theories that justified violence as Worster summarizes: "All destruction is the means to a continuity of life. Through its dreadful agency comes the possibility for a maximum abundance of species and individuals and such an abundance or plentitude is further proof of God's benevolence" (47). Thirdly, people had come to believe that man's progress was justified even if a species diminished on the sidelines because the web of life (a Divine creation) would withstand any action.

What started with the transformation of rural agriculture and communities across England and Europe that Gilbert White experienced as urban areas demanded larger resource inputs grew steadily into a counter-critique of mainstream development that was concretized by the mid-nineteenth century in the period known as Industrialization. There are myriad reasons why the Imperial View toward nature and Worster refers to it has been so successful. Because of its success, I find it all the more fascinating that there has always been a voice within the West that has contested this way of life and that has yearned for a more Arcadian livelihood that is often associated with indigenous peoples today. It is also interesting how the ideas of philosophers like Locke and Descartes and economists like Smith and Ricardo have transcended time and have made outstanding impacts on the political orientation of the world's nation states and the global economy. In the next chapter I build on these ideas and look at how they impacted theorists like Charles Darwin and the shaping of the final colonial expansionist period up to World War Two. It is in this time period that the mainstream meaning of development mainstream becomes fully wedded to an idea of *civilisation* that reflected the aspirations of a particular class group emanating from Western Europe.

CHAPTER THREE
Civilizing Development

Charles Darwin lived his entire life during the 19th century (1809-1882) but his life was influenced by the thinkers in the Age of Reason and in turn his theories helped shape the philosophy of the Victorian Era. Darwin was conceptually rooted in Carl von Linne's work as well as Thomas Malthus' observations and theories on population dynamics. In 1859 he published *On the Origin of Species* where he first iterated his theory of evolution, that is, natural selection of the fittest species occurs through competition. He argued that man evolved, not by the hand of God or Divine intervention, but through a natural process of mutation, adaption, and changes over generations (Worster, 1994:160). The gestalt of his evolution theory was obviously more than some devout religious followers could digest. Even today some still debate the validity of his theory. But the implications of his work had a tremendous impact on the field of ecology, the nascent field of anthropology, and a belief in the United States and Europe of the superiority their civilisation. Darwin asserted that it is natural for the stronger to push out the weaker. Thus he developed an antagonistic or competitive view of nature. Combined with Hobbes' theory of power relations and Marx' opinion that human historical development processes were no different than those found in nature, symbolic parts of the expansionary or colonial attitude toward development in the Victorian Era begin to unravel. Worster believes that Darwin's biggest influence, though, was that he separated man's progress from the hand of God which led to secular belief and logic systems that still guide the prevailing views on progress today.

The Victorians 1860-1900

The last great imperial conquest of "uncontested" lands and the "savage" world[1], the Victorian Era, began roughly in 1860. Christian missionaries were being sent around the world to proselytize the non-Christian world in the name of God and to transform humanity to a more civilized order. The Victorian Era marked the final rush of territorially expansion of the West's that had begun 400 years earlier when Christofer Colon found the New World (*see* Sale, 1990). The only difference was that now science could support and justify (and rationalize) these efforts.

In addition to the theory of evolution, Darwin was also interested in the phenomenon of *savages* that he had observed throughout his travels vis-à-vis the stature of the more civilized people from his culture. The field of anthropology (1850's) was also consumed with the savage or primitive person, which was reduced to a question of evolution: "what is the process of change whereby a group of humans can transcend their savagery and become civilised (Worster: 172)?" In the Linnean tradition that assumed there was a natural purpose and course to nature, the primary aim of investigation during this era was to discover the natural course and purpose of humanity.

Thus marked the rise of the Social Darwinists and others that over time imbued a secular science and belief system with the moral righteousness and teachings of the Christian Church. In this way, they could raise the standards of others which would fulfill a moral obligation to help the poor and wretched. In one sense, the Social Darwinists took their charge from the success of the advances being made industrially within their civilization which proved to them that Darwin's theory of survival was also applicable socially and justified the superiority of European civilisation.

By the end of the 19th century the natural environment played a more central role in development theory with the rise of industrialization. Many cities, notably in England and along the US eastern seaboard were experiencing serious decay. One response was to restore vitality to the cities with parks and other natural features like street trees. The idea was that people's social health in the cities could be vastly improved by incorporating natural areas into them. During this period the Garden City and utopian movements were dreamed of and implemented (Christensen, 1986). New York City's Central Park is one example.

After the 1870's neo-classical economics became entrenched in the political apparatus of the Western nations because they best supported the expansionary policies that defined colonialism and the demand for natural resources by their industries. At this time, the concept of relative scarcity replaced absolute scarcity by neo-classical economists who were concerned increasingly with natural resource allocation. Economists began to look at the physical limits of both non-renewable and renewable resources (Van den Bergh: 1996).

Conservation and Externalities

The conservation movement arose concurrently to the Garden City movements out of a growing societal opinion that it was important to conserve wild places. Notably John Muir impacted the nascent conservationist movement, as did President Roosevelt's Conservation Program Director, Gifford Pinchet in 1900 (Sachs, 1992:28). In 1915 the Canadian Commission on the Environment stated that "Each generation is entitled to the interest on the natural capital but the principal should be handed down unimpaired." This was an important statement for the time and it has been a principle theoretical premise in

the recently established field of ecological economics. It was also a precursor to the principle of intergenerational equity embodied by the Bruntdland Commission.

One advocate of the time who clearly embodied the Arcadian philosophy was Liberty Hyde Bailey. In 1916 Bailey, who was the Dean of the Agriculture School at Cornell University in New York, published *The Holy Earth*. Bailey's writing is frank and poetic. He clearly established a mandate for living simply in harmony and respect for the earth and yearned for society to realize that they were plundering the earth through rampant and wanton use of technology. This was the basis of his critique on modern agriculture and its value lacunae. Bailey's argument was interesting because it was strongly based in a religious reverence for the earth, arguing that if God made the earth than the entirety of nature was hallowed and should be respected by man. The only way man could duly respect the earth was if he chose a humble path and reduced his impact on the earth to a minimum.

One, if not the most important, ecological theory to come from this period was the theory of dynamic steady-state ecosystems or climax theory by American ecologist Frederick Clements in the first decade of the 20th century. He asserted that species would undergo many levels of succession but ultimately a geographically defined ecosystem would achieve some level of stability and permanence, which would remain unchanged until a major climate change caused a disturbance or upheaval (Worster, 1993:137). At the point of climax or stability the ecosystem acted like one super-organism.[2] Clements' theory suggested that if man can determine at which point an ecosystem, like a forest, is stable then he should be able to control the stability of the forest by limiting what he

takes from it. Contemporary ideas of sustainable yields and harvests stem from this theory.

Clements' observations cultivated a new surge of critique against the type of modern agriculture that was transforming the Great Plains where he worked. During the Dust Bowl in the 1930's, Clements and his followers observed that modern agricultural practices had actually deepened the mal-affects of the natural disaster. Today there is a large body of scientific evidence confirming Clements' suspicions.

Around the same time an economist named Pigou (1932) looked at the problem of pollution in cities and was concerned with the ways pollution affected social welfare or industrial production. He proposed a theory of negative externalities, which suggested that pollution generated by one actor, could negatively affect the welfare or production of another actor. Van den Bergh (1996) states that his theory actually inspired a number of policy prescriptions (free-market environmentalism) in later part of the 20th century that, for example, propose tradable pollution permits in order to regulate pollution. The theory is that if pollution becomes more expensive to produce than the alternative of finding a means of production that doesn't pollute, the firm will be encouraged toward the latter.

By the middle of the twentieth century the successes of industrialization had transformed many parts of the world. But these had not gone on without certain consequences, for example, the increased pollution and deterioration of many of the older industrial cities. Regional pollution became an issue of serious economic consideration and political debate for the first time in modern history. Socially people were changing too as their society evolved and they were confronted with new problems resulting from industrial pollution, urbanization, and welfare issues. These transformations set the stage

for the social transformations that occurred immediately after World War Two both in the United States and abroad. Following the war changes in international economic institutions, production systems, transportation, and communication systems all contributed to an increasing awareness of large-scale development issues like international poverty, global environmental degradation, and human population growth.

CHAPTER FOUR
Development in the Age of Ecology

A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.
Aldo Leopold, A Sand County Alamanac, 1949

World War Two helped position the United States as the global economic leader and concretized the American lifestyle as the standard of development. Due to its preeminence, the United Nations was founded in New York City in 1947. One of the guiding principles of the UN charter was to promote economic growth measured by per capita income-a goal proposed by economist Arthur Lewis in 1944. Thus the standard measurement of a country's wealth, the Gross National Product was established as the predominant indicator of progress and development (Esteva, 1992:12). The forming of the United Nations was also important because it quickly became a clearinghouse for development relation programs and international accords such as Human Rights, environmental summits, and a mediator for escalating environment/development problems globally. The World Bank was founded in 1945 (following the 1944 Bretton-Woods Conference) and over the next two decades international development agencies proliferated to meet the needs of the world's underdeveloped nations.

In his 1949 inauguration speech, President Truman launched the rest of the world into the modern era of economic globalization and development by characterizing the majority of the world as underdeveloped. He was the first person to introduce the ideas of *underdeveloped* and *developing* into the international political discourse and stated that it was the duty of the United States to help the developing countries (Sachs, 1992; Kearney, 1996). Expansionary economic policies prevailed throughout the 1950's.

Government policies were geared almost exclusively toward industrial expansion and economic growth. It was popularly believed that the trickle down effect of growth would foster human development even at the periphery where the peasants lived. The Victorian sentiment lingered into the 20th century reflected in the theories of people like economist Walter Rostow who wrote, Stages of Economic Growth: An Anti-Communist Manifesto. His writing reified the images of anthropology and development of the future that would be not only a "non-peasant but also a non-Communist future" (Kearney, 1996:35). Rostow had a tremendous influence of the formation of development theory and of a universal society defined not by its social and cultural differences but its unification in the pursuit of economic growth and materialism.

Significantly, *development* became the "distinctly modern criterion for defining difference. There [were] two kinds of societies: developed and underdeveloped" (Ibid.34). It was then that the idea of the *peasant* emerged in anthropology and became the symbol of a nation's underdevelopment. Kearney argues that the peasant essentially replaced the idea of the primitive person as a category of study, but in so doing, the peasant posed entirely different questions for anthropologists and development. Whereas the primitive person lived along side the civilized society as an anachronism, the peasant lived on the fringe of modern society which made it conceptually more difficult to understand causing anthropology (and development programs by extrapolation) to reinvent itself (Ibid.24).

The focus on peasants was problematic because the category removed individual cultural identity, spirituality, tradition, sovereignty/autonomy, or other established socio-political networks that enabled people to survive. Because the West conceived the

"peasant" as an international problem, the *peasant* quickly became a transnational issue synonymous with *rural* or *poor*. The international development institutions perpetuated the paternalistic attitude of the colonists developed over the previous 450 years assuming that the peasant had an "historic destiny to develop, to modernize" (36). The location of the peasant identity as a transnational phenomenon happened much the same way that autonomy and sovereignty have become globalized. Both question (and perhaps the latter more than the former) previously agreed upon structures like private property, national boundaries, and the dualistic nature of law and democracy.

"The First Decade" 1960-1970

"The problem of the underdeveloped countries is not just growth, but development…Development is growth plus change. Change, in turn, is social and cultural as well as economic, and qualitative as well quantitative…The key concept must be improved quality of people's life"
1962 *Proposals for Action, First UN Development Decade*

Early development objectives were perceived with a linear logic and causality that monetary growth would lead to better human development. Esteva argues that this postulate is steeped in a historical process that excised the economy from society and politics creating an autonomous sphere of influence that economized all aspects of life. Kearney also argues that "modernization theory and developmentalism in general are twentieth century permutations of nineteenth century unilinear social evolutionism" (1996:42).

Rachel Carson stunned the Western world in 1962 with her book, Silent Spring. Worster claims that her book prompted a slew of literature foretelling the "ecological apocalypse" (199:23) as well as catalyzing the nascent environmental movement. (Sale, 1990) Bartelmus (1994) adds that the public was also impacted by several conspicuous pollution disasters during the 1960's and the rise of neo-Malthusian theories on

population growth together led to the rise of "doomsday" literature. In 1968 Paul Erlich published The Population Explosion, which linked human economic consumption to the natural capacity of earth systems. Non-governmental organizations and international institutions like the United Nations became concerned that the growing number of people on the planet would eventually cause a total system collapse.

Parallel to the growing environmental movement of the 1960's, major advances were occurring in the field of ecology that were prompted by theories in chaos and complexity that profoundly affect the notion of sustainability. By the 1960's Frederick Clements' theory of dynamic steady-state ecosystem was supplanted by the Odum brothers, Howard and Eugene's unified ecosystem theory (Worster: 1993:138). The Odum's established the idea of natural equilibrium between individuals-populations-communities-and ecosystems. The idea of equilibrium or steady-state is married to the (institutional) idea of sustainability that we can achieve a point of stasis in development where growth can occur indefinitely.

In 1961, MIT meteorologist Edward Lorenz coined the "Butterfly Effect" to describe a phenomenon where a butterfly flapping her wings someplace in China could cause a ripple effect that later results in a hurricane in Jamaica. The ecology of chaos rose as scientists realized the limited efficacy of making long term predictions for any particular species given the uncertainty in the occurrence of external perturbations or other changes coming from a species' own behavioral dynamics(Worster, 1994:471). The ecology of chaos soon integrated the field of thermodynamics (and economics) (Van den Bergh, 1996). The second law of thermodynamics, that entropy is always increasing, has driven conceptual and theoretical exploration for the last several decades in the areas

of time and irreversibility, information, non-linear processes, order and chaos and evolution. (Ibid.:17) If disequilibrium is the operating norm of the planet and universe than the theories of steady state or ecosystem equilibrium must be discarded. The reasoning is that self-organized ordered structure stems from disorder in fluctuating or stochastic type of patterns (Ibid).

The Age of Ecology

And They Saw the Earth…

The second United Nations Development Decade began in 1970, one year after earthlings saw the *whole* earth for the first time. The goal of this decade was to eradicate poverty and the primary *modus operands* was to meet people's basic needs. Although noble, the platform to eradicate poverty did nothing to support environmental quality or health (Sachs,1993). Despite the inefficacy of expansionary policies over the previous two decades, the West had still not adequately addressed the conditions of impoverishment that were wrecking the Third World; the peasants were not going away. Development was still popularly viewed as a uniform path geared toward the living standards set by the West. Moreover, it was becoming increasingly apparent that humans were facing severe (and perhaps catastrophic) environmental degradation as a result decades of environmental abuse and neglect – a "side-effect" of modernity (Beck, 1986). While technology did loosen the natural limits on human progress, it appeared that there were limits even to that. In Worster's opinion, the sudden acceleration of environmental damage after World War Two was largely the result of scientific advancement (1994:359; Beck, 1986; Luhmann, 1986, 1993).

Increasingly, underdeveloped nations were facing new problems like urban squalor as displaced "peasants" were moving to cities in search of jobs and sustenance. This was one condition that forced development agencies to redirect their efforts toward stabilizing the people living in rural areas (Kearney, 1996) hence the focus on basic needs.

The United Nations formalized the Basic Needs Approach to development in 1976. The prevailing theory suggested that people who could meet their basic needs (food, water, shelter) would counteract any negative impact they were having on the environment (e.g., collecting firewood and thereby depleting forests). Additionally, they would be more *productive* and this would eventually help raise the GNP.

Stockholm, Sweden hosted the United Nations forum on Humans and the Environment in 1972. This was the first time in history that non-government organizations gathered in tandem to the "official" event to hold a counter conference marking the emergence of the modern global civil society. They advocated an alternative path for development. Another product of this meeting was the theory of eco-development. Maurice Strong, the Secretary General of the Conference, was the first person to use the term *eco-development* to indicate development that was not based on economic expansion and incorporated ecological concerns (Mellos,1988:60). Critiques of global political and economic centralisation were beginning to escalate and some were hopeful that eco-development might be a viable option. This meeting also alluded to connection between cultural autonomy and self-reliance to social equality. The argument was that distinct social identity justifies political autonomy on the grounds of the democratic principle of self-determination (Ibid.).

In 1972 the Club of Rome published the Limits to Growth (Meadows et al.). This was the most significant neo-Malthusian argument of the time period stating essentially that human population was growing excessively and that it was only a matter of time before the global population would exceed the biological supportive capacity of the planet. The statistical models that they devised were important to help demonstrate likely outcomes and problems for humanity dealing with resource availability and the possibility of survival. Another 1972 publication was To Live on Earth by Brubacker Sterling who claimed that scientific and medical advances in the recent human past "have given us the means to break the natural checks on population and to support vast populations independently of nature's usual rhythms. It is the combination of numbers and per capita consumption that creates the problem" (9).

One of the leading thinkers and economists on ecological issues was Robert Heilbroner. In 1974 he published An Inquiry into the Human Prospect. Daly and Cobb (1989) credit Heilbroner with being the first economist to consider the pressures of the human economy on the biosphere. A thesis began to emerge that Western civilisation had acquiesced its autonomy to the forces of its economy (as Esteva has argued;) the economy has surpassed all other societal concerns and has been abstracted largely from social or other political issues (Wolf, 1982).

In the field of ecology, complexity theory offered scientists the hope that they could study the disorder inherent in chaos to give them insights into how ecosystems work. A debate grew during the 1970's (that persists today) challenging the assumption of stability by suggesting that nature and every "ecosystem" was in a constant state of flux and impermanence. In 1973 an article appeared in the Journal of the Arnold

Arboretum by William Drury and Ian Nisbet arguing that ecological succession occurs forever without progressing in any determinable direction (Worster, 1994:391).

This discounts other theories that nature has a unified purpose or evolves toward a steady-state. Applied to social theory, it also counters the meaning of development as a *perfect state* or standard that can be attained through a course of activity. Development, then, can never be a goal unto itself; instead it is an infinite process that is shaped by the unfolding of events in the present and future never achieving a static or stable plateau. Kearney links the influence of complexity theories to changes in anthropology noting that social sciences frequently adopt metaphors from the natural sciences where

> "concepts based on an appreciation of the complexity of identities and the intricacy of social and communication networks and the flows of persons, information, value, and so forth, through them should replace the teleology of development and the static, mechanistic assumptions of structuralism" (1996:134).

Two other theories had a resounding affect on the emergence of sustainability. First, E.F. Schumacher wrote Small is Beautiful (1973). He advocated small-scale appropriate technology to make development more responsive on the local level. His work spawned an entire movement that continues to influence development proposals world-wide; and I think, can be said to be a precursor of the more advanced ideas today of regenerative systems and technology (*see* Lyle,1994; Thayer, Jr., 1996). Secondly, James Lovelock and Lynn Margulis presented the Gaia Hypothesis in a 1979 publication called Gaia: A New Look at Life on Earth. The Gaia principle states that all life and the atmosphere co-evolves; that "the most fundamental principle of life [is] not individualistic competition but cooperation and symbiosis" (Worster, 1994:381). This dispels the notion that ecosystems achieve stasis but rather they exist in a constant process of co-evolution. Thayer in Gray World, Green Heart writes that the Gaia

Hypothesis "is both a theory for the organizing principle of the earth and a spiritual metaphor" (1996:186).

The Gaia Hypothesis was ideologically aligned to the philosophy of the Deep Ecology movement that was first articulated by Norwegian Arne Naess in 1973. The Deep Ecologists purport the belief that the self is united with, and not separate from the natural world (Thayer, 1996:183). The basic tenets of their belief are biospherical egalitarianism, local autonomy, and that all life has intrinsic value. The spiritual component of their beliefs elevated one aspect of ecology to a course of ethical deliberation and spiritual philosophy.

The 1970's were in many ways a revolutionary time period for generating a planetary consciousness. For the first time in human history people were able to see the whole earth as it appeared from outer space. Able to view the entirety of their planet as a single unified orb, people could no longer easily separate humans from their ecosystem. I think this must have greatly propelled the movements like Deep Ecology and environmentalism. These movements are also interesting because many of the values that they espouse parallel spiritual beliefs held by indigenous peoples worldwide. But despite the increased awareness of burgeoning development and environment problems at the mainstream political level and the rise in a spiritual consciousness within a sector of the Western society on the other hand, development continued to fumble. Poverty increased, environmental degradation escalated, and the complexity of modern life ensued to the point where totally new approaches to development were urgently required.

CHAPTER FIVE
Development Loses, Globalization Wins and Sustainability Emerges

By the 1980's the international scope of economic systems and global environmental issues had arisen as a central topic of concern to economists (Van den Bergh, 1996). Policy statements on development increasingly recognized the connection between society (development), economics, and the environment (Virginia Maclaren, 1996, *calls these the "three pillars of sustainability"*). All sectors of society were paying attention to the physical limits of the available natural resources (Van den Bergh, 1996) as the idea grew that the biosphere actually acted like a sink and was therefore impacted by the process of development (Auty and Brown, 1997). And for development professionals, the crisis with the environment was equally great but also was the general inefficacy of development strategies over the previous thirty years. Words like self-reliance, partnership, empowerment, mutuality, participation, equity, and joint-action were frequently injected into the development discourse. This was an ironic, if not blatantly condescending, argument with the North still blaming the South for why it hadn't developed.

Our Common Future: Together or Not at All

> "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."
> *Our Common Future*, 1987

While many pin the conceptual emergence of sustainable development to the International Union of Conservation of Nature World Conservation Strategy in 1980, the concept didn't take until the Brundtland Commission published *Our Common Future* (1987). In 1983 the United Nations convened the World Commission on the

Environment and Development, spearheaded by former Norwegian Prime Minister, Gro Brundtland, to address the perceived problem of integrating the environment with development. *Our Common Future,* did to the concept of sustainable development what President Truman's inauguration speech did to the concept of underdevelopment in the way that it was elevated to a global dialectic and became a new policy directive. Wolfgang Sachs argues the "Brundtland Report incorporated concern for the environment into the concept of development by erecting 'sustainable development' as the conceptual roof for both violating and healing the environment" (1992:29). Development, according to Sachs, has long been a hypocritical enterprise that at its roots creates poverty in the name of its elimination. Worster criticized the Brundtland Commission for three shortcomings. First, their definition was anthropocentric; second, it relied on an assumption that people can determine the carrying capacity of the planet; and third, that it "rests on an uncritical, unexamined acceptance of the traditional world view of progressive, secular materialism"(*in* Sachs, 1993:142).

Still, *Our Common Future* made important contributions to the modern development discourse – in particular by emphasizing intergenerational equality. Although this idea was by no means new, (*the Canadian Commission in 1915 made the same claim and, intergenerational planning has been a normal part of indigenous people's development for a millennia* – Sachs, 1992:33,) by injecting a future oriented temporal dimension into institutional development planning caused people to reevaluate development methodology. Conceptually this has been highly problematic for people accustomed to budgets, timelines and specific project parameters to *operationalize*. In the opinion of Auty and Brown, the Brundtland Commission advocated a global

environmental management approach that could be universally applied based on scientific analysis. Moreover, as Lele argued, "the absence of a clear theoretical and analytical framework makes it difficult to determine if policies can foster environmentally sound and socially meaningful development"(1991:607).

The report launched an extensive and important debate on the meaning and definition of sustainable development. There is no consensus on the Brundtland definition that sustainability is just about intergenerational equity in terms of resource allocation and availability. The Commission, in trying to solve or bring clarity to a problem, actually opened Pandora's box and helped bring to the surface a number of issues that have been plaguing the "development" question for the last five decades. For example, Barbier (1987), defined *social* sustainability as "the ability to maintain desired social values, traditions, institutions, cultures or other social characteristics" (Lele, 1991:9; see also J. Pezzey, 1989). Barbier's emphasis on "social" sustainability implies that there are other possible categories or groupings. Auty and Brown suggest that sustainable development, essentially "lengthens the temporal dimension of development, concerned as it is in its literal definition with the maintenance of something over time" (Auty and Brown, 1997:1). But *what* is being lengthened and over what *time scale* has never been fully answered although some authors have thought extensively about these questions (*see* Gale and Cordray, 1994; S. Lele, 1991; R. Norgaard, 1994).

Studies in complexity and chaos theories achieved greater sophistication during the 1980's. Some ecologists were beginning to say that ecosystems do not exist; or, there is no internal logic to the ecology organized in a series of sub-set hierarchical systems. Rather, the earth is a composite of interconnected environmental conditions (Worster,

1994:393). Margarat Davis studied the effect of climate on ecosystem dynamics using short temporal variables and hypothesized that climate was in fact the key determinant to the instability of organic nature (Ibid.395). The idea of sustainable yields or harvests based on an assumption of ecosystem parity has been completely discarded by California ecologist Daniel Botkin. He argued that the idea of living off the natural interest is totally incongruent with the theories of disequilibrium that state change is intrinsic to nature (Sandilands in Keil, 1996:127). Later ecological-economist Jeoren van den Bergh, captures the essence of disequilibrium in his definition: "sustainable development is not a fixed state but a balanced, adaptive process of change in a multi-dimensional complex integrated system" (1996:5).

Herman Daly, an economist, and John Cobb, a theologian, argue for the basis of a moral economy. They deconstruct classical economics to show fallacies and antipathy toward social or human well being; that there is "a widespread recognition that something [was] wrong, that present policies do not work" (1989:355). Humanity must address the egregious organization of its economy and how value is conferred. They contend that the economy should be to renew moral capital rather than deplete it (140) and that economics should be embedded in the social system and not the reverse. Daly and Cobb influenced myriad thinkers on ecological economics, social and human welfare indicators, and redirecting modernization toward a more human goal. This book probably more than others ignited an earnest debate on ecological economics and the efficacy of development, that despite all of the advocates for alternative development over the past two decades, was still decisively embedded in the same colonial expansionary worldview.

The Last Eight Years: Will Humanity Beat the Punch Line?

In fewer then five years after the Brundtland report, *sustainable development* had become a catchphrase and people were complaining that it had been used so widely by conflicting interests that its meaning was ambiguous at best (Sandilands in Keil, 1996; Lele, 1991; Gale and Cordray, 1994; Auty and Brown, 1997). Nonetheless, elements of the sustainable development dialectic are clearly becoming inseparable from a critique of the socio-cultural and ecological consequences of modernity and economic globalization. Lele notes that the debate on the environment and development actually forged an understanding that social conditions influence ecological sustainability (1991:7). Kearney characterizes the difference between the old and new ways of thinking about development:

> "Whereas developmentalism was obsessed with economic production, in the new discourse concern with production is tempered by a concern to change patterns of consumption having to do with the distribution of the world's resources and the environmental impact of consumption. Central to this issue is the differential consumption of global resources by 'overdeveloped' northern nations compared to the poorer southern ones"(1996:132).

The institutional approach to sustainability focused on eradicating poverty but sustaining growth through community participation (Lele, 1991). While, on the one hand the 1990's saw an increase in the use and sophistication of alternative (to GNP) welfare indicators (*see* C. Cobb, 1994; Daly and Cobb, 1989; *K. Hamilton in* Auty and Brown, 1997), the mainstream remained largely unchanged.[3] Catriona Sandilands calls this the "shaking political and epistemological ground" of sustainability (*in* Keil, 1996:125). She counsels that because of the problem of uncertainty and disequilibrium in nature, we must choose a path that is at the very least, cautious and self-limiting. Citing the ideas of Daniel Botkin, she advocates a course of development that consciously minimizes the rates of change on the environment as much as possible.

"Anthropomorphic though this prudence may be (anthropomorphism may be inevitable in politics, even if anthropocentrism is not), it suggests the need to add a new inflection to discourses of limits: we cannot conceive of sustainability as a project of using resources to their (presumed) limits, but must understand that sustainability requires a cultivation of *self-imposed* limit based on a healthy respect for what we cannot know, and for the partiality of what we do know. While not perfect, an attitude of prudence, combined with an active cultivation of multiple (human, situated, partial) knowledges of nature, seems a healthy resistance to both capitalist expansion and capitalist homogenization" (*Author's emphasis*, ibid.130).

Worster makes a similar argument that the history of nature teaches that all changes are not equal because growth and adaptation varies. (Even *equality* is an anthropocentric idea not applicable to natural systems.) Uncertainty and inability to predict accurately any change makes it difficult for us to know if what we do now will lead to our death or continued survival.

"The challenge is to determine which changes are in our enlightened self-interest and are consistent with our most rigorous ethical reasoning always remembering our inescapable dependency on other forms of life" (1994:432).

Richard Auty and Katherine Brown, editors of Approaches to Sustainable Development (1997), critique mainstream development in the same vein for ignoring environmental conservation. They blame the global mal-distribution of (monetary) wealth on structural inequalities within neo-classical economics that favours unhampered economic growth at the expense of cultural disintegration. This is indicates *unsustainability*. They contend that to make development sustainable requires knowledge of biophysical and ecological processes, a lengthened temporal horizon, and a *philosophical basis for the analysis of change*. Etienne Vermeersch synthesizes the conflict between sustainability and modernity stating that:

"[W]hatever people's concepts or mentality may be, the real oppression of nature and the destruction of it that we witness nowadays has only become possible through the introduction of means with highly productive and destructive power, in short through modern *technology*. This type of technology is based on the application of *scientific* results, and the use on a large scale of both science and technology was established within an organization of the economy that we call *capitalism.* We must add to this that a limited, stationary use of this arsenal would not need to have disastrous consequences on its own: it is especially its unrestrained *expansion* that makes up the core of the ecological problem" (*Author's emphasis,* 1994:276).

By analyzing the literature since 1987, the debate on sustainable development is essentially bifurcated into two general worldviews: weak and strong sustainability.[4] Weak (or *shallow, see Naess in* Drengson and Inoue, 1995) sustainability focuses on the economy without making any significant changes in its operating parameters or goals. The theory is that the market is the best tool to solve any environmental or social problem that may arise because technology and innovation will lead to the best or most optimal solutions. Strong sustainability focuses on people and the ecology by reorienting societal values to transform the very essence of the human relationship with the biosphere. The economy becomes a means to that end. Daly and Cobb's moral economy is one example.

Some of the most intriguing insights into sustainability come from people concerned more directly with other issues like Michael Kearney who offers an interesting perspective on anthropology in the global era. In Reconceptualizing the Peasantry (1996), he argues that the idea of the peasant has been replaced with the indigenous or native person. The surge of debate around human rights and ecopolitics has helped bring attention to the plight of indigenous people who are often at the center of both of these issues. The problem that he sees is that the debate is still set in a binary code of duality pitting the indigenous person against the non-indigenous or modern person. He advocates developing new anthropological theories that can transcend binary configurations and reflect the "complexity and depth of contemporary patterns of difference and differentiation" (119). In Ecological Communication (1986), Niklas Luhmann discusses the problems with binary coding expressed in the way that modern people speak about the ecology and society. He analyzes the way society communicates about ecological issues where everything is seen in terms of a prescribed polarity, e.g.,

legal or illegal, true or false, developed or undeveloped. This impedes an in-depth analysis of the root of our problems. Luhmann seeks a sociological theory to describe the "unity of difference" where the emphasis on polarity is overcome by fomenting gradients of resonance between and across systems. In the same vein, Ulrich Beck poses a *theory of reflexive modernization* to establish an analytical framework that transcends the categories and premises of modernity.

> "What is at stake everywhere in the phase of reflexive modernization is the continued existence of premises – conventional ways of life, work, production, organization, and hence of specialized fields in sociology. Normatively and in actuality, scientifically and politically, the issue is whether and how basic self-evident certainties can erode or continue to apply, how they can be renewed and protected against questioning and questioners"(1997:18).

Beck's thesis focuses on the sociology of risk and uncertainty. He is concerned that the success of modernity and economic growth has generated myriad environment hazards or "side-effects" that have the potential of destroying humanity and the entire planet; just as Vermeersch argued that modern technology results in modern destruction. Beck seeks to understand why, given that people know that the outcome of their activities may lead them to extinction, they don't change the premises and conditions for what they do. He argues that the scope of environmental hazards and accumulation of risk makes the neo-classical economic notion of externalities irrelevant. Furthermore, the environmental issues "call into question basic premises of European thought and activity – the notion of limitless growth, the certainty of progress or the contrasting of nature and society" (Ibid.12).

Both Luhmann and Beck have observed that people thinking about problems today are still analyzing them with "old patterns of thought"(Luhmann, 1986, 1990; Beck, 1997:13; *see also* Cohen, 1983). In Luhmann's analysis, the prevailing worldview purports that humans are safe as long as they do not violate a law of nature. (This would

of course necessitate knowing the laws of nature. But even the act of determining the "laws of nature" ascribes an anthropocentric construct of legality onto nature.) Luhmann notes that ecological research now demonstrates that environmental equilibrium is loosely maintained at best.

> "Given the serious problems and the high probability of ecological or economic disasters which results from the very structure of modern society, we need a new seriousness in all our concerns" (1990:231).

Sustainability, whether its meaning is weak or strong, is a part of a global discourse that is trying to dissolve endemic socio-economic (and even political) structures (many of which are centuries old,) that keep our species from reaching its potential. Even though modern civilisation is found in all parts of the world, this has not proven to be the end-all cure for humanity's problems. Poverty is still pervasive, environmental degradation is more serious than ever, and millions of people are hungry and dying of preventable disease. Not only have we not solved the aging development polemic of how to care for the world's people and develop without destroying ourselves, we have fallen short of addressing the serious structural inequalities in our political and legal systems that marginalize certain classes, age groups, genders, racial and ethnic groups. In Part Three I will integrate some of the ideas and theories I have explored above with issues pertaining to cultural autonomy and sustainable development for Native Americans.

CHAPTER SIX *PART THREE*

Linking Sustainability to Autonomy

"The Indigenous Peoples suffer the most outrageous abuses of their rights. Nation-States have adopted national policies designed to deny peoples their rights to exist as distinct peoples of the world, including the right to practice their culture, to speak their language, to the peaceful possession of their national territory and their right to a national identity...There has been conclusive demonstration, that the economic interests or ruling classes of the Nation-States as well as the economic interests of the ruling classes of industrialized countries, as represented by the activities of transnational corporations, have been instrumental in dispossessing peoples of their lands and freedom."
The Russall Tribunal 1980 (*in* Moody, 1988)

The issues raised in the political debates over sovereignty and autonomy question every structure and premise held by the modern nation states and the global corporate leaders. There are few issues in the United States today that stand to shake the political foundations of this country like the issue of autonomy for the Native Americans – hence there is a real political inertia to seeking sustainable solutions to these conflicting interests. Some solutions to problems, for example, might suggest that land and property rights be conceived of in completely different ways.

As modernity unfolds, people's lives are increasingly interconnected and interdependent economically, ecologically, and politically. While neo-liberal economics are viewed by the global elite as the panacea for resource distribution; humanity has also incurred certain consequences from these policies as evidenced by deteriorating ecological systems and human communities globally. Increased awareness and analytical sophistication of the interconnection between social and ecological problems have engendered a global politics of sustainability to counter the deleterious affects of economic globalization. Once disparate and localized, political/ecological struggles are now being played out internationally and transnationally. Not only is the place of these struggles transforming from a physical locality to a global meta-sphere, the actors and consequences of these battles have both local and global implications.

Struggles for autonomy and sovereignty have historically arisen in a place between identifiable groups – for example between the colonizer and the colonized. Sovereignty indicates the ability for a person (or group of people) to act independently and self-govern. Autonomy means the condition or right of self-government or self-determination for an individual, community or group. Arguably, these ideas are essential for a group to express its culture and a distinct identity. The historical process of forming modern nation states has occurred along side the erosion of indigenous cultural autonomy and sovereignty.

Today, the political environment for these struggles is different as people worldwide have access to high-tech communication systems and the assistance of an increasingly organized global civil society. This has allowed localized struggles to transcend their physical location to a transnational sphere of interest groups and advocacy networks at the same time localized actors are able to expand their support-base non-locally. Although the battle for autonomy is now reaching urban dwellers in modernized cities as people lose control of their localities to global economic interests, the situation for the peasantry and indigenous peoples is categorically different because they were once independent and autonomous. Upon the formation of modern nation states, these people's cultures and economies were usurped supposedly (and undemocratically) *for the common good*.[5] Another, consequence of an increasingly global economy, is that the causes of oppression locally are increasingly the same globally.

Over the last 50 years the "global civil society"[6] has been increasingly influenced by the quest for autonomy by the indigenous people of the Americas. And conversely, people fighting local battles are using international networks to put pressure on their

oppressors and advance their issues to the forefront of global social issues by expanding their network of supporters from a local level to a global one (Smith, 1994). Both the *Zapatistas* and the Free Burma movement are excellent examples. One positive advantage for indigenous struggles in the modern world is that they are able to exchange information about the oppressors (today whom often are multi-national corporations) which might help their strategies for resistance (s*ee* Korten, 1995). The intersection between environmental issues and indigenous sovereignty is a natural point of departure to examine how development can be forged to devise both intra and intergenerational equity. Kearney observes that,

> "the term *peoples* in *indigenous peoples* links sustainability as a movement to the political aspirations of indigenous peoples to defend their cultural and political autonomy against the designs of the modern nation-state to make them disappear from history, whether by assimilation or some other form of ethnocide. The global environmental movement has thus become linked to the defense of the human rights and the self-determination of indigenous peoples in ways that perhaps no one foresaw before 1970" (1996:107).

Ethical Considerations

The United Nations Universal Declaration of Human Rights (1948)[7] recognized the issues of sovereignty and autonomy at the institutional level and thus helped to elevate local struggles for autonomy to a transnational platform. The idea of *universal* human rights had particular relevance for rural or peasant/indigenous people (Kearney, 1996) who are often in a disadvantaged position *vis-a-vis* modern societies in terms of securing their rights and privileges.

In the case of the indigenous people of the Americas, who were once sovereign people acting autonomously on the land; today, they are governed by people from disparate cultures espousing alien morals and values. In some cases this has resulted in prohibitory legislation curtailing their free expression of religion, ceremonial use of certain plants or animals, and the ability to use and have access to sufficient land and

productive resources. How can the United States reconcile the fact that the Native Americans have a profoundly different relationship to the land and accord them respect and proper recognition in light of the fact that the Native Americans were (at times brutally) forced from their ancestral and traditional lands?

The centuries long processes of economic globalization have firmly established an economics based on private property and individual (this includes corporations but not indigenous peoples or nations) rights. This has led to an inability for some indigenous people to make autonomous decisions about the immediate fate of the surrounding ecosystems as their power and participation in the decision making process has been largely reduced. Because autonomy of decision making has been linked as a necessary requisite to the formation and character of a person's identity, economic globalization can be charged with removing or displacing the peasant by usurping his or her identity (*see* Kearney, 1996:147). Is this genocide? Furthermore, in the case of the Native Americans, there were clearly established nations such as the Iroquois Confederacy prior to the arrival of the Europeans. Article 15 of the Universal Declaration of Human Rights establishes that everyone has the *right to a nationality*; and that no one shall be *arbitrarily deprived of his nationality nor denied the right to change his nationality*. Yet the Native Americans have endured biased legislation; they have signed treaties in good faith to have them violated and ignored; they have been forcibly relocated; they live with reduced rights and privileges, in some instances have been denied the freedom of movement. How does the American society amend the usurpation of the aforementioned rights of the Native Americans?

Sustainability is an issue because of the growing ecological crisis-which today exists along side local struggles for control of the land and resource acquisition. Why are some people in Western cultures[8] interested in sustainability yet the society at large remains embedded in an unsustainable development pattern? The orientation of any culture is fine in principle; but when it acts in a manner that delimits or otherwise reduces the ability of another culture, or even its own culture, to develop in a healthy environment, then the culture itself becomes problematic. The aspect of Western culture that manifests itself as neo-liberalism is quickly reducing the planetary biosphere's capacity to support biological life in any and all cultures. This is unacceptable by any means and no person or group of people should have the "right" to conduct affairs in such a manner.[9]

Yet, this is an ethical position. Realistically, life on earth will not continue forever regardless what we do. Eventually the sun will explode, or an asteroid will collide with the planet making the surface inhospitable. What is at stake is the knowledge that for the first time in our recorded (oral and written) histories, people around the world have to decide the future course of human development as a whole species. This places the debate of sustainability in the realm of quality and ethics - people have to consider the functionality of their decisions versus the aesthetics of their bank account or the new sports car. In this vein, issues like autonomy and sovereignty are concomitant to the debate on ecological sustainability because we must consider culture (and cultural diversity) as a resource that we must sustain in order to enhance the diversity and integrity of the human species at large. Ethically, the debate on sustainability and cultural autonomy begs questions like who controls the dialogue on these issues? How will

decisions be made? How can a process be forged that will be inclusive of all cultures and nations (and not just corporations and nation-states)?[10]

People and the Land

Autonomy, sovereignty, and self-determination have always been a central concern for people throughout history. Even Europeans migrated to the Americas to escape persecution and to self-determine their cultures. Should people have the right to make their own decisions, to feel independent and secure in their identity, and be able to pursue their own path in life? The modern era with high-speed telecommunications and the ability to travel around the globe has made the planetary expression of these questions uniquely possible. One hypothesis that I have is that land ownership and access to sufficient land is the pivotal issue facing humanity in its challenge to manifest an equitable (and sustainable) development process. Control of land and its resources seems to be at the center of the politics of oppression and the denial by one group of another's sovereign rights and cultural autonomy. It also seems to be the rallying cry for numerous revolutions and violent battles. At the very base level, the land supports the biological life systems of all flora and fauna with food, water, air, habitat, and necessary resources to cloth ourselves and make tools. From my research, it is apparent that many of the problems that development organizations are addressing today stem from a poor distribution and/or delimited access to productive land.

That the alienation of people from traditional lands has occurred as a result of domination, hegemony, imperialism, proselytization and even deception has tremendous socio-political and economic consequences that are at best poorly understood. The process of indigenous cultural dislocation has occurred in direct relation to the process of

economic globalization, which correlates to the deterioration the planet's diverse ecologies. Control and access to land seem to be the least critically examined social issue in America. While the public seems to be concerned at the rapid loss of species diversity in distant and foreign forests, there is relatively no consideration of the effect of the loss of indigenous culture and different forms of epistemology. Further study could be applied, for example, to the historical processes of co-evolution[11] to examine how cultural and individual identity is shaped through time in relation to the land and physical surroundings.

CHAPTER SEVEN
Two Perspectives on Land and Civilisation

The European

The first Europeans in North America regarded the landscape and its bounty for its commodity potential and not for any spiritual or cultural value; they consciously separated themselves from nature[12] (Cronon, 1983; Deloria, Jr. and Lytle, 1984; De La Cruz, 1989; Sale, 1990; Sweet, 1993; Sardar et. al., 1993). Coming from a totally disparate geography and having long since severed any (sacred) connection to the land in Europe, they brought little intuitive knowledge of how to use or interpret their new environment. Moreover, by the time that the Europeans migrated to the Americas, they had already experienced extensive resource scarcity on the European continent due to pollution and despoliation by generations of overgrazing, over-harvesting and destroying the environment.[13]

> "As to the rest of what we know of Europe's ecological heritage, it can be seen written across the face of the land. With some significant exceptions, it is a record of deforestation, erosion, siltation, exhaustion, pollution, extermination, cruelty, destruction, and despoliation, all done either in the name of utility and improvement for the betterment of society or, as often, in ignorance of natural systems and the human connections to them" (Sale, 1990:82).

An economic system premised on an assumption of scarcity was a natural extension of their experience with the environment and was reified in the philosophical deliberations of people like John Locke, Thomas Hobbes, and Francis Bacon. This was codified in religious interpretations of the Bible that deemed it right and natural for man to control nature (Sale, 1990:78-81). The European perception of land in North America was influenced by their desire and preconception of a material quality of life that they could craft with the wealth they unearthed in the New World (Cronon, 1983:20). They also regarded the domination of nature as a sign of civilised progress (Sale, 1990:82). The

early colonists left behind a land and political institutions marred by centuries of feudal battles and the estrangement of personal liberties. In turn it seems only logical that they focused their economic and social activities on material acquisition and individual liberties, thus, "what was a 'merchantable commodity' in America was what was scarce in Europe" (Ibid.). Wood for fires which had been scarce in England for nearly a century, for example, was readily abundant in New England (Cronon: 1983:21) and frequently given as a description of the abundance of the *New World*.

The material philosophy of the European elite structured an historic belief that nature was subject to the whim of man because only he was capable of rational thought. Modern neo-classical economics rose from this ideology and were founded on "a tradition of mechanistic materialism" (Sale, 1990:80) that required advances in science and technology to systematize and ensure the progress of materialism in all aspects of their society. Furthermore, the belief in the progress of modernity and civilisation, strongly entrenched in the Victorian period, actually "justified the repression and extermination of minorities, especially indigenous peoples by colonialists" (Norgaard, 1994:5).

I have tried to imagine the gestalt for the Europeans who ventured to a distant land which in their lifetimes hadn't existed. What made an individual decide to make a treacherous journey across a vast ocean to a distant and unfamiliar land? Everything about the land was entirely new and unaffected by the politics and constraints of the medieval ages (political repression and memories of burning witches, ecological destruction, torture, religious domination, plagues and cholera epidemics, the massive redistribution of wealth, resource scarcity, urbanization, and increased crowding of the

countryside). Along with the uncertainty and fear of leaving their birthplace and families, many must have felt a tremendous sense of ideological, psychological, and political liberation and individual freedom that was previously unknown in feudal Europe.

Quijano and Wallerstein, in their examination of the political patterns that shaped the colonies, theorize that the concept of *newness* itself (1992:550) profoundly influenced how they developed.

> "The New World was new, that is not old, not tied down to tradition, to a feudal past, to privilege, to antiquated ways of doing things. Whatever was 'new' and more 'modern' was better. But more than that, everything was always defined as being new. Since the value of historic depth was denied morally, its use as an analytical tool was dismissed as well"(551).

Kirkpatric Sale, in The Conquest of Paradise (1990) identifies six values that guided the development of the colonies. The most pertinent in regard to today's environmental crisis was that the European attitude toward nature "was more *hostile* and *antagonistic* than was true of any other *developed civilisation*"(*my emphasis*, 88; Worster, 1990). Secondly, the colonists held no reverence for nature, in fact, it was a place filled with terror; and, they thought, "human achievement and material betterment were to be won by opposing nature" (79). These beliefs were upheld by a religious attitude that corroborated them and was reified by their penchant for machines that evolved into "a self-propelling and self-reinforcing mode of thought that created its own purposefulness and momentum" (89). They developed a uniquely rootless culture that led them to explore and finally conquer disparate and foreign lands. This is important because it shows that many people from Western Europe were adapted to a highly mobile lifestyle satisfying their needs by the consumption of other places through expansionary networks. Lastly, Sale says that they placed an emphasis on materialism to a degree unparalleled by

any prior culture or civilisation that was more often than not at the expense and "sacrifice of the natural world"(90).

The Native Americans

> "A system lethal to the world and its inhabitants, that putrefies the water, annihilates the land and poisons the air and the soil, is in violent contradiction with cultures that hold the earth to be sacred because we, its children, are sacred. Those cultures, scorned and denied, treat the earth as their mother and not as a raw material and source of income" (Galeano, 1991:14).

The Native Americans or "Indians" had a different (as opposed to *alternative*) view of nature and their place in the ecology. Their cultures, traditions, and spirituality were bound to the land. They actively managed the ecosystem but at the same time regarded the earth as sacred so they took strides to ensure that they did not damage it (Cronon, 1983, Anderson and Nabahn, 1991; Cohen, 1983; Adamson, 1993). Their political and social organizations reflected a belief in a need to cooperate with nature. They conceived of themselves as natural parts of an entire cosmos or universe and therefore did not require rigid institutions like the Europeans to manage their economy or the natural world (Deloria, Jr. and Lytle, 1984:9). Native American communities can generally be described as communal with each member contributing equally to benefit the whole; in contrast, the European individual had to struggle against all the other individuals thus reifying Hobbes theory of power.

Many native cultures emphasized reciprocity to maintain power and authority among their leaders. They governed themselves by establishing systems of individual responsibility in relation to the whole community such that their leaders were chosen by their ability to "enforce the Spiritual and Natural Law" but also the "laws of the people" (*quoted in* Moody, 1988:70). By deduction, it can also be said that the Native Americans

had different systems of epistemology in order to understand the natural and spiritual worlds they inhabited.

In retrospect, the Native Americans had a more sustainable view of measuring their civilization then the Europeans, which they determined by a people's "ability to live in a location with a minimum disruption of its features"(Deloria Jr. and Lytle, 1984:11). The European responded to the Indian by forcing them to the outskirts of their settlements just like the rest of the natural world. Which was

> "[n]ot something that just happened, governed by the logic of an impersonal system, but something that was done to people by other people…Nor was it just an economic process. It meant the transformation of every dimension of life for the majority of the people of the world who lived in those countries that underwent underdevelopment." (Worsley, 1984:3)

Worsley's observation is as true today as it was then.

CHAPTER EIGHT
Subsistence and Modern Economies

The development of the modern economic system occurred over the past 500 years in the West, but it has only been in the last fifty years that it has become firmly rooted globally. Cash economies have replaced the need for the many people on the planet to work the land for their subsistence or even to "need" access to land for any reason other than recreational purposes. The modern economic system has also greatly distanced the material production of goods and services from the places of consumption.

For many in the West it would be difficult to conceptualize a different kind of economy. Nonetheless, ancient cultures (and existing cultures today), did on every continent have well-developed economic systems, albeit some more so than others. In particular, Native Americans from both continents had highly advanced civilizations, complex economies and socio-political organizations. Certainly they experienced their own failings, but that should only evidence the possibility that the modern economy may also fail. They were not, though, geared toward the accumulation of abstract wealth, as is the modern economy. Some of them were largely subsistence oriented and the surpluses that were produced were needed and used for purposes other than individual aggrandizement.

Capitalism has undeniably benefited large groups of people and helped to make possible many technological advances; however, critique of it as a universal model for economic exchange and a panacea for the world's ills is still valid-and necessary. If the system supports conditions of oppression or suppression or genocide, we must ask out of ethical persuasion if the system is *working*? The essence of critical social research is to ask these types of questions in order to perpetuate a dialectic that truly evolves into a

higher synthesis. For example, we can observe that the process of economic globalization has widened class divisions, estranged people from the earth, poorly distributed wealth for the benefit of the few, and pushed the biosphere to the point of systematic collapse. Even though proponents of economic globalization argue that this type of economic growth will still best develop everyone eventually, it begs the question: how long is the majority supposed to wait? Over the past 150 years people have become poorer and more estranged from their traditional support bases. Those that were once deemed savages, were still able to find food in their localities, they had shelters, socio-political networks, spiritual resources, customs and local knowledge. Under the processes of economic globalization, they have been reconfigured as peasants or squatters, made a development category and often forced to migrate to urban centers only to live in destitute poverty with impoverished shelters and polluted water.

Today the West benefits from an extensive documentation of different cultures, traditions, and worldviews; generally there is a broad respect for the maintenance of cultural diversity that didn't exist in the Western mind 500 years ago. On the other hand, we are still facing the legacy of decisions and political action that was made during that time. For example, the problem for the Native Americans in North America at the time of conquest was that their social organization was uniquely structured and resembled nothing known to the Europeans when they arrived in the New World. They had complex trading networks, technology that allowed them to live in their environment, and regional economies. Over the past 500 years Europeans have successfully supplanted indigenous economies in North America (perhaps even unintentionally[14]) to the extent that no semblance of their economic sophistication remains in the popular consciousness.

The Subsistence Economy and the Peasant

The term *subsistence* economy doesn't appear in anthropological discourse until mid-twentieth century when the focus of the discipline was transmuted from looking at the primitive *other* to the peripheral *peasant*. At this point it became important for anthropologists to understand the economic organization of this social category. Generally subsistence structures are discussed as a parochial system whereby families and individuals cultivate a piece of land (augmented with hunting and gathering) in order to grow enough food for their immediate survival. Characteristically they use tools that they can fashion locally; any surplus might be traded for other resources to benefit the home (*see* Kearney, 1996). The subsistence economy is diametrically opposed to the (modern) market economy, which is principally defined by the maximizing profits and accumulating material wealth.

Kearney discusses how the role of land and the agrarian focus of the peasantry *en masse* became the primary category around which other aspects of peasant life were articulated and studied, e.g., personality, worldview, economic rationality, and/or social identity (ibid.61). Theoretically, the category of subsistence economy becomes a binary classification of *other* vis-à-vis the market economy in the same way rural is to urban or underdeveloped is to developed. This conceptual differentiation places the market at the center or the standard by which all other things existing outside or on the periphery are observed and understood. Kearney explains that "the peripheral spaces are invariably marked with respect to the center and are defined as deficient in that which makes the center normal, dynamic, or more powerful, because it has concentrated in it that which is lacking in the periphery"(43).

It is impossible to say with any confidence today what a pre-modern subsistence/non-market economy looked liked or how it behaved without falling into the trap of ideological, political, or even romantic, historical revision. Non-capitalist modes of production and economies have been thoroughly depreciated and politically undermined - stripped of any desirable qualities in the modern era. Nonetheless, by the 1970's, subsistence economies had become a more central focus for academicians in the social sciences who were trying to gain greater insight into the polarities between modernization and dependency theories (98).

Studying the parameters and operating principles of subsistence economies has another utility in the context of sustainability and the implications for future development that can offer ways that the West can blend and integrate the global market with locally more self-reliant community economic systems. We can learn how resources were diversified and used for different ends by different people. Diverse knowledge of local ecosystems can offer new insights for the different properties of plants or the ebbs and flows of natural systems. We can learn how groups of people can survive and adapt to fluctuations and changes in the climate and their surrounding ecosystems. Unfortunately, much of the knowledge of non-Western economic organization prior to the introduction of the European market economies is highly speculative.

There are at least three things that make it difficult to understand pre-colonial economic structures. First, the early social evolutionists and anthropological interpretations undoubtedly distorted what they observed or how they experienced non-Western cultures because of a difference in worldviews and value. Even the use of reflexive ethnographies and anthropological research that is popular today can't remedy

the distortion that occurred in the past when people were less careful to analyze the impact of their worldview on their observations. We also know that the Spaniards, for example, systematically destroyed many records of different Indian groups like the Maya, which means we are left today trying to reconstruct a picture of the past with only a fraction of the pieces. We can and should assume that our record of the past is incomplete.

Secondly, international efforts to modernize and institute land reform have wrecked indigenous supply and distribution networks and totally altered the ability for many people to obtain resources without money or outside "the market". Thus it is difficult to reconstruct ancient trading networks or productions systems because the prior resource configuration has been displaced. Thirdly, the pervasive operating parameters of the neo-classical/liberal market have engendered massive relocation of people in the form of migratory patterns, urbanization, and also immigration. Many individuals from non-Western cultures have already been assimilated into a modern culture based on consumption oriented market ideology. This has occurred at times by the forced removal of cultural traits or values, thus changing the original identity of the individual(s).

Private and Usufruct Property Rights

The idea of private property-the belief that individuals can own and have full title to pieces of land-is paramount to a civilized society and economy in the Western tradition. The concept of private property was unknown to the Native Americans in New England prior to the arrival of the Europeans. They employed systems of usufruct property rights. This meant that a person could possess the right to use the land in a particular way, e.g., they might have the usury right to hunt deer in a particular area, fish

at a certain bend in a river, or collect reeds for basket making near a seasonal marshland. "What the Indians owned - or, more precisely, what their villages gave them claim to - was not the land but the things that were on the land during the various seasons of the year"(Cronon, 1983:65).

Their spiritual beliefs[15] shaped an economic system that was dynamic and adaptable to seasonal changes in the ecosystem. When at times a river became engorged with fish, an entire village may come to partake in its bounty where it would otherwise be the fishing area of one family the rest of the year (Ibid.63). The difference between usufruct and private property systems alone poses an ideological (and possibly insurmountable) gulf between the economic premises of the two cultures.

Ultimately the Native Americans in the United States lost all of their rights to continue their normal course of development to an economic system that was anathema to them. "Land is our mother. You don't sell your mother" remarked a Sioux Chief. (*quoted in* Galeano, 1991:16) Because private property ignores community between humans and the natural world, it actually "removes ethical obligations to non-humans and humans without property" (Trosper, 1995:77). Thus the Europeans in establishing their civilisation in the New World left no room for the Indian belief in reciprocal relationships. This can be interpreted as an abatement of the Indians ability to continue in the natural and normal unfolding of the potential of their people and culture.

Polarity of Values

From the onset of economic interaction between the Native Americans and the Europeans in North America the two cultures were ideologically polarized. The colonists at large were interested in nature only insofar as they could make a profit or amend it to

benefit their personal or collective gain. Sardar suggests that by the time Columbus arrived,

"Western civilisation was possessed of deep-set long-established attitudes towards the wilderness and indeed towards all *unimproved nature*, towards those who lived in the wilderness, and towards the relationship of 'civilisation' to them" (Sardar et al. 1993:40,*my emphasis*).

Prior to the Renaissance, some members of European societies believed that human and natural constraints would delimit or otherwise characterize the ideal society. Later, philosophers of the 17th century revisited that notion and conceived an image of society that could transcend all cultural and natural limits through increased production, better human management, and science. The gestalt of the Renaissance for the European was a belief in the primacy and superiority of their civilization over nature and less *civilized* people.

"[I]f the period of the Renaissance marks a qualitative break in the history of humanity, it is precisely because, from that time on, Europeans become conscious of the idea that the conquest of the world by their civilization is henceforth a possible objective (Amin, 1989:72).

Civilisation is a subjective experience that is determined socially – not scientifically. Yet, it was injected into scientific discourses during the Victorian era especially in the social sciences like economics and in anthropology. The latter focused, for example, on the problem of the "primitive" and the evolutionary idea of civilization. (This serves as an example of how the scientific method has sometimes distorted or displaced other values in order to advance Western worldview and standards because of its use of certain categories and criteria set for questions and theory formulation.) Modernization grew from an historic tradition of mercantilism and was reified over time by a social theory proclaiming that "the history of Europe was exceptional" (ibid:105) which for the European,

"[f]ormed the superior prototype of social organization, a model that could be reproduced in other societies that have not had the good fortune of having initiated this superior form on the condition that

these societies free themselves of the obstacles posed by their particular cultural traits, responsible for their backwardness (106).

The European effort to promote their idea of progress in the New World was an honest attempt to dispel the plague of scarcity on man.[16] Influenced by Linneaus' hypothesis, advances being made in science, and rational philosophers, the Europeans (generally) did not conceive of another way of life or relationship to nature. (Perhaps analogous to Plato's cave.) They tended to view the world in comparative relationships of scarcity and power among humans causing them to focus on the overt poverty of the Indians, "who lived in the midst of a landscape endowed so astonishingly with abundance" (Cronon, 1983:33). Locke commented how, although the land is fertile, the Native Americans had not improved it by labour and therefor "have not one hundredth part of the conveniences we enjoy, and a king of a large and fruitful territory there feeds, lodges and is clad worse than a day labourer in England"(*quoted in* Acterhuis, 1993:108). They had no way of *knowing* that these people had actively managed (that is, imputed value into the landscaped through labour) the land for over 10,000 years.[17]

Whereas the colonists defined wealth as land and possessions, the Native Americans living near the early colonies believed that they should fix an upper limit on their consumption of resources (Trosper, 1995:65). Plus, they often minimized their personal possessions because they felt confident that "their mobility and skill would supply any need that arose"(Cronon, 1983:54). The Native Americans defined wealth by their skillful ability to live on the land in harmony with non-human life and the landscape.

Another value conflict occurred around the amount of work that an individual was expected to perform in the respective cultures. The Native Americans enjoyed more

leisure[18] time than the Europeans because their lifestyle required fewer resources and less energy expenditure to maintain it. The New England colonists perceived the Indians being lazy; they felt that to spend one's time "idly" was a waste when, for example, the Indians had no cities, institutions nor material comfort. Once more, they considered the Indians wasteful because they *underused* the abundance of the land and their own human labour (ibid:56, *see also* Marcus, 1994:385). It was equally difficult for the Europeans to grasp the idea of community property that they perceived as a danger "to the development of the free enterprise system" (ibid:15).

Historically, and even contemporaneously, there is an assumption that subsistence economies produce no surplus- a goal for the market economy- they therefore cannot play a meaningful role in development. On the contrary, there is evidence that subsistence economies do produce surplus and people have historically enjoyed abundant livelihoods. Rebecca Adamson, President of First Nations Development Institute, explains that:

> "Indigenous peoples in fact had very sophisticated economic systems in place. Because these systems were so different from the European system, they were completely misunderstood. To understand them, we must realize that gold, coins or capital are not the only form of wealth. Before the arrival of Europeans, our assets were our hunting grounds, our fishing sites, our berry-picking areas. The better your hunting grounds, the wealthier you were. What made this type of economics so different - and dangerous to the Western economic organization - was not the use of cash at all. It was the traditional principles or sustainability versus scarcity of resources, sharing and distribution versus accumulation and communal ownership, and kinship usage rights versus individual exclusive ownership rights" (*quoted by* Ambler, 1993:1).

Respect for the land and community formed the basis of their economic interactions, which Trosper (1995:67) categorizes into four components. First, *community*, in the sense that all people and all beings (plant and animal) participate in a community together and each has obligations toward the other. Reciprocity must always be present in any type of economic exchange.[19] *Connectedness* reifies the belief in

community by describing the way of the cosmos. Third, they believe that it is the duty of the present generation to pass on the legacy of their ancestors by looking toward the *seventh generation*. [20] Lastly, *humility* is an essential quality for humans *vis-à-vis* the natural world that they believe possesses great power that is ultimately unparalleled by the will of man.

The differences and possible synergies between subsistence and market economies and Native American and Western value systems still warrant extensive research. Through contrast and comparison of differing economic systems, important ethical questions can be raised that may assist the development of a more sustainable local-global human society. How do we qualify labor and value? How does work differ from leisure, or how does meaningful work differ from a "job"? How much or often should an individual work? What is productivity? What is abundance? What does it mean to subsist? Can these concepts be defined relatively to reflect different cultural values and objectives? Would that reconceptualization conflict with the needs and means of economic globalization? And, what should motivate the economy - producing surplus to advance the integrity of the community or producing surplus to advance the material wealth of the individual?

CHAPTER NINE
Sustainable Development, Autonomy and Permaculture

"We have no aspirations to take state power or to create a separate state. We are not fighting for our culture – we already have it. We want only our rights: the right to peace, the right to define our own path to development, the right to educate our children in or own languages and traditions, and the right to represent ourselves and our culture." *A Maya leader - quoted in Smith, 1991*

Cultures are Resources

Previously I characterized some of the disparate historical, cultural, and political beliefs between the Europeans who came to North America and the people that were living here when they arrived. My intent was to look at some of the origins of the thoughts and values that define modernization as well as to bring out ideas that may help foster a sustainable development process.[21] The following discussion looks at the concepts of sustainability in relation to cultural autonomy to forge a more equitable development process. What is development? What does it mean to be autonomous? How can we develop sustainably? In no way do I attempt to fully address any of the questions because I don't have the answers. They all warrant further and more sophisticated analysis and research than I can do here. Here, my intent is to explore specifically the link between culture as a resource *vis-à-vis* nature as a resource in the sustainable development dialectic.

No right is more sacred to a nation, to a people, than the right to freely determine its social, economic, political and cultural future without external interference. The fullest expression of this right occurs when a nation freely governs itself.
Joseph B. DeLaCruz, Quinault

Clearly, we must develop our own economy, rather than depending on externally initiated development. Such an economy would not only encourage continued renewable resource activities, such as hunting, fishing and trapping but would include community-scale activities designed to meet our needs in a more self-reliant fashion. True Dene development will entail political control, an adequate resource base, and continuity with out past. It will be based on our own experience and values. In accordance with our emphasis on sharing, Dene development will not permit a few to gain at the expense of the whole community. Our purpose is to bring to an end such colonialism and to re-establish a process and experience of development for the Dene nation as a whole. As such, we believe the conditions that govern the development of individuals will determine the conditions for the development of the whole Dene community. This has always been our belief.

The Dene Declaration (in Moody, 1988)

If culture and spiritual values are intrinsic aspects of a people's *normal development*, then they must be integral components of a sustainable development process. Issues like identity, sovereignty, language, and autonomy have been underscored in development programs yet these are the very components of a people's culture that allow them to reproduce a distinct identity and pass something unique on to their descendents. If one aspect of sustainability is intergenerational equity than the degeneration of languages, stories, myths, histories, and integrity of diverse cultures in the present is unacceptable since it will effect the ability of an individual to teach their culture to their children.

What are cultural resources and why aren't they considered like natural resources in the debate on sustainability? It would be too simplistic to suggest that any of the pre-conquest economic or political systems of the Native Americans could be revived; nor could any of the indigenous subsistence economies that existed anywhere in the world before they were transformed by the "market" be reinstated. The issue, it seems, is not how we can reinstate ancient structures, but who will control the unfolding of the future in the present? Who determines what values guide that process?

"It shall be unlawful for any state to take or permit any action or course of conduct with respect to the territories of an indigenous nation or group which will directly or indirectly result in the destruction or deterioration of an indigenous nation or group through the effects of pollution of earth, air, or water, or which in any way damages, displaces or destroys any natural resource or other resources under the dominion of or vital to the livelihood of an indigenous nation or group" (in Moody, 1988:66).

Recognizing the need for sovereignty of native peoples as a cultural resource would mean full acknowledgement of their right to sufficient land as was conferred to them (minimally and assuming the treaties established sufficient retribution) through treaty or otherwise. What options are available to us as a society to manifest an

innovative and sustainable development process that meets the needs for development for all people? How can creative solutions to the disparate developmental needs between the Native Americans and modern America become manifest to ensure intra/intergenerational sustainability?

Conceptual Issues for Sustainable Development and Autonomy

Individual sovereignty is a basic postulate of contemporary American society. The United States was founded on a democratic principle to uphold the rights of individuals, that they may speak freely, pursue their own religions, and that they may govern themselves. People living in this country are supposed to have the right to develop themselves and improve their quality of life, yet this is essentially denied to the Native Americans (native Hawaiians, for example, aren't even recognized by the Federal government). Even the Native American tribes that are recognized as sovereign people continue to be under jurisdiction and control of the United States Federal government[22]. Many native people living on reservations lack basic infrastructure and the amenities of modern life that the average urban American takes for granted, e.g., electricity.

Increasingly, however, in the urban and rural areas that make up modern American, more people are feeling the "side-effects" of modernity. Non-indigenous American people are also experiencing a host of problems that seem to be plaguing every aspect of their modern institutions. The issue of sovereignty is not just an indigenous/peasant issue anymore because all humans are effected equally by air pollution, densification, and/or desertification. Over the past 50 years [23](*see* Esteva*, 1992:6*) the number of people living in absolute poverty has increased without a noticeable reduction in the gap between the rich and poor (Amin,1989:112). Increases in

acute poverty have grown parallel to ecological disintegration. Concern is escalating that conventional development strategies happening in the foreground of a time marred by (de)industrialization, rural-urban migration, famines, smog, sprawling shanty towns and suburbia, the duality between opulence and genocide, might not be as effective as originally assumed.

> "The recent emergence of concerns with sustainable agriculture and sustainable development is de facto recognition of the failure of both right and left versions of developmentalism to bring about the major transformations in 'underdeveloped' areas of the world" (Kearney,1996:105).

Outside certain academic circles little critical analysis is spent on understanding the consequences of modern development and economic growth on people's rights (natural, biospheric, political, human) and autonomy-particularly at the institutional level, i.e., nations states or global economic super-structures like the European Union, NAFTA or the World Trade Organization. Kearney, for example, argues that "primary attention is given to relationships between the local environment and the culture of local communities rather than relationships between broader economic and political conditions of regional, national, and global levels" (1996:105). The institutional response has been by and large to redeem the status quo by using the tools and methodology of the status quo, for example, finding ways to "sustain" economic growth, rather than changing the premises for economic exchange.

An earlier (and present) logic of the Western nations was that contracts would serve as a check and balance to ensure one's freedom. But, to the degree that large-scale catastrophes can occur as the result of risky actions taken by others, Luhmann argues that the danger "can no longer be absorbed by contracts and payments and therefore undermines a latent premise of our constitutional liberties"(1986:230). Beck also discusses (1997) the idea that people today incur huge risks when other people make

decisions. For example, we all are at risk when a handful of people decides to detonate a nuclear bomb. Yet, the majority of people alive have no part in the decision-making process. In this way democracy is undermined. I think this is a crucial point in the debate over cultural autonomy and sovereignty and meta-human development issues, especially in the way that the denial of these rights affects indigenous peoples. Issues like toxic waste dumping next to Indian reservations, patenting traditional plant genetic resources, or relocating people to different lands at the bequest of corporations, creates entropy and certain risk for the native people that is not equal to that of the people making the decisions to do these things. This is why it is important to incorporate cultural autonomy and sovereignty into the meaning of (social) sustainability.

How do we address the growing social and ecological inequities people are experiencing globally on a local basis? How can we develop without (jeopardizing our survival) abusing the carrying capacity of the planetary ecosystem? Development can be seen as one of two things in the modern era. Either it is a prescribed ideology that determines the parameters of civilisation and the standards that people should strive to achieve, in this case, the World Bank and Western Democracies sets the agenda. Alternatively, it can be seen as a process that people constantly undergo that has no predetermined outcome but that is always seeking to enhance people's lives. Depending on how one considers development, sustainable development will reflect that ideological framework. The mainstream approach to sustainability seems to reflect the former approach. Without making significant changes, sustainable development –at least in the international context-is approached from a programmatic perspective with timelines,

budgets and evaluations. I suspect that this is because the implementing organizations are themselves constrained by these categories.

The ubiquitously cited Brundtland report is more popularly known for its definition of sustainable development. A more important point was their suggestion that indigenous people should play a key role informing sustainable development. "These communities are the repositories of vast accumulations of traditional knowledge and experience that link humanity with its ancient origins." Compare this Native perspective recorded nine years before that report was published:

> "Each of us were created in these lands and it is our duty to take great care of them, because from these lands will spring the future generations of our peoples. We walk about with great respect, for the Earth is a very Sacred Place" (*in* R. Moody, 1988:70).

The concept of sustainable development is a reflexive critique of modernity questioning its premises and assumptions: *progress, rights, borders and boundaries, private property, liberty, money and wealth*. It is an ethical dialectic concerned with the meaning of our society's moral codes and how we live in the present so we don't endanger either our descendents or ourselves. In many respects the question about present endangerment and intragenerational equality is far more pressing than future equity. Is it folly to discuss equality between generations when it is absent in the present? Resource allocation aggregately has evolved to benefit the third-world elite and Western nations. Land resources have been privatized in favor of multi-national corporations and for the benefit of elite recreation at the expense of indigenous peoples and the wild. Recognizing sovereign rights of all people and upholding these rights as a primary development and political objective, e.g., in international trade, would make it very difficult to continue any abuses (perceived or real) of human labor or other people's historic land base.

By understanding that the history of economics and progress in Europe and the United States has been based on a psychology of separation of man from nature helps illuminate the meta-psychology of the problem of inaction in solving development challenges. People have created an almost artificial or synthetic reality based on achievements and a belief in the supremacy of one kind of technology. This attitude is reflected in the language that we use to discuss sustainable development.

As the forces of modernity and economic expansion are firmly and tenaciously rooted like an invasive plant overrunning the local ecology, people must ask if the universal approach to development is viable for either conventional or sustainable development. Development in the modern era (and specifically the development of market economies) has been geared toward universal models that people could plug into like economic structural adjustment programs. Sustainable development has been pursued in much the same fashion. Sustainability has to integrate culture and nature which means that it must seek pluralistic, horizontal, creative, and non-hierarchical approaches to forge more effective solutions between and across cultures and nations of people. This makes universal models less effective because of the number of variables that have to be considered.

Advocates of decentralization are one of the few voices that are pursuing these kinds of ideas. Organization at the grassroots seems like the other more likely path to move towards a sustainable development process that can uphold people's sovereignty. As people achieve greater degrees of local self-sufficiency they also secure their local autonomy by lessening their dependence on external sources for their daily survival. Native peoples living on reservations might have one advantage in this respect since they

are relatively homogenous groups in terms of value and identity compared to the hyper-pluralistic arrangement and expression of interests in most American cities. Plus, even if it is marginal, they still have access to land where most Americans do not.

The Permaculture Example

In the Southwest and Central Plains there are several Native American groups who are adapting the permaculture design system to enhance their traditional farming systems, native science, and local knowledge. Their aim is to enhance the viability of their local communities, restore local and traditional knowledge to their development process, increase the level of sustainability between the people and their land, and hopefully improve the quality of people's lives. If they are successful, they hope that this process will help them regain their local autonomy decreasing their dependency on the federal government.

Permaculture is a holistic design process anybody can use to develop intelligent and sustainable improvements in their food, energy and material systems. The word itself is a conjunction of "permanent agriculture" and "permanent culture". The three basic principles of permaculture are care for the earth, care for people, and reinvest the creation and distribution of surplus to care for people by caring for the earth. These principles support traditional Native American agriculture (Pierce, 1997:82).

> "Most design systems are defined by a 'market driven' ethic in which most considerations are subservient to the conclusions of a short term cost/benefit analysis, discounting or ignoring such factors as environmental degradation or destruction of human community…The [permaculture] ethic is: care for the earth; care of the people of the earth; conscious frugality (avoiding waste); and, system surpluses distributed to accomplish these aims" (International Institute for Ecological Agriculture, 1997).

Permaculture seeks to cultivate relationships of balance and reciprocity between people and the natural world in a way that supports the values and philosophies of its

users. Dick Pierce of the American Indian Science and Engineering and Society explains the connection between permaculture and traditional Indian agriculture:

> "Both start with a reverence and caring for the land, acknowledgment of the complex interrelations of the web of life, the use of local natural resources and the role of patient observation and imitation of Nature. Permaculture stands for 'permanent culture,' so it includes, but goes way beyond agriculture, and it easily becomes a framework to hold and revitalize traditions, culture and spirituality (1997:82).

Bill Mollison and David Holmgren from Tasmania and Australia developed permaculture during the 1970's. They wanted to ameliorate the destructive forces of Western agribusiness and enhance the viability of traditional grain and subsistence agricultural systems in the third world. They believed that "a low-energy, high-yielding agriculture is a possible aim for the whole world, and that it needs only human energy and intellect to achieve this" (1978:1). The first Permaculture Design class was taught in 1979. Since that time, the method has spread around the globe to more than 100 countries. Thomas Mack from the Tesuque Pueblo in New Mexico explains that there is a growing network of people using permaculture to create an ecologically sustainable future, and that it "is being used as an effective tool by indigenous communities around the world." (http://mite.cs.cowan.edu.au/ipc6/ch06/mack/index.html)

People in permaculture systems live with nature by establishing harmonious development patterns that reduce energy inputs, assume waste as a resource into their systems, and seek to foster mutual and reciprocal relations with the soil, flora, fauna and surrounding human communities - antithetical to the relations established by modern development.

> "The philosophy behind permaculture is one of working with, rather than against nature; of protracted and thoughtful observation, rather than protracted and thoughtless action; of looking at systems in all their functions rather than asking only one yield of them; and of allowing systems to demonstrate their own evolutions" (Mollison, 1990).

Although an extensive and systematic study of permaculture as a tool for sustainable development has not to my knowledge been performed, I think that there is enough evidence to consider it as a possible vehicle for sustainable development for three reasons. First it builds on people's local knowledge, cultural resources, and helps them chart their own course of development. Secondly, the ethics of permaculture seek to care for the land and reduce negative impacts by people on the earth. Third, the permaculture approach adapts to the needs and culture of the user rather than predetermining the course they should follow.

Permaculture may be an effective tool for achieving local or village level sustainability combining aspects of a subsistence economy with the global market economy. Detailed studies should be done to substantiate this hypothesis. As it is totally dynamic and relational to people's local knowledge, the development that comes from the system comes from within the people, hence, it empowers. Permaculture could not be imposed on anyone and still be permaculture. Since the beginning, one of the "iron-clad" rules that Bill Mollison has adhered to is that he never goes any place where he wasn't invited first. Permaculture embodies the principles of sustainable development without trying to define it. Thus it remains flexible to local ecologies, people's needs and continues to co-evolve through its use over time. Most importantly, in theory, culture as a resource is equally important to nature as a resource, and seeks to find a path of co-evolution. By extrapolation, it seems possible that permaculture may be an appropriate vehicle to establish local autonomy by way of creating independent systems for food and energy production that in turn enable the advancement of a people's culture and tradition.

Native Americans in the Southwest and Northern Plains of the United States have been actively pursuing permaculture as a development strategy. Ann Krush of the Sinte Gleska University in South Dakota explains that the people there are using permaculture "as a framework within which to encompass their own Native Science, to ensure the permanence of their own culture"(1997:42). The Dine people living at Black Mesa, Navajo, share this hope. The Black Mesa Permaculture Project (BMPP) was established in 1991. It follows on the coattails of 40 years of interference by the Bureau of Indian Affairs. Their land is seriously deteriorated and political relations with the nearby Hopi nation have waned. They are also under constant threat by the Peabody Coal Mining Company who receives assistance from the government. Many people felt their traditional cultural identity slipping so BMPP was established "to heal the Earth and revive Navajo culture though the principles of permaculture - land restoration, revegetation, erosion control and water table replenishment." Families are taught how to "restore damaged soils and enhance self-sufficiency through the creation of productive sustainable, land based systems that provide food, energy, and shelter"(Silberman, 1995:28). The founders of BMPP believe that the goals of permaculture will help them advance their sovereignty in a way that builds on their cultural beliefs. As Justin Willy explains, like Dine culture, "permaculture works with the elements and the seasons. All sustainable systems and cultures work with nature and not against it"(Ibid:29).

The Traditional Native American Farmers Association (TNAFA) in conjunction with the Tesuque Pueblo in New Mexico has been actively promoting traditional farming techniques and permaculture. Clayton Brascoupe has been instrumental to the success of

both projects. He promotes farming for many reasons but two stand out. By cultivating the land and growing food, he says that people are keeping their political sovereignty.

> "Through the activity of growing food for ourselves, we can regain culture. It can come in different ways. Culture is a series of different types of values. What is valued in our Indian communities? In many Indian communities we value nature, and that leads to religious beliefs" (1998:26).

He believes that farming is an important way to maintain the connection with the land and nature and live in harmony with the environment. The Tesuque Pueblo holds permaculture classes and teaches primarily Native people good farming techniques and helps them reconnect with their tradition and culture by teaching them traditional farming methods and the knowledge of their ancestors. From the Tesuque Pueblo permaculture spread this year to Picuris Pueblo by Louie Hena who is the environmental director at Picuris Pueblo. This summer TNAFA and Picuris Pueblo co-sponsored the 3rd annual permaculture design course. The course is specifically designed for indigenous people who are invited to attend for free. This year there were 35 course participants including many indigenous peoples from New Mexico, Tarahumara and Tepeyano Indians from Chihuahua, and others from across the US and Canada. All of the instructors were native peoples and many permaculture techniques and concepts were explained through hands-on projects that strengthened the Picuris Pueblo. When I asked Hena when he learned permaculture he told me that he grew up doing permaculture. The utility for him for doing permaculture is that it brings back what his people have always naturally done in a constructive and functional way. For him and others and Picuris Pueblo, while autonomy was an important goal, permaculture was important not only to help strengthen local political objectives, but to heal the planet and all of which has been despoiled and poorly cared for by modern development. What they do at Picuris Pueblo is as much for the

benefit of their people as it is for all people and all plants and animals everywhere on the planet.

Conclusion

Initially I looked at the evolution of ideas embedded and integrated into sustainability. I took this approach because of the lack of concrete definitions and the convergence of worldviews on this subject had significantly detracted from achieving a consensus about the meaning of sustainability. A focus was placed on the formation of ecological ideas and the role of man and his environment particularly from a Western perspective. Although the word "sustainable" is used ubiquitously, the concept is unclear because the dialectic rarely turns to the political and historical antecedents of modernity to uncover the roots of the problems we are experiencing. Rather, theorists dwell on the use and consumption of natural resources in the present to the exclusion of the organization of our society or culture. This tendency itself reflects the patterns of expansionary development that were singularly focused on consumption of land and resources-not building culture.

There is no singular meaning for sustainability; it can be used as an ethical platform, a policy objective, a method of harvesting, or an economic framework. Despite the word's "slippery nature", it recognizes that human settlement does impact the integrity and viability of natural systems (and even some cultures) and that these impacts can in turn adversely affect human settlement.

Human survival as a species on planet earth is jeopardized, not because of an asteroid or the next Ice Age, but because of the way that we live. Sustainability, as the Brundltand Commission conceived it, asks people to look to the future and the quality of lives of our descendents. The intergenerational equity theme is important; however, it is still an anthropocentric vision. If we are unable to achieve equity in the present than how

can we possibly think that this will manifest in the future? By equity I mean that no culture is involuntarily governed by another group and that all cultures have access to productive resources including land, reproductive health, autonomy, and identity by which they can support themselves and develop a quality of life that is consistent with their spiritual needs and values. Additionally, equity means that no group or class is subjected to air pollution, water pollution, or land contamination by the wanton acts of others.

But even the question of survival is tricky as the ecology of chaos shows we cannot predict the future for any species and especially for ourselves. Beyond certain biospheric needs, it is not even possible to predict what resources future generations will need. We do know with at least some degree of certainty though, that our civilization will subside, be it through increased entropy, climatic variation, warfare, or a cosmic collision. Sustainability, thus, is not a plan for infinite longevity, but rather, a question of morality and how as a collective species we can ensure a just and equitable quality of life for people now with respect to our children's children.

Both the writings of Niklas Luhmann and Ulrich Beck have influenced my thinking in this way significantly. Their criticism and search for understanding of the root causes of social malaise are tremendously important. Their examination of modern institutions, notions of progress, unquestioned assumptions of private property and material values raise essential moral and philosophical questions about modern social organization.

I examined differing views and perspectives of ecology, of economic systems and values related to cultural development. I compared two different worldviews historically

and contrasted them with contemporary issues to elicit another perspective for sustainability-one that encompasses not only natural resources but cultural resources as well. The issues framing battles for autonomy today are similar to the perpetuation of ecological despoliation inasmuch as they are examined in the context of economic globalization. We can observe that the same structures of oppression rooted in a modernity based on abstract wealth, private property, and material accumulation has led equally to the destruction of unique natural assemblies and unique cultures and societies. Can we accept an economic system of our own creation that we know to be the simultaneous cause of our species underdevelopment and the destruction of diverse parts of the earth's ecology?

Since the 1950's when the dialectic on the global peasantry was focused more immediately on the agrarian issue and feeding the starving millions, today the focus is on more subjective issues like human rights, ethnic identities and the politics of the environment in a global analytical framework. How can a science and scientists trained in the scientific method to focus on observables and rationalizations address these issues?

Whereas the West used to control the flow of the development process, indigenous grassroots organizations have increasingly stood up to policies that threatened their livelihood and damaged their environment. The rapid deterioration of land worldwide has near immediate effects on the livelihood of the rural peasantry or indigenous peoples. Not only are people threatened with natural resource shortages but their cultures are also threatened as they are pushed off their lands and forced to survive in alien societies where they become estranged from their tradition and socio-cultural networks.

Five hundred years ago the colonists that found the New World avidly pursued progress and civilization. They sought to overcome their dependency on the natural world (and the European Lords) and supplant it with their cities, governments, science and technology. The fact that they had no tradition, culture, or history associated with the New World can not be understated as a predetermining fact to how they treated the Indians, land and pursued development. Five hundred years later the path of progress has allowed their descendents to reach the far ends of planet. I can buy Coca-Cola in the most rural area of Africa and the entire planet is covered with a fine layer of radioactivity as a result of nuclear tests. Five hundred years later, poverty is a significant social condition. Progress and civilisation have not alleviated the daily burden of the starving millions. But is has allowed a very small percentage of the global population (of which I am part) to live in extreme comfort.

To co-exist with indigenous people and accord them human rights and the autonomy to develop their own societies will require a radical reorganization of the way that the West conceptualizes boundaries, control and power specifically in regard to land use, ownership, and property rights. Use of the environment would have to be re-negotiated as indigenous cultures regard pollution and domination of the natural environment anathema to their spiritual beliefs. How would the two societies mitigate the production of pollution given the fact that it is not contained by the political boundaries that contain people? Moreover, the ecological issue demands more than mere market intervention (we can't get moral response from an amoral institution). Restrictions of corporate enterprise like pollution control run counter to the entrenched liberal attitude of "free-enterprise" and trade. Full recognition of Indian autonomy and

reinstatement of a sufficient land base for the Indian nations in the United States would possibly challenge the entire political and legal order of this country's hallmark private property system. In either case, the United States would have to fundamentally reconsider how it uses the land in recognition of the treaties it made two hundred years ago in "good faith" with Indian nations who gave them privilege and access to use and not own the land.

But the ideological gap between these cultures is still tremendous because the fulcrum lies in the realm of the spirit. For many non-Western people, the sense of the sacred is profoundly rooted in the land and their development processes and knowledge systems reflect their spirituality. In turn this has led to the formation of an ethic of stewardship and respect for the land among many indigenous peoples of the Americas. The Western spirituality is more esoteric finding the sacred in a man-like image that lives in the heavens, which has led to a different type of development trajectory and ethical boundaries. There is a conflict of the subjective spiritual in terms of ethics and morals that affects and possibly delimits the two cultures from holistic communication and problem resolution.

Developing a science of sustainability that can assist humanity create freedom for all individuals and liberate the earth from economic oppression, will necessitate the conscious involvement and cooperation of the whole planet's population creatively working together to solve our current ecological and settlement debacle. If it is anything less then it is not democracy. Questions like why can corporations, who are vested with the rights of citizens, move freely around the globe yet people cannot, must be asked as part and parcel to global sustainable development. Part of that answer has to do with how

and who can use the land. How would universal free movement of people affect resource use and distribution? How would the economy be different? We live in a so-called democracy but there was no consensus about our economic organization. The fact that there has been resistance to industrialization since the beginning and now to globalization casts doubt on the viability of expansionary economic systems as the panacea to human development.

The degree to which the debate on sustainable development has varied indicates to me at least that any universal approach to development will fail unless it is based on a belief of radical autonomy. (Murray Bookchin has some interesting things to say about this issue but the actual concept of radical autonomy I am borrowing from Jose Arguelles.) Such a system would necessitate a certain moral fortitude that is currently not present in our modern political economy. For example, national-to-local decentralisation of power systems would not necessarily deal with the rapid advancement of biospheric pollutants and potential catastrophes. Dealing with toxic chemical or radioactive waste necessitates people that have advanced training in highly specialized and abstract scientific disciplines that large and centralized power organizations still seem best able to support. But I think that the philosophy of permaculture is important in shaping a new society along these parameters because it is not dogmatic and it is not political, it is moral. It does not detract from culture it builds it; and it does not destroy the earth, it stewards the earth.

As long as any group of people remains repressed, suppressed, or oppressed by another people than we are not engaged in a sustainable process. The guiding ethic is that all people have a right to exist, to self-regulate, and that all people have the

responsibility to live in such a way that does not inhibit, delimit or otherwise restrain others from realizing this right. Sustainable development must include principles that will guide the full realization of cultural autonomy and the sovereign right of all people to guide their development. The efficacy of this can only be possible if all people covet the responsibility to respect and nourish the integrity, viability, and health of the planetary biosphere. The development of a people is the most personal and spiritual process we go through collectively although we mostly experience it on an individual basis over the course of our lifetimes. Development is the process whereby we shape our identity, values, beliefs, and define what is sacred and gives meaning to our daily lives. Yet most development projects completely ignore the spiritual aspect of people's lives. If the science of sustainable development does not broaden its conceptual definition and purpose to include cultural as a resource, resource politics will likely ensue to the detriment of us all.

It is possible that many Native American ideas could serve as guiding principles for the creation of parallel economies even in the context of a "modern" era. Further study and creativity may prove that the market economy can live along side locally self-sufficient or largely subsistence economies with a lot of interaction and integration between the two creating completely new global economic networks. Permaculture as a development tool is exciting for this reason. As a totally decentralized and grassroots movement, it is spreading functional information rapidly around the world that is enabling people to work more autonomously from their localities toward healing the earth and caring for each other's cultures. Indigenous and non-indigenous people globally are

forming new networks of resource exchange based on a common philosophical platform that is helping forge a new dialectic about modernity and development.

Annotated Bibliography

Aberley, Doug (Ed.), Futures by Design, New Society Publishers, Philadelphia, PA. 1994.

Provides different perspectives on planning and ecological design. Highlights include essays by Richard Register writing on eco-cities, Bill Mollison on Permaculture, Murray Bookchin and Donella Meadows. Bookchin explores his thoughts on social ecology and why there can be no separation between human and non-human evolution. His essay made me think how the domination of human by human precedes or is a necessary prerequisite to the domination of land by humans collectively.

Auty, Richard M. and Katrina Brown, (Eds.) Approaches to Sustainable Development. Pinter, Herndon, VA. 1997.

This collection of essays focuses on case studies of community applications of sustainable development. The editors give an apt description of the linguistic and conceptual problems about the term sustainable development and how it has been used for many different political or social objectives. Table 1.1 is an excellent comparison of different perspectives on sustainable development.

Bailey, Ronald, ECO-SCAM: The False Prophets of Ecological Apocalypse. St. Martin's Press, NY. 1993.

Ronald Bailey uses imaginative language and paternalistic hyperbole to make his case against the environmental movement. I picked this book off the shelf at the library to avail myself to an alternative [sic] perspective. Had the author made more of an attempt to be scholarly about his pursuits the book might hold more water, but instead he resorts to reactionary colloquialisms to refute the scientific claims made by "environmentalists". In his introduction, for example, he states "In this book I hold those environmental alarmists strictly accountable for their faulty analyses, their wildly inaccurate predictions, and their heedless politicization of science, in the hope that the next generation will not grow up feeling that their future is dismal and blighted."

His essential argument is not even new but rather the tried and true [sic] economic progress is good for humanity and technology and science will solve any problem that is created. Not to his credit, Bailey spends considerable energy stating the merits of science and the accrued benefits to man, yet he simultaneously denigrates the work of other (environmental) scientists (for example, Rachel Carson, Paul Erlich) only because "they painted the near future - our future- in hopelessly bleak terms.

Eco-Scam is a hopelessly reactionary book that demonstrates the author's insecurities more than anything. It does not contribute meaningfully to the dialectic.

Bartelmus, Peter, Environment, Growth and Development: The Concepts and Strategies of Sustainability. Routledge Press, NY, NY. 1994.

The emphasis of his discussion is to analyze the outcome of the 1992 UNCED event in Rio de Janeiro and specifically focuses on Agenda 21. Box 1.1 Basic Human Objectives and the Chart on page 13. This is a good source for specific data and information related to this conference.

Beck, Ulrich, The Risk Society: Towards a New Modernity. (1986) Translated by Mark Ritter. Sage Publications, Thousand Oaks. 1992.

I read this book for a class in the spring of 1997. Almost a year into my graduate studies, this was by far one of the more difficult reading assignments I had had because of the intense theoretical nature of his logic and thought style. Nevertheless I found Beck's ideas and concept of

the "Risk Society" to be most intriguing. This was my first introduction to the author and since then I have read several of his works.
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I like Beck's central thesis of the Risk Society. His discussion of how society will organize itself under the increasing threat of global environmental catastrophe is enlightening. Framing global environmental problems and democracy in terms of risk is particularly interesting in contrast to (understandably) emotive and reactionary environmental activists. He gives his argument credibility in that he does not attack modernization, only the present form modernity has taken because, "everything which threatens life on Earth also threatens the property and commercial interests of those who live from the commodification of life and its requisites." (Risk Society, p.39) The boomerang effect makes this point successfully vis-à-vis the producers of risk. Like Beck says, smog is democratic. So is nuclear war and its aftermath.

His discussion on risk reminded me of another idea somebody told me when I was in college about how nuclear technology in particular delimits the possibility of a real (or perhaps I should say a utopia) ecological society. Nuclear power plants and generators require constant attention to prevent an accident. Thus for the rest of the foreseeable future, society will have to ensure that there is a suitably educated and technically competent class ("technocrats") of individuals that can, minimally, attend the nuclear power plants. That's a very simplistic summation of the argument, but the point is clear that human society has indefinitely incurred the risk of nuclear annihilation.

His gestalt of modernity is important for capitalists and community organizers alike. He asks, how as a society do we want to modernize? What do we want to produce and what risks do we want to assume? As an advocate of sustainability, I have to remind myself about the latent risks that industrial modernization has bestowed human society. Although I fantasize about a world of interconnected eco-villages and socio-political sensibility, there are undeniable risks already assumed by society that must be accorded a place in planning. Therefore, my role as a planner and community organizer today, is to actively prevent harm from risks latent or otherwise, as well as work with people democratically to ensure that the type of risk produced therewith does not pose a lethal threat to humans or the ecology at large. In part, sustainable design and decision making will accomplish this, but only so long as there are people who can assume the larger technical responsibilities left over from industrial modernization.

Beck's discussion of global environmental threats and the manner in which quality of life is defined, coupled by his discussion in the article of capitalism and market forces, is an invaluable asset to the social and political dialectic shaping our communities both locally and internationally. He makes a really good point, although I am sure he is not the first to state it, that capitalism won't work unless it can suffice certain material securities. Such securities are the thrust (albeit ineffective due to the same capitalist structures) of international non-government organizations and aid agencies whose primary objectives have been to "meet basic needs". I often wonder who the multi-national corporations plan to sell their high-priced products to-as their workers (in the third world) are too poor and bereft of resources to buy them, and the people in the first world are increasingly unemployed and growing poorer every year. Under their own policies of growth at all costs, it is ironic that there ultimate cost is a limit to their expansion.
ABS 242 Prof. Hirtz
4/16/97 Ulrich Beck, Risk Society: Towards a New Modernity Pt II, III

Throughout the latter half of his book, Risk Society, Ulrich Beck describes processes of individualization, gender stratification, the lost promises of labour and the reflexive scientization in the face of modernity. His deliberations on the individualization processes that have occurred as a result of modernity are provocative and thought stimulating. Beck's apropos portrayal of the individual as "detraditionalized", placed in the context of societal risk, reasserts the necessity for

people living in Western culture to evaluate their "quality of life". He suggests that they eschew the bourgeoisie lifestyle of mass consumerism if there is to be any salvation for the planet and the integrity of people and family here or anywhere.

While others over the past week have criticized Beck for a plethora or reasons, I view Beck's ideas (irrespective of any warranted criticism) as a platform for understanding some of the central underpinnings of the feudal corporate structure which dictates lifestyles around the world. In fact, I believe that the unwillingness of some of my peers to consider Beck's observation of de-traditionalization as the key concept of the Risk Society actually validates Beck's thesis. The fact is that people in Western culture are so entrenched in a highly evolved place of the "societalization of individualization" that previous connections to family and responsibility of maintaining their own cultural and traditional integrity are seemingly forgotten. Claims are even made that the Euro-American is void of culture and tradition to the triumphant choirs of modernity.

The risks to society portrayed by Beck are twofold, on one hand there is the risk of damage to human and non-human life from toxic waste and nuclear annihilation; but equally if not more importantly, there is the potent danger to society that arises from the standardization of identity (as a labourer or simply an individual) systematically eroding traditional life contexts. The risk then is total social fragmentation and a destabilization of people's ability to function in a society as a community as they are stripped of all traditional communal skills. In more academic terminology Beck describes the removal of spirit and soul among people in society being manipulated by the ultimate goal of modernity. I think his analysis is totally appropriate in the European and US context where the loss of traditional lifestyles is so rarely regarded as a phenomena-unlike similar analyses of third world communities where the loss of tradition is often a main focus of study. He hails the risk society faces as people are standardized and consequently marginalized from healthy relationships and spirituality.

He made an excellent case for his argument in Chapter Four on gender relationships and the reversing roles of men and women in families. I regarded his discussion on the dilemma for women caught between the equality to seek a job but simultaneously the inequality of a biased labour market. This is not so different from a typical feminist analysis except that he contrasted it to the loss of tradition, the role of children in the family, and the concomitant duality placed on men as women are found more often in the workplace than at home. Feminist analysis usually leaves out the effect on men altogether seeking to rectify structural inequalities that affect the mobility of women.

Beck is right to argue the mal-effects of standardization of people via what he calls the "institution of dependent control structure." In a recent conference I went to on economic globalization, a central theme was that economic globalization is dislocating people and traditions by the homogenization of information, intellect, biology (in terms of their food) and lastly, politically and economically through the worldwide standardization of market based commerce based on neo-liberal ideology. The tides of corporate control and usurpation of resources forcing people into a competitive individual based labour market that erodes their traditional knowledge is the most dangerous risk that society faces today. It is the precursor to a modern totalitarian feudal system of control and manipulation of the earth's remaining and dwindling resources.

Beck, Ulrich, The Reinvention of Politics: Rethinking Modernity in the Global Social Order. Translated by Mark Ritter. Blackwell Publishers for Polity Press, Cambridge, MA. (1993) 1997.

This book examines how environmental issues question the basic premises of Western thought like growth and progress. Beck connects changes in self-identity with problems of industrial society. Much of his analysis struggles with problems arising from increased global homogeneity and suggests an analytical framework of reflexive modernization to criticize and further the objectives of modernization. The aim of the reflexive modernization as an analytical

framework is to transform the categories and premises for which we make social analysis. In an applied sense it would attempt to simultaneously dismantle ineffective categories of analysis and indicate ways to transform society to a more functional course. One strength of this book is an analytical synopsis of modernization theorists with an emphasis on the effects or influences of thought coming out of the Marx and Weber tradition. I thought one salient point that he made on page 13 was that even "if people look for new structures they tend to do so in the old categories." This has a particularly strong relevance in how people conceive of and attempt development.

Beck, Ulrich, Ecological Enlightenment: Essays on the Politics of the Risk Society. Translated by Mark Ritter. Humanities Press, Atlantic Highlands, NJ. (1991) 1995.

This book follows in greater detail to the Risk Society. Chapter 11 compares primary and reflexive modernization and the role that sociology can play in understanding the challenges of industrial development.

Beck, Ulrich, Ecological Politics in an Age of Risk. Translated by Amos Weisz. Polity Press, Oxford, UK. 1995.

Beck's central idea is that modern society has come to organize its activities based on the amount of perceived risk by its activities. Certain activities result in higher risks for the society like nuclear war. Beck examines the prevalence and management of hazards in industrial society and how the presence of hazards creates certain confusion for society. On page 48 he discusses his theory of the Death-reflex of Normality. Basically he posits that as the extent of the hazard increases and peoples proximity to said hazard increases their acceptance of the hazard also increases. Conversely people on the outside who witness the hazard tend to be larger and more vocal opponents to the continuation of the hazard. He puts forth a theory of social hazard to explain the paradigm confusion between industrial progress against the annihilation hazards created by industrial progress. (163) Another interesting philosophical consideration that he explores is the idea of "burdens of proof" which he claims are unequally distributed throughout society. In fact he argues that industrial society is predicated on an "extreme inequality of the burdens of proof."(159) Because society has engineered itself based on a "system of organized non-liability"(160)

This book has been essential to my process of understanding the complexities of environmental problems and the intersection of those problems with society.

Beck, U., Giddens, A. and S. Lash, Reflexive Modernization: Politics, Tradtiion, and Aesthetics in the Modern Social Order. Polity Press, Cambridge, MA. 1994.

Bell, Graham, The Permaculture Way: Practical Steps to Create a Self-sustaining World. Thorsons, London. 1992.

Bell presents a good overview of what Permaculture means and the philosophy behind why Permaculture is an ethical approach to development and land management. He explores many issues of community like ideas of capital and the importance of self-sufficiency (i.e. sustainability) The majority of the book is devoted to practical things that people can do to use permaculture in their homes, landscapes, and energy systems. He also gives much technical information for agricultural systems, orchards, and aquaculture and so forth. This book is very easy to read and highly informative.

Bernard, Ted and Jora Young, The Ecology of Hope: Communities Collaborate for Sustainability. New Society Publishers, East Haven, CT. 1997.

Wes Jackson writes the foreword for this book. He made an astute distinction between provincialism and parochialism in terms of how it affects development at the community level.

In regards to sustainable communities it is his assertion that community planning for sustainability must be essentially parochially because only then will the relevant local knowledge, tradition and customs be embodied in the programs and policies devised to effect sustainability.

Berry, Wendell, Another Turn of the Crank. Counterpoint, Washington D.C., 1995.

Wendell Berry is a small-scale organic farmer who lives in a rural community in Kentucky. He has witnessed first hand the massive transformations of agriculture into a global agribusiness and the struggle of people around him trying to maintain their cultures and identity in the face of globalization. A proliferate writer, Berry thinks about the relationship between people and the biosphere and tries to understand the ethic behind taking care and nourishing our land and communities. In this volume he addresses issues such as how the global economy affects farming and farmers who he sees as the cornerstone to any healthy and viable community. He also writes about American politics and explores issues important to communities that are often obscured by what he calls "poor politics". His thoughts on what comprises a multicultural landscape and the provisions for land conservation are provoking. Berry's writing style is fluid and anecdotal. I highly recommend of his essays, many of which I have read and have always found insightful and sincere. Wendell Berry is indeed a Yankee at heart.

Bergh, Jeveon C.J.M. Van Den, Ecological Economics and Sustainable Development: Theory, Methods and Applications. Edward Edgar Publishing Ltd. Brookfield, VT. 1996.

Bergh concentrates on scientific methods for integrating economics and ecology. He poses an interesting discussion in Chapter Two integrating thermodynamics with economics and the ecology. He provides a brief but very interesting history of the intersection of economics and ecology and how the growing field and understanding of thermodynamics is affecting theorists of ecological economics. Bergh explores multidimensional complex systems through an historical analysis of environmental economics. In addition he provides a good analysis of the original intentions of sustainable development "as a starting point in exploring solutions for the potential conflict that may arise between striving for several sub-goals, or between interest groups supporting them (p.4).

Bookchin, Murray, Remaking Society. South End Press. Boston, MA. 1990.

I read the chapter From Here to There where Bookchin explores the "door that can open the way to a New Left of the future" (159) essentially how society will respond to the growing environmental changes. He discusses why the ecology movement has not been "catapulted" to the foreground of social discourse but has instead been fragmented into several directions. His discussion begins with a focus on the feminist movement and attempts to equate the environmental movement with gender, and turn the ecology into a religion. Bookchin takes the perspective of an anarchist, and as such, his critique is refreshing. This chapter is critical of the bureaucratization of the environmental movement and its willingness to compromise. He also looks at how the politicization of the ecology by the introduction of myth, supernatural figures, and gender (eco-feminism) has created a viewpoint of hierarchy such that the woman (equated to nature) has been the prototypical victim (and source) or all hierarchy. (164-5) This has led to, in his opinion, a distortion of the ecology and impeded the original thrust of the environmental movement.

Bookchin is also concerned about a proclivity to an anti-Enlightenment viewpoint within Western society. He asserts what is needed is a reinstatement of the values put forth by the Enlightenment thinkers such as Hegel, Fourier, and Leibnitz. His analysis points out how the transformation of logic paradigms by the 18th Century gave new values and ideas to society which have been subsequently commodified and abused by modernity. "[C]apitalism warped these goals, reducing reason to a harsh industrial rationalism focused on efficiency rather than a

high-minded intellectuality; that it used science to quantify the world and dualize thought and being; that it used technology to exploit nature, including human nature - all of these distortions have their roots in society and in ideologies that seek to dominate humanity as well as the natural world."(166) His discussion of the goals and values of the Enlightenment are essential to his thesis where he posits that humans cannot harmonize with nature until humans achieve harmony with each other.(171) The last half of the chapter focuses on the issue of ethics and what it means to get from here to there, from industrial modernity, to another inclusive and participatory modernity.

Borman, Herbert F. and Stephen R. Keller (Eds.), Ecology, Economics, Ethics: The Unbroken Circle. Yale University Press, New Haven, CT, 1991.

This is an updated version of a 1970 publication called *The Environmental Crisis* that examines the changes that have occurred over that 20 year period in environmental degradation and social inequalities.

Bradbury, Ian K., The Biosphere. Belhaven Press, NY, NY. 1991.

This is a scientific book that explores the question - what is the biosphere? He uses a general systems approach.

Brown, Lester R., et al., Saving the Planet: How to Shape an Environmentally Sustainable Global Economy. W.W. Norton and Co./Worldwatch Institute, NY, NY. 1991.

The central theme of this book revolves around the question of what a sustainable economic system would look like. Part One discusses the key principles of a sustainable economy including ecological efficiency, building a solar economy, agriculture, and of course, stabilizing global population figures. Part Two examines specific approaches that could be taken to induce the proposed changes including better indicators and applying green taxes on goods and services.

Brubaker, Sterling, To Live on Earth: Man and His Environment in Perspective. John Hopkins Press, Baltimore, MY, 1972.

Choosing a Sustainable Future. Report of the National Commission on the Environment. Island Press, Corelo, CA, 1993.

Members of the commission include the federal government, advocacy resource organizations, academicians, and corporate officers. The focus is technical responses to maintain healthy environment. The environment and economy need to be joined and made to have compatible values over the long-term. Long-term economic growth is a major reason to pursue sustainable development. There is a heavy focus on government mediation through policy and legislation to address problems over land-use and planning.

Christensen, C.A., The American Garden City and the New Towns Movement. UMI Research Press, Ann Arbor, MI. 1986.

Cobb, Clifford, Green National Product: Index of Sustainable Economic Welfare. 1994.

Cohen, Michael J., Prejudice Against Nature: A Guidebook for the Liberation of Self and Planet. Cobblesmith, Freeport, ME, 1983.

Cohen at the time of writing this book was the Director of the National Audubon Society Expedition Institute. This book comes out of his experience of years living and learning from the Native American Indians in the Southwest. This is a personal account but it is filled with factual information and detailed accounts of the Native American perspective on community, the earth

and the appropriate posture man should take to live with the earth. His writing style is both entertaining and analytical.

Cronon, William, *Landscape and Patchwork, Bounding of the Land*, in Changes in the Land: Indians, Colonists, and the Ecology of New England. 1983.

Daly, Herman E. and John B. Cobb, Jr., For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future. Beacon Press, Boston, MA. 1989.

I read this book soon after it came out and I have referred to many times since. Herman Daly, an economist, and John Cobb, a theologian, put forth a super cogent analysis of modern or classical economics which they say is perverted by the notion of *misplaced concreteness* – a term that they borrowed from Alfred N. Whitehead. The meaning of this idea is that knowledge separated into disciplines requires a great degree of abstraction such that successful disciplines are highly abstracted to the degree that the practitioners within them don't realize it because of the process of socialization that occurs within them. Their central critique is that the process of industrialization has had a deleterious effect on society and led to the dislocation of community values – hence the moral focus on the common good.

Chapter Seven is interesting in that it relates a new concept to me – *chrematistics*. This is a political economy idea going back to the time of Socrates that looks at the manipulation of property and wealth for the maximization of short-term monetary exchange. They compare and contrast chrematistics to *oikonomia* – the Greek root of economics- whose original meaning meant to manage the household to increase the value over the long term for all members.

They advocate the creation of an economy or form of exchange that would support human health and development while simultaneously nurturing the environment. In the appendix they discuss their *Index of Sustainable Economic Welfare*. This has been frequently cited in other works because of its attention toward the problem of economic valuation and the need to transcend the modern standard of the Gross National Product (GNP). Their portrayal of the moral and ethical dilemmas of the common good are very well presented. Numerous book reviews have been written.

Deloria Jr., Vine and Clifford Lytle, *A Status Higher than States, Domestic Dependent Nations*, in The Nations Within: The Past and Future of American Indian Sovereignty. Random House. NY, NY. 1984.

De La Cruz, Joseph, *From Self-determination to Self-government,* in Carol J. Minugh, Glen T. Morris, Rudolph C. Ryser (Eds.), Indian Self-Governance: Perspectives on the Political Status of Indian Nations in the United States of America. Center for World Indigenous Studies, Kenmore. 1989.

Drengson, Alan and Yuichi Inoue (Eds.), The Deep Ecology Movement. North Atlantic Books, Berkeley, CA, 1995.

Works by Arne Naess, the founder of Deep Ecology, poet Gary Snyder, and others on related topics like eco-feminism and ecological philosophy.

Eco-Villages and Sustainable Communities: Models for 21st Century Living. Title of the Conference Proceedings held at the Findhorn Foundation, October 1995. Findhorn Press. UK. 1995.

This is a great book that contains a lot of information about eco-living practices drawing from the life experiences of people around the planet. The topics range from ethics and alternative communities to local exchange and trade systems. Every presenter's address and contact

information is provided on the margins of the text. It's really a great resource for international contact and examples of innovation in sustainable development worldwide. Much of the dialogue centers on how to create a positive vision for the path of the future.

Emmel, Thomas C., (Ed.), Global Perspectives on Ecology. Mayfield Publishing Co., Palo Alto, CA, 1977.

Freeman, W.H., Man and the Ecosphere: Excerpts from Scientific American. W.H. Freeman and Co., San Francisco, CA, 1956.

Problems related to industrialization and human impact on the planet.

Gladwin, T., Newburry, W. and Ruskin, *Why is the Northern Elite Mind Biased Against Community, The Environment and A Sustainable Future?*, Chapter 11 Bazerman, Max H. et al. (Eds.) Environment, Ethics and Behavior. New Lexington Press, San Francisco. 1997.

Heller, Chaia, *For the Love of Nature: Ecology and the Cult of the Romantic, in*, Gaard, Greta (Ed.), Eco-Feminism: Woman, Animals, Nature. Temple University Press, Philadelphia, 1993. "Instead of challenging these institutions and ideologies of domination within society in general, romantic ecology points its sword toward a mythical dragon called 'human nature,' 'technology,' or 'Western civilization,' all of which are allegedly responsible for slaying 'Lady Nature.'"(220) Heller looks at how romantic ideas expressed in literature and within social discourse shape the way that Western societies look at the environment and how society responds to environmental degradation. My critique of her argument is that she places too much emphasis on a supposed oppression of women in the medieval ages which is more emotionally than scholarly deduced. But she ultimately does draw some nice philosophical conclusions, e.g., "An ecological society, free of all forms of domination, will express the human ability to participate fully in developing the richness and creativity of both the natural and the social world."(235)

Henderson, Hazel, Building a Win-Win World: Life Beyond Global Economic Warfare. Berret-Koehler Publishers, San Francisco, CA. 1996.

Henderson touches on one of the most important issues to sustainability by exploring the economic growth paradigm touted by the world's leading nations as the only means for betterment and improvement of people's lives. She discusses how this line of thought actually increases competition and conflict on a global scale to the extent that we see corporations and nation states vying for control of trade and investment. From the perspective of a futurist, she seeks to understand how the current economic system actually perpetuates a pathological paradigm of global economic warfare in contrast to sustainable human development. Using a cybernetic perspective employing positive and negative feedback loops, Henderson analyzes the shift of global interdependent to "cooperative" sustainable development. Her analysis is organized into seven levels of the world system from the total biosphere to the individual values and ethics.

Holmberg, Johan, (Ed.), Redefining Institutuions, Policy and Economics. Island Press for the International Institute for Environment and Development, WDC, 1992.

This is part of the organization preparation for UNCED. Its emphasis is on policy prescriptions for governments and development agencies. Chapter One has a useful chronology of sustainable development and problems associated with the Brundtland Commission definition and its usage.

Keil, Roger, et al. (Eds.), Local Places: In the Age of the Global City. Black Rose Books Ltd. Cheektowaga, NY. 1996

The essays in this book examine the issues of sustainability in the context of the global city considering issues of urbanization, technology, population growth and planning for sustainable development. The theme of globalization runs through all of the essays to explore ways that it affects citizenship, eco-politics, social welfare and international trade. More detailed information for some of the essays is given below:

Eduardo Garay, *Sustainability or Unsustainability: The Case of Marginal Urban Settlements in the City of Cali, Colombia*. Garay focuses on the meaning of sustainability as it is used in Colombia. First, he examines the "economist approach" to explain how the relationship between nature and humans is not fully understood outside the paradigm of economic expansionism and accumulation by analyzing structural adjustment programs in Cali. Secondly, he looks at "a progressive socio-ecological approach" which attempts to provide locally based communities with the means of supporting themselves while simultaneously sustaining the natural resource base. This means maintaining a holistic communication between humans and non-humans.

Michael Hough, *Cities and Natural Process: A Regional View*. This author addresses the need for an organizational ethic that "recognizes the interdependence of all life-forms and the maintenance of biological diversity."(197) His discussion references the organization of cities and people in cities and how they naturally interact with the biosphere but have been unconsciously designed to live beyond the limits of the biosphere.

Franz Hartmann, *An Ecopolitics for Urban Sustainability*. Hartmann says that "ecopolitics is fundamentally about the struggle over two issues: defining the causes for our problematic relationship with nature, and developing a course of action that will create a more sustainable relationship with nature. Put simply, ecopolitics is about the struggles around problem definition and resolution."(107) This is an important essay for thinking about ethical issues that frame the debate and/or discourse on sustainable development.

Roger Keil, *Greasy Jungle Metropolis Noir*. In the introduction to Local Places, Keil discusses the necessity for integrating sustainable social systems with sustainable systems of physical infrastructure. "In this age of globalization and technological overkill, [we] need to build intelligent urban infrastructures that depend more on ingenuity of people in their interaction with non-human nature than its conquest." To illustrate his point, Keil looks at cities worldwide to demonstrate how human societies through their social organization and physical infrastructure take nature for granted. He looks at how nature exists outside society and as a result of such activity, society has damaged the natural environment that sustains it and thus jeopardizes its survival.

Stefan Kipfer, *Whose Sustainability? Ecology, Hegemonic Politics and the Future of the City*. Kipfer examines how universal application of "ecological principles" is fundamentally problematic especially in relation to neo-liberal transnationalization policies. He analyzes the movement to create an eco-city plan for Zurich, Switzerland and looks at the problems that unfolded during this process to elaborate on his central idea. "Rather than contributing to the crystallization of dominant discourses of sustainability, radical urban-ecological politics thus represents the renewal of the struggle for the 'right to the city' as an immanent challenge to the socially and ecologically destructive features of the capitalist urban process."(122-3)

Patricia E. Perkins, *Trade Liberalization, the Natural Environment and Cities*. Trade liberalization is a central idea in neo-liberal policies for global economic market integration. But can it be sustainable? To examine this question, Perkins addresses the idea of time horizons - a key theme in sustainability. If intergenerational equity is an issue that concerns us, how many generations to we try to plan for? In regards to trade, Perkins rests her analysis in ecological terms that are defined by incoming solar energy over space and time. "The precise geographic

area we are concerned with - whether we define it along political, ecological, or economic boundaries - is key to measuring incoming solar energy and thus to a 'conceptual bottom-line' for sustainable trade."(240)

Catriona Sandilands, *The Shaky Ground of Urban Sustainability: A Comment on Ecopolitics and Uncertainty*. This is my favorite essay in the book. Sandilands argues that the discourse on sustainability is actually creating a reverberation within the political and epistemology or urban politics. The fact that there is dissonance on the topic of sustainable development and its meaning forces people to ask critical questions of a self-reflexive nature. "Through a process of shaking and disrupting hegemonic discourses and practices of so-called 'urban sustainability' that space may be created for the promotion of alternative urban socio-ecological relations."(125) Her discussion focuses on the ways neo-liberal policies have misappropriated the words sustainable development to promote the converse of sustainability and maintains the global economic hegemony.

"So long as the only legitimate knowledge of what is sustainable comes from ecological science; so long as this same ecological science has no idea of what natural limits really are, and even if 'limits' is an useful concept for thinking about nature; so long as sustainability remains the dominant language of environmental politics, to the exclusion of, say, ethics or aesthetics… it will privilege capital over caterpillars."(128)

She continues on page 129 to say "sustainability requires a cultivation of self-imposed limits based on a healthy respect for what we cannot know, and for the partiality of what we do know."

Korten, David D., When Corporations Rule the World. Kumarian Press. West Hartford, CT, 1995.

Korten advocates decentralized self-reliant communities that work autonomously to safeguard their own environmental and social standards for sustainability. Citizen rights should always prevail over corporations. In part two he discusses issues of sovereignty as they pertain to people versus corporations. He does not address the simultaneous denial of indigenous sovereignty rights. I am curious how he would respond to that critique because he is obviously only concerned with the viewpoint of vested citizens of the Western tradition. He gave a useful critique and description of the worldview of corporate libertarians or neo-liberalism.

Luhmann, Niklas, Ecological Communication. Translation by J. Bednarz, Jr. University of Chicago Press, Chicago, IL. 1986.

Luhmann's question is why or how society talks about the ecology and the relation of society to the natural environment. His central thesis revolves around the idea of autopoiesis of society through communication. To this point he is interested by how society is responding through communication to the pandemic environmental dangers it has itself created. His theory of ecological communication attempts to create an orientation within social science to examine the problem that results from increasing uncertainty;

"society has thus become alarmed as never before without possessing however, the cognitive means for predicting and directing action because it not only changes its environment but also undermines the conditions for its own continued existence." (1)

He also puts forth a reformulation of evolutionary theory where he states that "complexity is constituted through evolution" via communication and communication processes. This is the basis for the rest of the arguments in his book. His theory is interesting because of the conceptual framework which he notes must include two things: changing from examining the system of society to the difference of that system and environment; and, that system elements must be changed from substances to self-referential operations, i.e., autopoiesis.

This book contains a unique theoretical (and highly substantial) stance from which to view environmental problems. Luhmann's analysis of the situation is very important to bring more clarity to the social problems related to making decisions or talking about "the environment". His perspective and study differentiates itself from other literature on ecological problems by concentrating on society itself and its internal operations - or that which allows society to reproduce itself (i.e., autopoiesis) which he attributes to communication.

Luhmann, Niklas, *Ecological Communication: Coping with the Unknown*, in Joanna Tsivacou (Ed.), A Challenge for Systems Thinking: The Aegean Seminar. Plenum Publishing. 1993.

Luhmann, Niklas, Social Systems, translated by John Bednarz, Jr., and Dirk Baecker. Stanford University Press, Stanford, 1995.

This book addresses what Luhmann refers to as a "paradigm change" in general systems theory and how sociological theory could benefit by using this type of analysis. He talks at length about the role of systems and functions. In was interested in his chapter entitled "System and Environment" and the discussion on how changes in one system result in a change of environment for another system.

Mander, Jerry and Edward Goldsmith, (Eds.), The Case Against the Global Economy. Sierra Club Books, SF, CA. 1996.

This is a fascinating collection of works from activists, academicians and professionals working toward establishing vital local and economies. The focus of the essays is to describe the destructive tides of globalization of the economy and the effect of commercial homogenization on people around the globe. Essays by economist Herman E. Daly and ecologist Robert Goodland are excellent discussions on the ecological limits to economic growth and thereby discredit classical economic paradigms.

Ghandi's Swadeshi: The Economics of Permanence by Satish Kumar (Chapter35). This is a great article that details Ghandi's vision of a network of self-sufficient villages across India such that in every village there would be a microcosm of the whole of the country. In this way the Indian people would be able to resist the tides of international market economies and remain authentic to their culture and tradition. Swadeshi is the term for this style of village economies.
Communities: Building Authority, Responsibility and Capacity by David Morris (Chapter 37). David Morris, Institute for Local Self-Reliance, looks at the three concepts in the title of this essay, (authority, responsibility, capacity) and outlines the necessity of realizing these things in a community in order for it to become sustainable and functional. Morris says that capacity is essential to building local capacity so a community can build alternative economies.

Meiners, Roger E. and Bruce Yandle, (Eds.), Taking the Environment Seriously. Rowman and Littlefield Publishers, Inc., Maryland. 1993.

Key words: Role of government and Policy Issues; policy analysis, property rights, risk assessment, risk management.

Mellos, Koula, Perspectives on Ecology: A Critical Essay. Macmillan Press, Ltd., London, U.K. 1988.

This is a fascinating work where the author explains and analyzes the prevailing trends of thought in thinking about the ecology. Especially useful to me were the sections on the source and theoretical (or lack thereof) underpinnings of eco-development and the essence of radical ecology.

Mollison, Bill, Introduction to Permaculture. Tutorial Press, Harare, Zimbabwe. 1991.

This is a beginning Permaculture design manual. It includes a good description of Permaculture and proceeds to take the reader through the basic steps of a good Permaculture design. Chapter 7 focuses on Permaculture strategies for communities and urban areas.

Mollison, Bill and David Holmgren, Permaculture One. Tagari Publications, Australia. 1978.

Mollison, Bill, Permaculture: A Designer's Manual. Island Press. 1990.

Moody, Roger (Ed.), The Indigenous Voice. *Manifesto of Tiawanaku,* pp. 38-45, *The Russall Tribunal*, pp. 78-83, *A World Council of Indigenous People,* pp. 60-67. *USA: The Longest Walk*, pp. 68-73. Zed Books, London/IWGIA. Copenhagen. 1988.

Morris, Glenn T., *The International Status of Indigenous Nations Within the United States*, in Ward Chruchil (Ed.), Critical Issues in Native North America. IWGIA Document, N62, Copenhagen, December 1988/January 1989: pp.1-14.

Nabahn, Gary Paul, Enduring Seeds: Native American Agriculture and Wild Plant Conservation. North Point Press, SF, CA. 1989.

This book is a beautiful and personal account of Nabahn's work in the American southwest and his involvement with Native Seeds/SEARCH. He uses personal experiences and draws on many tales to elaborate of the problems and history of Native American agriculture. The focus of the book is the process of seed saving amongst these cultures and the importance of traditional seed varieties and their role in maintaining a healthy biodiversity. There is so much information in this book about the evolution of plants in North America and different cultural approaches to plant cultivation that I highly recommend it to anyone.

Narby, Jeremy, The Cosmic Serpent: DNA and the Origins of Knowledge. Jeremy P. Tarcher/Putnam, NY NY. 1998

An excellent discussion of indigenous epistemology and the relationship between myths and molecular biology that have been overlooked by Western science.

Nash, Gary B., *The Image of the Indian in the Southern Colonial Mind* in Edward Dudley and Maximillian E. Novak (Eds.), The Wild Man. University of Pittsburgh Press. USA. 1972.

Norgaard, Richard B., Development Betrayed: The End of Progress and a Coevolutionary Revisioning of the Future. Routledge, NY. 1994.

This is a seminal critique of modernity and development. Norgaard examines the ideas of progress (as was put forth by the Western European viewpoint) and the notion of sustainability through a coevolutionary framework. This means that he was trying to explain how people or society co-evolves or co-create processes and that no ideas happen unaffected in a vacuum. The essential principle of the coevolutionary theory is that change in social and environmental systems over time result as a process of co-evolution. For example, he looks at how modernity or industrial society has co-evolved around fossil-hydrocarbon fueled development.(29) He uses a coevolutionary analysis to explain why progress and its promises (peace, abundance, control over nature) were in his words, "betrayed" by modernity because of the conditions that it reached.

Through this analytical framework he looks at how the notion of sustainable development is often misunderstood because people are trying to understand it within a scientific and cultural paradigm of knowledge that has co-evolved around the notions of progress which have been linked to fossil fuel development. By using patterns of thinking which are associated with the unsustainability of modern [sic] development we are unable to move beyond trying to define

sustainable development operationally. An examination of the academic and professional discourse on this topic will uncover a significant debate on how to define sustainability and what it means. Norgaard makes the salient point that sustainable development cannot be defined operationally. (see chapter two) Hence in Chapter three he posits that the real challenge for sustainable development is to re-frame the challenge of development into a dialogue on how societies and environments grow and operate as co-evolving systems. This places on emphasis on processes as opposed to structures - the mainstay of the current development paradigm- and forces the dialogue toward a revisioning of the meaning of progress.

Development Betrayed should be required reading for anyone working on or learning about sustainable development. Chapter Two broadened my perspective on sustainable development through his analysis of the role that positivistic science has on the way we relate to the environment - a process of modernization - which thereby constrains our ability to effect true sustainability. His understanding of the intersection between politics and science is substantial and unfortunately not a prominent part of the development discourse.

Raberg, Per (Ed.), The Life Region: The Social and cultural Ecology of Sustainable Development. Routledge, NY, NY. 1997.

Emanating from Sweden, Raberg brings together perspectives on sustainable development within a framework of a *theory of social ecology*. The essays are organized into three parts all focusing on the sustainable region and drawing on ideas of *territory*, *culture*, and *community*. In his discussion of sustainable social development he says that it is an important prerequisite to ensure balance with the global ecology. Raberg organized the essays to explore a socio-ecological vision that brings focuses on the longevity of social organization (see introduction). He connects his ideas to the phenomena of globalization and how ecological theory of knowledge uses archaic levels of consciousness to know. (445) In the epilogue he comments on the denial of creativity by modern society.

Sachs, Wolfgang (Ed.), The Development Dictionary: A Guide to Knowledge as Power. Zed Books Ltd., Atlantic Highlands, NJ. 1992.

Sachs, Wolfgang (Ed.), Global Ecology: A New Arena of Political Conflict. Zed Books Ltd., Atlantic Highlands, NJ. 1993.

This book addresses the rising import of environmental conflicts and planetary health in political discourse. Published shortly after the 1992 UN Conference on Environment and Development in Rio de Janeiro, many of the essays touch on the issues highlighted at the conference and draw on it for examples. I read Part 3 of the book entitled: Confusion over Sustainability. Four authors presented their opinions (see below) on sustainable development; each trying to bring more clarity to the discourse by fleshing out some of the concepts that lie behind the idea of sustainable development.

In Chapter 6, ***Making Development Sustainable***, Paul Ekins states that in order for sustainable development to indeed work toward resolving the environmental crisis there must be a definition that "commands widespread agreement." This is counter to Norgaard's position that operational definitions are neither possible nor desirable. Nonetheless, Ekins attempts to draw out a strategy to achieve sustainable development by defining sustainable development against economic activity, or as he says the human way of life. He makes this qualification because he observes a tendency to separate human activity into the category of development (and in that vain, growth) and nature into the category of sustainability. This differentiation thus necessitates economic measures. While his analysis seeks to find a solution between the North and South, I still found his logic problematic because he continued to rest his argument on the need for growth even though he thought that it should be transferred to the south. Growth is still growth. His

emphasis on the poor in the South is admirable but I think that consumption by the North is a greater threat to the world. He is also swayed by the very Eurocentric concepts of justice, democracy, and participation. Assumedly he would want also a definition for these concepts to command widespread agreement or otherwise his plan will fail as well.

In ***Scarcity and Sustainability***, Achterhuis chronicles the formation of the idea and phenomena of scarcity in modern society. To build his argument he explores the early contributions to European socio-political discourse by Bacon, Hobbes, and Locke. Where Bacon reifies the notions of progress that modern man is able to transgress "every cultural and natural limit" (104); Hobbes is the first to articulate the phenomena of scarcity which he observes is the consequence of social institutions and structures. Locke surmises that scarcity is a natural condition between the earth and people and that only if people can organize production will they be able to ward off scarcity. Achterhuis makes a really cogent analysis of contemporary politics and the presence of this type of thinking which in his opinion disables people from being able to find value in a cultural way of life if there is no economic value ascribed to it. At the same time he looks at how the very presence of this type of thinking also contributes to the perpetuation of the problem and he asks if "whether the many environmental efforts to fight scarcity are not in fact propagating it."(110) He ties this argument into the idea of sustainable development and makes one of the best critiques of the Brundtland Commission report, *Our Common Future*, that I have read. By understanding the link between the ideology of productivity to the social construct of scarcity he demonstrates the paradox of the Commission's logic. He closed his essay by bringing in the perspective of four people brought to the Netherlands from Southern countries to critique their approach to sustainable development.

Christine von Weizsacker wrote a good essay elaborating the diverse reasons people are forming alliances to protect, preserve, conserve or rehabilitate biodiversity. She did a good job of framing the wide array of perspectives on this issue in her chapter, ***Competing Notions of Biodiversity***. She talks at length about the problem with forming a true biodiversity alliance and suggests that "there may be an inherent serious imbalance of power in this alliance for biodiversity, an imbalance which give undue implicit advantages to certain of the policies and value-judgments."(120)

The Shaky Ground of Sustainability written by Donald Worster examines the paradox of the ideas conjured by the term sustainable development. Although he said he would prefer an environmentalism based on ethics and aesthetics, for the efficacy of his discussion he focused instead on contemporary environmentalism which is based on resources and economics.(133) It is within this framework that he explores the various meanings and criteria of sustainable development where he identified the following as flaws in the concept. First, the belief that nature exists to serve people (Locke's assumption that nature should be harnessed by people to reduce scarcity amongst men); secondly, that it is a false assumption that given our understanding of the constant and natural state of flux in the biosphere and within any ecosystem we could accurately determine the carrying capacity, sustained yield or growth. Thirdly, that we are living in an unexamined world view of materialism and that this view is accepted as traditional and progressive.(142)

Sale, Kirkpatrick, The Conquest of Paradise: Christopher Columbus and the Colombian Legacy . Alfred A. Knopff, Inc. NY. 1990.

Sardar, Zia et al, *Them* in Barbaric Others: A Manifesto on Western Racism. Pluto Press. UK. 1993.

Sitarz, Daniel (Ed.), Sustainable America: America's Environment, Economy and Society. Earthpress, Carbondale, IL. 1998.

A publication of the President's Council on Sustainable Development. The foreword is written by Vice-President Al Gore.

Smith, Michael, Peter, "Can You Imagine: Transnational Migration and the Globalization of Grassroots Politics," Social Text. 1994.

Sztompka, Piotr, The Sociology of Social Change. Blackwell Publishers, Cambridge, MA. 1993.

Thayer Jr., Robert L., Gray World, Green Heart: Technology, Nature and the Sustainable Landscape. John Wiley and Sons, Inc. NY, NY. 1994.

Thayer argues that aesthetics have been the primary determinant for design which has also been largely driven by the automobile. He contends that ecological functionality would be a better criterion for design and would better assist human health. One thing I liked about this book was the author's utilization of descriptive diagrams to illustrate his concepts. Thayer puts an emphasis on the role of technology in our landscape and ways that it is hidden and thus represents a collective social technophobia.

His chart on page 245 *Living systems Model for a Sustainable Community* shows 12 subsystems to help conceptualized the design of a sustainable system. I think the model could be augmented by also adding a 13th sub-system to deal with transitional issues and methods for interfacing with non-sustainable communities or landscapes.

Theodore Mary K., Louis Theodore (Eds.), Major Environmental Issues Facing the 21st Century. Prentice Hall PTR, Upper Saddle River, NJ. 1996.

The book is organized into an introduction and then topical chapters on environmental issues like "Air", "Solid Waste" or "Energy Conservation". Each chapter gives a summary of the issues - mostly scientific based analyses and closes with prescriptive measures and a summary of the main points. It is essentially presented as a textbook - but not necessarily only for college students. Many of its points are aimed at active professionals. The latter chapters were especially useful to me. Chapter 37 "Public Perception of Risk", Chapter 38 "Risk Communication", and Chapter 49 "Environmental Ethics". The ongoing dialectic on risk and ethics as related to sustainability and environmental issues is essential from a social science perspective to determine …….

Chapter 38 (Patricia J. Brady) gives a good overview of the problems associated with communicating risk and breaks down the methodology, or what she calls the "rules" for communicating risk to the public. Ruth Richardson (Chapter 49) makes a salient point that environmental ethics, rather than fomenting a new moral code, has expanded the notion of the "common good". (471) One of the problems with this is that disparate cultures have different moralities so it is difficult to define the common good. She reviews four ethical frameworks (utilitarianism, duties, rights, and virtues). She also discusses Aldo Leopold's position on environmental ethics and concludes "the incorporation of environmentalism into everyday ethics, therefore, does not require a redefinition of one's ethics, but rather, a redefinition of one's *community*."(475, her emphasis)

Thomas, Caroline, (Ed.), RIO: Unraveling the Consequences. Frank Cass and Co. Ltd., Portland, OR. 1994.

What impact did the1992 United Nations Conference on Environment in Rio De Janeiro have on international policy and action to address environmental problems? Each of the chapters of this book examines a different issue related to the conference and its effectiveness in producing appropriate action. The first two chapters were of most interest to me.

Steve Smith, wrote ***The Environment on the Periphery of International Relations: An Explanation*** as an attempt to explain why the environment will always be subset to the international politics between states. He asserts that the environment will remain outside the core of "real" politics and contrasts the discourse of the environmental movement. To support his argument he contrasts international politics and with academia and how the two bodies concern themselves with environmental issues. The basis of his critique lies in the general assumptions of international relations that focus on the role of the state as the nexus of power and decision making and how it is not concerned with environmental issues. He makes a salient point that "the international political system is not constructed in such a way as to make it in anyone's interest to act for the planet."(38) He argues that despite certain advances "the world of power, social, political economic and academic is far less conducive to environmental concerns."

For Smith, the environment remains an issue in international politics because of the problem of trying to reach a consensus on a plan of action. This increase with the richer countries and when there is an increase in cultural viewpoints present in the dialectic. Although his critique was thorough, it is only appropriate for the status quo (this would assume that the environmental problems will not deepen or will improve), however, I felt like he was missing a crucial point about environmental issues in that a worsening environment means worsening conditions for humans. As these experiences increase and more people suffer from environmental problems, the state will have to get involved and the only way to do this will be to transfer the politics of the environment from the periphery to the center. I would have liked Smith to touch on this issue and speculate on how environmental catastrophe will cause "states" to reorganize their political priorities.

Julian Saurin wrote ***Global Environmental Degradation, Modernity and Environmental Knowledge,*** which focused in on three ideas: distanciation, mediation of action; techno-rationalism, and modes of knowledge as related to modernity and environmental degradation. In the first part of his discussion he argues that the barrier to environmental sensitivity is the diffused nature of the manufacture of environmental degradation. That because of this a sense of the "normality of degradation" occurs which parallels Beck's arguments of normalized irresponsibility. Because goods are produced and consumed in disparate places by disparate peoples, a time-space distanciation that inhibits people's ability to react to global environmental problems.

Saurin develops an excellent critique of modern agriculture to support his ideas and demonstrate the consequences of modernity that simultaneously contribute to global environmental degradation and impede people's ability to halt environmental degradation. For example, one consequence of modernity is that it masks the origins of environmental degradation by restricting and substantially mediating knowledge of degradation(62).

Tolba, M.K., Development without Destruction: Evolving Environmental Perceptions. Tyooly International Publishing, Ltd. Dublin, Ireland. 1982.

World Bank Group, Mainstreaming the Environment. Fiscal 1995. World Bank Group, WDC.
The title says it all.

Worster, Donald, Nature's Economy: A History of Ecological Ideas. Cambridge University Press, NY, NY. 1994.

Zweers, Wim and Jan J. Boersema (Eds.), Ecology, Technology and Culture. White Horse Press, Cambridge, MA. 1994.

This book examines the historical roots of environmental problems in Western civilisation. Chapter 20 by Etienne Vermersch compares different philosophical approaches to understand why the West destroys nature.

Articles

Ambler, Marjane, *What Can Indigenous Economics Tell Us about Today's Society?* An interview with **Rebecca Adamson**, President and Founder of First Nations in Business Alert. First Nations Development Institute. V 8 N 2. March/April 1993.

Anderson, Kat and Gary Paul Nabahn, *Gardeners in Eden* pp. 27-30 in Wilderness. Fall1991.

Amin, Samir, *The Culture of Capitalism,* pp. 71-88 in Eurocentrism, Monthly Review Press. NY, NY. 1989.

Barnet, Richard J., *The End of Jobs*, Harper's Magazine. September 1993.
A critical look at the state of global employment and why economic globalization is failing to generate enough jobs.

Blue-print for a Sustainable Bay Area. Urban Ecology. Berkeley, 1997.
City planners and municipal governments in the California's Bay Area are the target audience of this document which tries (unsuccessfully) to comprehend the socio-economic and cultural impacts of population and urban landscape growth in the region. To answer these problems, the group takes a scientific and pragmatic approach (meaning they are political and unwillingly to make any serious redress to community or economic organization) by advocating neo-traditional design principles and developing greenbelts or preservation plans for certain esteemed regional ecosystems. The document however assumes that "growth" is inevitable and therefore doesn't suggest any mitigating policies but rather throws out an array of glossy political slogans like: preserve, restore, prevent and so forth. The document is good though for a number of statistical measures on growth and different suggestions for individuals, governments and businesses to take in improving the quality of the Bay Area environment.

Brascoupe, Clayton, *Listening to the Natural World through Traditional Farming*, in Winds of Change. AISES Publishing Inc. Spring 1998.

Cernea, Michael M., *The Sociologist's Approach to Sustainable Development* in Ismail Serageldin and Andrew Steer (Eds.), *Making Development Sustainable: From Concepts to Action*. Environmental Sustainable Development Occasional Paper Series. N 2. World Bank, WDC.

Gale, Richard P. and Sheila M. Cordray, *Making Sense of Sustainability: Nine Answers to 'What Should Be Sustained'?* Rural Sociology. Rural Sociological Society. 59(2) 1994. pp. 311-32
The authors put forth four questions central to determining the meaning of sustainability: What is being sustained, why, how is it measured, and what are the politics of sustaining it? They then lay out nine levels or categories of sustainability from "Dominant product" (in an ecosystem) to "Ecosystem Benefit". Their discussion focuses entirely on natural resources. My main critique of their argument is that the authors separate human beings from the ecosystem as unnatural actors vis-à-vis the ecosystem. In each of their categories humans are viewed as acting outside the environment which I feel detracts from their analysis. But I think their analysis, and other discussions of this type, are important in helping add meaning to the concept of sustainability that is so often used politically and thus with empty meaning. They also draw upon

some interesting discussions like ecocentrism versus homocentrism and how these dialogues shape the way people try and respond to the "natural" world.

Galeano, Eduardo, *"The Blue Tiger and the Promised Land"* in NACLA Report on the Americas. V XXIV N 5. 1991. Pp.13-17.

Gibson, Charles, Spain in America, Harper & Row Publishers, New York, London. 1967.

Gray, Andrew, *Indigenous Peoples and the Marketing of the Rainforest* in The Ecologist. Ecosystems Ltd., Cambridge, MA. V20 N6. November/December, 1990.

International Institute for Ecological Agriculture, Pamphlet, Woodside, CA. Spring 1997.

Hawken, Paul, *A Declaration of Sustainability*, Utne Reader. September/October 1993.
This is a good article where the author lays out a plausible strategy for achieving a sustainable system of commerce. He predicates his strategies on the objectives of reducing absolute consumption of energy, ensuring meaningful employment, self-actualization, honor humanity, to make a sustainable system desirable, biological systems would be rehabilitated, energy would be based on the earth's solar income, and the system becomes engaging for people. His most important point is that environmental and social movements have no coherence and that it is important for people to work together on a systematic strategy in order to achieve a sustainable outcome. He also advocates an economic pricing system that reflects the true cost of a resource and suggests that we throw out the entire tax system.

Korten, David C., *A Deeper Look at "Sustainable Development"*, World Business Academy Perspectives. Berret-Koehler Publishers. 1992. V6 N2
Korten takes a conflict-theory approach to understanding the reasons for deepening world environment degradation. The focus of his analysis is a critique of international monetary policy based on assumptions of scarcity and generating huge social inequalities and environmental deterioration. The introduction of his discussion analyzes the theories of Daly and Cobb (cited above) and uses their six flaws of the market mechanism (e.g., erosion of competition or the depletion of moral capital). He presents a good critique of economic globalization and the (mal) effects it is having on people and the environment. He makes the significant observation that "The idea that a global community can exist in the absence of strong and effectively functioning local communities is itself a contradiction."(34) Korten questions the entire notion of progress by suggesting that autonomous self-reliance is a necessary prerequisite for sustainable development, and only then "through a fundamental transformation of our values, behavior, and institution."(36)

La Duke, Winona, *Native Economies in Native Hands* in

Lele, Sharachchandra, *Sustainable Development: A Critical Review*, World Development, 19(6) 607-621.

Luhmann, Niklas, *Technology, Environment and Social Risk: A Systems Perspective*. Industrial Crisis Quarterly, V14 N3. 1990. 223-231.

Mang, Bob, *Principles for Sustainable Communities* based on a chapter in the forthcoming anthology, Community Building Spirit and Learning in Business, New Leaders Press, SF. 1994.

Mang uses the ideas of social constructionism to present the positive potential of human will and the creation of sustainable communities.

Mann, Eric, *draft speech*, Labor/Community Strategy Center. LA, CA. No date.

Mann discusses for criteria for furthering the dialectic on sustainable development: how small can a community be defined; how can the market be changed subject to social and environmental mandates; how can economics and ecology be combined; social sustainability (morals); and lastly, constraints of the growing internationalization of world markets. I really appreciated his discussion elaborating on the new ethic that has to evolve in order to support social sustainability. He links the concept of inalienable human right to global environmental quality like the right to live without a hole in the ozone layer. He urges both a redistribution of real wealth and the reduction of global corporate political power. He obviously stands clear of the mainstream. It's a good paper and his points are well presented.

Maclaren, Virginia W., "Urban Sustainability Reporting," Journal of the American Planning Association. V62 N2, Spring 1996.

Maclaren develops what she terms the three dimensions of sustainability: society, economy, and the environment.

Marcus, Joyce, *The Amazon: Divergent Evolution and Divergent Views* in National Geographic Research and Exploration. National Geographic Society, W.D.C. V10 N4. 1994.

Meadows, Donella, *Envisioning a Sustainable World, in* Getting Down to Earth. International Society of Ecological Economics. 1996.

This is a great article. Meadows highlights the need and importance of imagination and how what we think shapes the world that we live in. The article discusses her observations with different people whom she asks to envision a sustainable world. Through a visionary process she shows how this helps people formulate goals to work toward while realizing that a "sustainable world" doesn't in any way mean a step backwards for humanity or that life would be like the "cave days". One important observation she makes is that "in many different parts of the world, visions and values (I have to use those two words almost interchangeably) are amazingly, astonishingly congruent."(122) Her writing style is very approachable and her article makes a good impact.

"Mollison in Vietnam" Permaculture International Journal. #54, pp. 10-12.

Describes Bill Mollison's efforts to bring the Permaculture Concept to Vietnam. The Vietnamese government is backing his ideas and helping spread permaculture education to more than 150,000 Vietnamese farmers. The article also gives some technical information on farming in sandy coastal areas.

Permaculture Activist (The). *Climate and Microclimate*. N36, March 1997.

Pierce, Dick, *"Traditional Agriculture and Permaculture"* Winds of Change. AISES Publishing Inc. Boulder. Winter 1997, 82-85.

Pierce explores the similarities between traditional Native American agriculture and the concepts behind Permaculture. He highlights several different tribes from different regions of North America and how they have been able to blend permaculture and traditional knowledge to increase the productivity of their gardens.

Quijano, Anibal and Immanuel Wallerstein, *Americanity as a Concept, or the Americas in the Modern World System*, International Society of Science Journal. Blackwell for UNESCO. UK. V44 N2 1992. 549-557.

Silberman, Tracey, *Green Hope on Black Mesa* in Earth Island Journal. Earth Island Institute, V10 N4. Fall 1995. 28-29.

Silva, Eduardo, *The Politics of Sustainable Development: Native Forest Policy in Chile, Venezuela, Costa Rica and Mexico* in Journal of Latin American Studies. Cambridge University press. New York. V29 N2. May, 1997.

Smith, Carol A. *Maya Nationalism* in NACLA Report on the Americas. V XXV N 3. December, 1991.

Sweet, Timothy, *Pastoral Landscape with Indians: George Copway and the Political Unconscious of the American Pastoral* in Jack Salzman (Ed.), Prospects: An Annual of American Cultural Studies. Cambridge University Press. NY. V18. 1993.

Trosper, Ronald L. *Traditional American Indian Economic Policy* in American Indian Culture and Research Journal. UC Regents. V19. 1995. 65-95.

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[1] Certainly the term "savage world" essentializes non-Western cultures. This is exactly what, in my opinion, occurred from within the Western social sciences and political apparatus at the time. The term savage seems to have been assigned to people in this era who were perceived by the European/American

[2] Similarly, Russian scientist Vladimir I. Vernadsky, hypothesized that the biosphere was actually the sum of all life and hypothesized that the biosphere is a single organism. *See Biosfera*, 1926.

[3] Further study might illuminate if the reason institutions are hesitant to do anything more substantial, theoretical or otherwise, is due to an anticipated upset of the entire order of the economic growth paradigm.

[4] The idea of *weak* and *strong* sustainability is borrowed from Auty and Brown, 1997:4-6.

[5] The indigenous peoples of the Americas have been struggling to regain their autonomy and sovereignty since the Spanish first arrived in the late 15th century and the English in the 17th century. The normal development of these people's cultures and societies were disrupted and irreversibly altered. The colonists forced the Indians off their ancestral lands and conducted efforts (that were at times cruel) to remove their traditional identities. (*see* Gibson, 1967) This history, concomitant with the present political status of the United States and its policy favouring economic globalization, places their ongoing struggles in an extremely compromised position.

[6] In the case of the indigenous peoples of the Americas, supporters from within the global civil society include academics, educated citizenry, and professionals. For example, a lot of attention was drawn to the inequitable treatment of the Indians by the colonizers during the Russall Tribunals which consisted mostly of Western anthropologists and indigenous representatives who had inculcated an heightened awareness of the dangers confronting indigenous communities. Also, non-government development organizations working with indigenous peoples in the Americas confronted first hand the problems associated with mainstream development and the resultant loss of culture and traditional communities which generated a lot of support for indigenous peoples and their causes.

3 June 26, 1945, 59 Stat. 1031, T.S. 993, 3 Bevans 1153, entered into force Oct. 24, 1945.
Preamble

WE THE PEOPLES OF THE UNITED NATIONS DETERMINED
to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and to re affirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and to promote social progress and better standards of life in larger freedom,
AND FOR THESE ENDS
to practice tolerance and live together in peace with one another as good neighbors,
and
to unite our strength to maintain international peace and security, and
to ensure by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and
to employ international machinery for the promotion of the economic and social advancement of all peoples,

l Declaration of Human Rights, G.A. res. 217A (III), U.N. Doc A/810 at 71 (1948).
PREAMBLE
Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world,

Whereas disregard and contempt for human rights have resulted in barbarous acts which have outraged the conscience of mankind, and the advent of a world in which human beings shall enjoy freedom of speech and belief and freedom from fear and want has been proclaimed as the highest aspiration of the common people,

Whereas it is essential, if man is not to be compelled to have recourse, as a last resort, to rebellion against tyranny and oppression, that human rights should be protected by the rule of law,

Whereas it is essential to promote the development of friendly relations between nations,

Whereas the peoples of the United Nations have in the Charter reaffirmed their faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and have determined to promote social progress and better standards of life in larger freedom,

Whereas Member States have pledged themselves to achieve, in cooperation with the United Nations, the promotion of universal respect for and observance of human rights and fundamental freedoms,

Whereas a common understanding of these rights and freedoms is of the greatest importance for the full realization of this pledge,

Now, therefore, The General Assembly, Proclaims this Universal Declaration of Human Rights as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction.

[8] To refer to Western culture is also slightly problematic due to the heterogeneity of the society, but in this case I am referring specifically to the values and cultural knowledge surrounding the market economy, material acquisition, and societal emphasis on money.

[9] The Universal Declaration of Human Rights protects fundamental rights regarding legal protection and freedom of expression, but it does not address universal biospheric rights. For example, all people have the right to potable water, arable land or minimally fresh organic produce, unpolluted air, or uncontaminated lands.

[10] Other questions, like what is Western culture, are also important to ask given that a large part of the criticism of its expression comes from within. This makes generalizations of Western values and ethics equally problematic. Even my thoughts and actions are steeped in Western culture yet I form them into a critique of the culture at large.

[11] Co-evolution, a dynamic process of adaptation and innovation, between people, non-human life and land, has allowed respective groups of people to survive in unique and important ways. (*See R. Norgaard, 1994, for a in-depth discussion on co-evolutionary theory*.)

[12] But that is not to say that they didn't experience a spiritual or cultural value of being able to inhabit the land or use the nature.

[13] There are many reasons why migration occurred besides the popular myth of wanting political and religious freedom. People were leaving behind feudal political land-use structures, disease epidemics, and overcrowding. For this discussion, I am only concerned with the fact that immigration occurred and those that came commonly shared experiences of resource shortages in Europe.

[14] I assume that it was not a malicious intent on the part of the Europeans to denigrate and destroy Native American cultures – however, certain historical events, e.g., the hispanization of the Indians by the Spanish, which was an intentional programme to displace the Indian identity with a Spanish one, make it difficult to interpret in a non-negative way. There is much evidence to support the belief on their part that they were in fact helping advance these primitive cultures by giving them the Supreme God, private property and European civilization. The colonizers saw a primitive and uncivilized people whom they tried to assist under a utilitarian belief that they would "extend to the Indians the advantages of a richer culture, a more advanced civilization, and most importantly, the Christian religion." (Nash, 1972:65) But even throughout that time and spanning history, there have always been some that have questioned the European treatment of indigenous people. In today's political climates such acts would be interpreted as violations of a people's dignity and human rights.

[15] Difference in religious beliefs also contradicted each other greatly. The Europeans in the Judaic-Christian traditions believed in One Supreme God who conferred upon them the natural right to use and dominate the natural world. The Native Americans believed that the creator gave the earth to all creatures and that each had a role and relationship to the other. They were taught to live in harmony and balance with the natural world.

[16] It's hard to criticize the events of the past because of the problem between data sets, time, and the increasing social complexity over time affects our decision making process in the present differently than theirs.

[17] This is an interesting commentary on the scientific method. Despite the fact that Europeans were *observing* the natural environment, they were not able to see how it had been cared for – or managed because they had a different cultural value for *how* to manage the natural environment. In this sense, observation, i.e., what a person decides to observe, can be highly influenced by a person's cultural standpoint, values, or belief systems.

[18] I am aware of the possible criticism of romanticizing the Indian. What is leisure time? If people are weaving a blanket, are they doing art or are they working? The whole idea of leisure time requires further examination. For example, does the fact that a group of people experiences abundant leisure time mean that they have a successful economy or that they are just lazy? How do we define success? Can it be quantified non-empirically?

[19] The concept of reciprocity didn't enter the European development dialectic until the 1980's when Northern development organizations (primarily emanating from Western Europe) were confronting the systematic failures of their development programs in the Third World. An attempt to be more ethical in their projects with Southern NGO's led to the movement (spearheaded by European development agencies and Towns and Development, Den Hague,) toward fostering reciprocal relationships based on mutuality and trust in decision making and program development.

[20] Ironically, the United Nations Brundtland Commission states the idea of intergenerational equity as the primary definition of sustainable development.

[21] I think it is helpful to assume that *modernity* can manifest in many different forms. Given the inordinate number of problems and the complexity of our lives living in a "modernized" world there must be other possibilities that would produce less side-effects and damage to natural systems. There are no prescribed rules or conditions for the future or the unfolding of civilisation. It may even be possible to entertain multiple modernities simultaneously. In such a view, subsistence economies may be able to exist alongside global and regional economies with varying degrees of interaction among and between all systems. Presently, though, that idea conflicts with the belief or supremacy of monism in our theoretical constructs, which reflects a singular attitude toward understanding complex problems. *See Norgaard, 1994, Chapter 1.*

[22] One area for further study would be to explore how it is possible that, while we are living in a "post-modern" world, we are still encumbered by archaic institutions of power and hegemony.

[23] President Truman's inauguration speech, January 1949, is generally considered the political beginning of the modern development era because of his use of the term "underdeveloped" and making development an official part of international foreign policy.