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Cultural constructions of the environment among Mexican and Canadian environmentalists: comparison and implications for NGO partnerships

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Meghan Lewick miraculously transformed my very rough sketch into figure 1.

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ABSTRACT

Cultural constructions of the environment among Mexican and Canadian environmentalists: comparison and implications for NGO partnerships

As environmental issues and the communities that confront them increasingly transcend borders, environmentalists in the North (wealthier countries) and the South (poorer countries) face the challenges of effective communication and collaboration. Acknowledging differences in how environmentalists culturally construct the environment is an important starting point: particularly given the tendency on the part of Northern environmentalists to assume (a) that environmentalism is essentially the same in different cultures i.e., it is all like Northern environmentalism; and (b) that environmentalism is more developed in the North. This study examines and compares the constructed environments of a sample of Mexican and Canadian environmentalists. Some significant differences are identified. The environmentalists in the two countries constructed the environment differently as a result of their distinct histories, economies and use of technology. Cultural constructions of the physical environment overlap with and cannot be separated from constructions of the social, cultural, political and economic environment.

RÉSUMÉ

Constructions culturelles de l'environnement chez les écologistes mexicains et canadiens : comparaison et conséquences sur les partenariats entre ONG

Pendant que les problématiques environnementales et les communautés qui y font face dépassent les frontières de façon accrue, les écologistes du Nord (les pays plus riches) et du Sud (les pays plus pauvres) doivent relever des défis pour pouvoir communiquer et collaborer efficacement. La reconnaissance des différences quant à leur construction culturelle de l'environnement est un point de départ important pour les écologistes; surtout vu la tendance chez les écologistes du Nord à supposer (a) que le mouvement écologiste est essentiellement le même d'une culture à une autre, c'est-à-dire, il ressemble au mouvement écologiste du Nord; et (b) que le mouvement écologiste est plus évolué dans le Nord. Cette étude examine et compare les constructions environnementales de quelques écologistes mexicains et canadiens. Elle met en lumière plusieurs différences importantes. Les écologistes de ces deux pays construisent l'environnement de façons différentes à cause des différences historiques, économique et technologique. Les constructions culturelles de l'environnement physique coïncident avec la construction des environnements social, culturel, politique et économique et ne peuvent pas en être séparées.

1. Introduction

> The geography of any place results from how we see it as much as from what may be there. Not all geography derives from the earth itself; some of it springs from our idea of the earth. This geography within the mind can at times be the effective geography to which men adjust and thus be more important than the supposedly real geography of the earth. Man has the peculiar aptitude of being able to live by notions of reality which may be more real than reality itself. Thus mental images should be of prime importance to the study of geography. (Watson 1968, 10)

In 1850, Alexander Von Humboldt said that "in order to comprehend nature in all its vast sublimity, it would be necessary to present it under a twofold aspect, first objectively, as an actual phenomenon, and next subjectively, as it is reflected in the feelings of mankind" (quoted in Saarinen 1974, 255-6). William Kirk (1963) coined the terms 'phenomenal environment' (the one of empirical facts) and 'behavioural environment' (the environment as experienced by human beings). Relph (1989) argues that there is only one environment, the environment which we perceive---as we cannot apprehend anything that we do not perceive---with or without the assistance of a variety of skills and/or technologies. He argues that there is no underlying material substratum that corresponds to objective reality.

Simmons (1993b) summarizes the contemporary debate regarding whether 'environment' "consists of all those material entities which exist on planet Earth but which are not human" or if "what we call 'environment' only exists in the human mind" (p.1). He suggests that in order to get beyond this debate,

> we accept that there is indeed a 'real' cosmos but that we are too limited to comprehend its true nature...In order therefore to reduce the mass of information to something which we can tell ourselves that we understand...and especially so that somebody can do something about it, we make constructions of various kinds...[the constructions] are all imperfect and can be only provisional" (p. 3).

The concept of cultural constructions of the environment does not play as significant a role in contemporary discussions of environmental issues as it should. While many environmentalists[1] implicitly recognize its importance in citing the damage done by misguided constructions of the natural environment (the most obvious being that of a limitless supply of resources existing primarily for the purpose of human exploitation), it is not usually to the advantage of the environmentalist to admit to inhabiting--and drawing conclusions on the basis of--one constructed environment among many possible ones.

Environmentalists must generally focus on persuading the rest of society that their ideas are grounded in objective reality. This does not encourage them to examine their own environmental constructions. The resulting lack of analysis may narrow the horizons of environmentalist thought, which may in turn limit the effectiveness of environmental work. It may also limit communication between those whose constructions vary but who must work together in order to be effective--as is increasingly the case with respect to environmentalists in the North (wealthier countries) and South (poorer countries), as well as the multiple stakeholders[2] in any environmental decision.

As environmentalists from the North and South increasingly work together, different cultural constructs (or perhaps only our lack of understanding of them) create a number of difficulties; some are discussed in the subsequent literature review. However, they also

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[1] 'Environmentalists' refers to people who believe that the natural environment is in some way threatened and that this is one of the most important concerns currently facing humanity. They are actively involved in seeking solutions to environmental problems, either as individuals or as members of groups.

[2] 'Stakeholders' refers to the interested parties in any situation. At a local level, this may mean local residents, various interest groups, etc. In the global context, all inhabitants of the planet have a stake in its continued ability to support life.

offer an opportunity to examine the constructed environments of environmentalists; for it is at the interface of cultures that the borders of the constructed environment become clearer.

The constructed environments of Northern and Southern environmentalists, and particularly, Canadian and Mexican environmentalists, are explored in the development of this thesis. The hypothesis is that there are significant differences in these constructions (contrary to some common assumptions discussed below). This study attempts to identify differences, explore their significance and possible roots and determine the implications for both North-South collaboration and how environmentalists generally think about their work. It also re-asserts the usefulness of the concept of cultural constructions of the environment and its importance as a framework for contemporary environmental debate.

Cooperation between Northern and Southern environmental non-governmental organizations[3] (ENGOs) is a relatively recent phenomenon. In Canada, ENGOs have traditionally focused on local, regional or national issues, and only a few larger groups such as *Friends of the Earth* and *Greenpeace* were connected to international networks and occasionally worked with Southern non-governmental organizations (NGOs). This situation changed during the 1980s when environmentalists began to talk about 'global environmental issues'. This was in response to increasing awareness of the borderless

[3] A 'non-governmental organization' (NGO) is an association of individuals (although individual members may change over time) who have constituted themselves as a group and adhere to a mission statement and/or set of guiding principles. An NGO is independent of government and in the context of this document is defined as a not-for -profit organization. This means that although it may generate revenue, which may be used to meet the goals of the organization, it is not constituted for the purpose of generating profits. An environmental non-governmental organization (ENGO) has a mission statement and/or set of guiding principles emphasizing environmental concerns.

nature of problems like acid rain and radioactivity and new scientific information regarding phenomena such as ozone depletion and greenhouse gases. Globalism (i.e., a global perspective) also served as a "consolidating framework, and thus an over-arching movement ideology"; a way to bring together diverse struggles (Buttel and Taylor 1992, 222).

The costs of working with a partner overseas are high enough to be prohibitive to the average environmental group whose meagre budgets are generally directed toward local work. It was only in the early 1990s, in the lead-up to the United Nations Conference on Environment and Development (UNCED) that funding from government allowed joint work between ENGOs in the North and South. In Canada, funding was made available by the Canadian International Development Agency (CIDA) because the Canadian government was keen to play an important role in the UNCED process and to support the participation of ENGOs (in response to pressure from ENGOs and also in an attempt to gain their support). This was in keeping with a wider move on the part of the organizers of UNCED to build a 'constituency' for UNCED based on NGOs (Finger 1993).

In addition to funding actual participation in the UNCED process, CIDA supported the development of 'partnerships' between Canadian and Southern ENGOs. This was not only appropriate in the context of UNCED but also responded to CIDA's desire to put more emphasis on environmental issues and on partnership (with Canadian NGOs and between Canadian and Southern NGOs). Furthermore, CIDA was also looking to build its own constituency at home (particularly in a period when interest in development assistance was waning) and thought ENGOs might be a good source of support.

The major manifestation of this support for ENGOs was the initiation of the Environment and Development Support Program (EDSP) in September of 1990. Managed by the Canadian Environmental Network (CEN)[4], it supported joint work by Canadian ENGOs and their counterparts in the South. Until the termination of the program in June 1995[5], approximately 100 projects were undertaken by partner groups. I was Coordinator of the EDSP from January 1991 until October 1993, and the experience led me to reflect on the dynamics of North-South partnerships and eventually to pursue my present research.

One of the stated principles of the EDSP was equitable partnership. It sought to avoid the paternalistic relationships of development assistance and instead promote relationships of international cooperation, mutual exchange and support. This is extremely difficult in a situation where an unequal relationship between North and South is well-entrenched and where CIDA (which espouses 'partnerships' but not necessarily equal ones) is interested in the role of Canadian ENGOs in the 'capacity strengthening'[2] of Southern NGOs. Even if ENGOs reject the assumption that the North is possessed of superior knowledge, the context of the relationship is that the North provides the money, sets the agenda and 'invites' the South to participate within the limits that it has set.

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[4] Approximately 2,000 NGOs are members of the Canadian Environmental Network (CEN). CEN serves to facilitate communication and to coordinate activities among its members. It also manages consultations between government and NGOs and carries out various projects in keeping with its members' interests.

[5] This was part of a decision by CIDA to 're-centralize' its 'decentralized funds' (funds managed by NGOs), one of which was the EDSP. The EDSP was replaced by the 'Environment and Sustainable Development Program' (ESDP), which is managed directly by CIDA.

[6] *Capacity strengthening* is a much-used term among NGOs and development agencies. It generally refers to activities that assist people (particularly those in the South) to increase their ability to achieve objectives. It stems from the principle that development initiatives should teach people to do things for themselves: 'rather than giving them food, teach them to grow it'. This appears to make some sort of sense in terms of decreasing dependency, but it assumes that people in the South lack necessary skills and technology and must be taught them/given them by people in the North. In the case of the ENGOs to which I refer, 'capacity strengthening' may refer to transferring skills such as performing environment impact assessments or designing public education campaigns; and to transferring computer technologies.

While partnerships between Northern and Southern environmentalists are influenced by the development assistance context in which they are often established, Northern environmentalists may also bring their own constraints to the possibility of equitable partnership. My observations as Coordinator of the EDSP indicated that there was a tendency on the part of the Canadian environmentalists (a tendency which it should be noted is also rooted in the 'development' paradigm) to assume (a) that environmentalism[7] is essentially the same in different cultures i.e., it is all like Northern environmentalism; and (b) that environmentalism is more developed in the North. My contact with Southern environmentalists led me to question these assumptions and eventually to attempt a comparison of North-South environmentalism in the context of the present research project.

A focus on Mexican and Canadian environmentalists seemed appropriate because the number of partnerships between groups in the two countries is increasing; within the EDSP, projects involving partnerships with Mexican environmentalists predominated. While North-South collaboration on environmental issues is generally expanding, partnerships between Canadian and Mexican groups are further encouraged by the common ground of the North American continent and the North American Free Trade Agreement (NAFTA).

[7] 'Environmentalism' refers to a philosophy or set of beliefs and also to the activities of environmentalists and the environmental groups to which many of them belong. These individuals and groups of people with their common set of beliefs constitute an 'environmental movement'.

A comparison of environmentalism in different cultures can be undertaken using a variety of theoretical frameworks, which tend to focus on environmentalism either as a philosophy or as a social movement. An experience during the early stages of developing my research project led me to believe that cultural constructions of the environment might be a critical element in making the comparison. In the autumn of 1993, I attended the EDSP Constituents' Assembly; the Assembly brought together Canadian and Southern environmentalists who had carried out joint projects funded by the EDSP. Below is an excerpt from my notes taken at the Assembly. The objective of the workshop mentioned in the excerpt was to "visualize a sustainable community"; the participants came from Canada and from a variety of Latin American countries (Mexicans predominated in the latter group).

> In the Spanish language workshop, we decided to draw our 'vision'. The Latin Americans began to draw trees and animals, sun and stars. A Canadian went up and drew a globe in an eye; another drew arrows running from stick people in North and South. "That's the sort of thing I would have drawn", I thought. It's interesting, we think in terms of global interaction and our images of arrows and planets in eyes are not reflected in nature. We see ourselves in terms of the planet rather than rooted in our communities. The EDSP encourages us to think and speak in these terms. Does it result in moving us further from being able to relate to our Southern counterparts?

This study builds on the experience of that workshop in an attempt to investigate whether there are important differences in Northern and Southern, and particularly Canadian and Mexican, environmentalism. These differences are described in terms of the cultural constructions of the environment among a sample of Canadian and Mexican environmentalists. The significance and roots of different environmental constructions among environmentalists in the two cultures are explored and the implications for North-South collaboration and environmentalism in general are discussed.

This study does not attempt a comprehensive description of environmentalism in the two countries. It is an argument against a presumed uniformity of cultural constructions of the environment in the North and South[8] but does not imply uniformity among environmentalists in either country; as mentioned in the third section of the literature review, there is considerable variation within the environmental movements in Canada and Mexico. The objective is to illustrate different cultural constructions, not in order to conclusively define the differences, but rather to acknowledge that differences exist and must be taken into consideration if ENGOs in North and South are to work together effectively.

The literature review, which follows this introduction, is divided into three sections. The first examines the concept of cultural constructions of the environment. The second documents the assumption that Northern and Southern constructions are the same; examines the conflicts between Northern and Southern constructions of the environment and environmental problems that have arisen in international forums; and discusses the potential risks of Northern constructions dominating Southern ones. The chapter ends with a discussion of some specific characteristics of Mexican and Canadian environmentalism.

The methodology chapter describes the qualitative and open-ended approach to the empirical research which was adopted and explains why this approach was most appropriate. A step-by-step description of the process through which the empirical research was carried out is then given, along with an explanation of how categories (of characteristics and differences) or 'themes' emerged. The results, in the subsequent

[8] This presumption is described in greater detail in the second section of the literature review.

chapter, are thus presented by category. Within each category, the characteristics/differences are illustrated with examples and discussed with reference to the literature. The categories are grouped under: (a) the physical environment; (b) the social and political environment; and (c) the integrated environment. The chapter ends with a discussion of how the environment is constructed. The concluding chapter summarizes the research and also dwells on its implications for North-South ENGO collaboration and for environmentalism in general.

2. Literature Review

Cultural Constructions of the Environment

> Somehow or other human societies construct the environment for themselves. To do this in a simple, pre-industrial society involved the use of material that was largely mythical and orally transmitted. By contrast, one of today's industrial communities will receive a big input from the latest findings of the natural sciences. (Simmons 1993a, 177)

In the context of international dialogues (e.g., UNCED), there is no indication that 'environment' could possibly be constructed in different ways: it is physical and can be apprehended by scientific investigation. Little attention is paid to the fact that the scientific worldview is itself a construction that greatly influences our perception of the environment.

Environmentalism, even in the West, owes less to science than one might expect. Human beings have been interested in their relationship with their environment for as far back as human interest has been recorded (Tuan 1974). The current crisis, now evidenced by science, was described in detail by environmentalists long before scientists took any interest in it (Grove-White 1993).

Given the strength of the scientific paradigm, however, it is difficult for most of us in the West to imagine that the environment is not an objective entity that is perceived in the same way regardless of culture. Marglin (1990) distinguishes between "organic for propositions the truth of which depends on the belief of agents, and...atomic for propositions the truth of which is independent of these beliefs" (p. 15). Propositions about

the environment tend to be placed in the category of 'atomic' propositions, whereas it might be more appropriate to consider them 'organic'.

> Observe that if the conventional opposition between scientific and ethical discourse has any epistemological validity, it is because normative statements are in some sense more likely to be organic, and descriptive statements more likely to be atomic. But any correspondence between descriptive and atomic is not a logical one...I share [the] view that there is a realm in which an absolute conception of the world applies, but also ... that (unfortunately) this is not the realm in which most cross-cultural disagreement and misunderstanding takes place. The beginning of wisdom in cross-cultural dialogue may be an appreciation of the limits of atomic discourse. (ibid., 15)

Whereas the limits of atomic discourse with regards to the environment are ill-defined (as was mentioned in the Introduction), there is agreement among many authors that at least some portion of what we experience as the reality of the environment is socially, or culturally, constructed. Simmons (1993b) describes how a construction develops through the process of perception and cognition:

> Perception is the term given to the neurophysiological process of the reception of stimuli from a person's surroundings...Perception is generally regarded as immediate, i.e., it follows directly upon the stimulus, and is stimulus-dependent since the nature and very presence of the perception depends on the existence and type of the stimulus. Cognition is the wider personal context of perception. It is not necessarily immediate in the same way, since it constitutes the means of awareness that intervenes between past and present stimuli and the behavioural responses of the present and the future. It cannot therefore be easily disentangled from perception although the latter is sometimes regarded as a subset of cognition. The whole complex of cultural response such as memory, experience, values, evaluation and judgement are present in the processes of cognition with the result being a construction of environment which is perhaps analogous to a map of a landscape: a representation but not the terrain itself. (p. 76)

Constructions of the environment vary considerably across cultures and across time. A number of authors have traced the evolution of environmental constructions (See Glacken 1967; Worster 1991; Ferkiss 1993; Simmons 1993a). The focus has been largely on the Western, or European, experience. Western societies have generally moved from a situation of venerating and sometimes fearing nature, to one in which domination and control of nature is seen as the natural order of things, and finally to idealizing nature. These changes in environmental constructions were integrated with or accompanied by an

evolution of religious thought (i.e., from animism to monotheism to holism) and intellectual thought (i.e., from magical to rationalism/materialism to romanticism).

Cultural construction of 'the environment' most often alludes to the natural or physical environment and inherently to the human relationship to that environment. The evolving Western constructions mentioned above describe the natural environment as a source of fear (on the part of humans) or an object of control (by humans). It is difficult, however, to disentangle constructions of the physical environment from other parts of a culture's worldview. Tuan (1974) explains how forest and savanna dwellers tend to develop vertical and horizontal cosmologies respectively, depending on their range of vision which may or may not be blocked by trees. The cosmology will then affect the perception of the physical environment. Columbus applied the *mappae mundi* of European cosmology, with their associated biblical places and beings, to the Americas and described the physical environment in those terms--even after repeated visits and prolonged contact with the 'reality' of the Americas (Flint 1992).

If discussion of cultural constructions of the environment is limited to the 'natural' as opposed to the 'human-made' environment, the difficulty of distinguishing between natural and human-made environments arises. Perceiving or not perceiving the hand of humans in a landscape is often a significant aspect within different cultural constructions of the environment. European visitors to the Americas saw jungle with no sign of human habitation in areas that were in fact cultivated (Hecht and Cockburn 1989). 'Wilderness' parks, such as National Parks, are perceived as natural whereas they may have been largely designed by humans and may also have involved removal of human inhabitants (Wilson 1991). It is also not clear whether people should be included in the 'natural

environment' and if an environment should be termed 'natural' if it is inhabited by indigenous versus non-indigenous people (and how many trappings of 'civilization' indigenous people may acquire before they become 'unnatural').

As it is difficult to isolate human and non-human elements, it is also difficult to separate the 'physical' environment from the political, social and cultural environments. Duncan (1990) describes 'intertextuality' where a culture's discourses and texts (including the text of the landscape itself) interact to construct social reality. Duncan gives the example of how power relations are maintained by the interacting elements of stories and ceremonies and location of the centre of power on a hill in a central geographical position. The perception of the physical hill cannot be separated from social and political structures or from its relationship to the person looking up to it or down from it.

The separation of the physical or natural from other aspects of the environment is possibly a particularly Western environmental construction. The mappae mundi mentioned above contained both geographical and religious elements. Pre-Columbian Mexican maps did likewise and also integrated family trees with physical landforms (Harley 1992). In a cross-cultural comparison of environmental constructions, it would therefore seem appropriate to define 'environment' as widely as possible.

Trying to make sense of cultural constructions of the environment is further complicated by the fact that cultural constructions formed in one environment have often been brought to bear on another. Thus, cultural constructions developed in Europe were applied to the

Americas (Watson 1968; Flint 1992; Arnold 1996) and eventually affected the constructions developed by the original inhabitants.

Some contemporary studies have compared cultural constructions of the environment in other cultures with Western constructions.[9] For example, Bird-David (1993) gives examples of a subject-subject relationship with the environment, as compared to the subject-object relationship common in the West. Only very recently has a small amount of attention been paid to differences in cultural constructions of the environment among Northern and Southern environmentalists and how these differences may impact on North-South dialogue and relationships.

Cooperation or Conflict? The effect of different cultural constructions of the environment on North-South ENGO relationships

> Many cultural conflicts emerge and are perpetuated, particularly between those who make decisions about the environment according to "universal norms" and groups of people who espouse the "traditional" or "local" concepts of the area in which they live. Conflicts are exacerbated because "universal concepts" are themselves ambivalent. They insist on solidarity on a regional, continental or international scale, while defining that solidarity in terms of one environmental concept developed by Euro-American culture. (Bugnicourt 1987, 99)

As environmentalists from South and North began to come together at UNCED and related forums, some authors (see Banuri 1993) noted a tendency for Northern environmentalists to assume that they were more advanced in their work as environmentalists and as a result to adopt a paternalistic approach in their dealings with

[9] It should be noted that 'Western constructions' (a term used in this paper more or less interchangeably with 'Northern constructions'. Northern being used more often when the comparison is made with the South), like Western culture, represent a generalization which serves as a basic framework but with the understanding that constructions may vary among groups and among individuals, for example, among environmentalists and non-environmentalists, and among environmentalists themselves.

their Southern counterparts. Northern environmentalists also assumed that as inhabitants of the same planet sharing a common destiny, NGOs in North and South could share a common global agenda. Esteva and Prakash (1994) emphatically deny this possibility and state that usually the more powerful NGOs (generally Northern) assume that their agenda is the collective one. To use Banuri's (1993) analogy: while most Northerners are involved in the drama of building the ark, Southerners are in a theatre on the other side of the tracks where the poor suffer on the cross so that the rich can prosper. Banuri describes the meeting of Northern and Southern NGOs at UNCED, as follows:

> While NGOs were (at UNCED) generally more responsible and more committed to the resolution of problems, their perception of global problems was also (naturally) influenced by their national or regional contexts. This does not mean simplistically that NGOs were partisans of their national interests - which they often were - but that they viewed their own experiences as definitive, not only for themselves but also for others from very different backgrounds. Given the self-righteousness of NGO activists, this often made a cross-country dialogue between NGOs more difficult than that between governments or between NGOs and governments. (ibid., 59)

Sachs (1992) expresses concern that this situation will serve to limit cross-cultural communication, perpetuate Northern domination and perhaps even result in the eradication of solutions to environmental problems if Southern ENGOs must deform their conception of their work and their world in order to fit into the Northern framework.

> The mental space in which people dream and act is largely occupied today by Western imagery. The vast furrows of cultural monoculture left behind are, as in all monocultures, both barren and dangerous. They have eliminated the innumerable varieties of being human...Moreover, the spreading monoculture has eroded viable alternatives to the industrial, growth-oriented society and dangerously crippled humankind's capacity to meet an increasingly different future with creative responses. (ibid., 4)

Some authors (see Barkin 1994; Mayor 1996) have drawn a parallel between the need to preserve cultural diversity (which includes a diversity of constructions of the environment) and the need to preserve biodiversity, in order to maintain our capacity to adapt to a changing environment. [10]

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[10] If cultural diversity is significant, as much attention should be paid to cultural extinction as to species extinction. According to Toledo (1992), only about a quarter of the approximately 1600 ethnic groups that existed in Latin America when the Europeans arrived have survived.

The preservation of alternative constructions of the environment is particularly important as Marglin (1990) indicates because the "western model of development has yet to produce an acceptable model for relationships between people or with nature" (p. 16). Some authors (see Evernden 1993) suggest that Western culture is unlikely ever to produce such a model because the scientific and development paradigms and emphasis on consumerism objectify the environment and create the exact antithesis of a healthy relationship with the environment which, according to Evernden, must be grounded in an emotional attachment.

Northern environmentalists, while rejecting many aspects of the contemporary Western worldview (such as the need for continued economic development and the value of consumerism), still tend to construct the environment within a Western cultural framework, focusing for example on the global, the universal and the abstract.

> Green globalism appeals strongly to many Northern environmentalists...because it tries to translate all important 'environmental' practices and insights into a common, comfortably modern vocabulary. This globalism, being both geographical and intellectual, satisfies a deep-felt Western (and probably, largely male-associated) need for containment and control...According to this vision, nature, human beings and sentences are characterized not by their roles in more or less self-contained, discrete communities or cultures but by their roles in single, universal, overarching systems. Conflicts which arise when one culture encounters another are regarded as either trivial or resolvable according to criteria acceptable to all sides. In line with the shift in the dominant meaning of the word 'local' from the Middle-English-derived 'peculiar to a particular place or places' to the modern 'pertaining to a position in space', local areas themselves become mere spots on a universal grid. Everyone everywhere is assumed to be playing, if only they knew it, roughly the same game. (Lohmann 1993, 159-60)

The 'capacity', which it is assumed that Northern environmentalists can pass on to their Southern partners, has been developed largely through dealing with the dominant Western culture. Thus the former find themselves with the skills required for negotiating with government and industry, presenting legal cases and conducting environmental impact assessments. While developing the ability to present their case to mainstream

society can contribute to the success of the environmental movement, it may also change the nature of the movement and the constructed environments of environmentalists.

As a result of this adaptation, some authors suggest that 'environment' (in the North) has gone from meaning almost everything to meaning something very narrow and specific like a 'resource' (Evernden 1993) or an 'amenity' (Grove-White 1993). Environmentalism is then reduced to an 'interest' to be weighed against other interests such as business (ibid.). Both Evernden and Grove-White describe how environmentalism is diminished when environmentalists agree to use the language of the dominant culture.

> ...the present dominance of this way of looking at questions of value has developed a manipulatively self-fulfilling dynamic of its own. NGOs, recognizing that this is the discourse in which our political and legal culture now frames issues most comfortably, have tended to reduce what are frequently more inchoate concerns into terms consistent with the discourse. (ibid., 23)

Environmental movements in the South that seek to preserve lifestyles which have largely disappeared in the North often focus on resisting such conceptualizations: "As nature is transformed under capitalist development and 'natural' resources are created, social struggles are initiated which resist the incorporation of nature into wider spheres of accumulation" (Redclift 1987, 159).

With the move by environmentalists in the North towards 'globalism', the dominant construction of 'environmental problems' has tended to focus on specific issues such as climate change, biodiversity and ozone depletion; abstract, technical concepts that cannot be apprehended or dealt with by the general public. They are large-scale and distant, requiring scientific expertise and government intervention. Focus on these issues moves

'environment' out of the public sphere, de-politicizes and neutralizes it in the same way that has occurred with 'development' as described by Escobar (1985).

The perceived need for high-level intervention poses another threat as Sachs (1991) points out. An international agency may be required to manage the earth in much the way the International Monetary Fund (IMF) has managed the economy. 'Environment' may replace 'development' as the new justification for continued Northern imperialism. While ensuring continued domination, this type of external control offers no solution to environmental problems.

> In the behaviouristic bent of the modern, impersonal world-view, the idea of internal constraints (relational or contextual limits) on people has been replaced by external constraints (market, state). However, these external constraints will work only if they are ubiquitous. If not, we will have the situation of 'market failure' or 'government failure'. While examples of these types of failure can be seen in various social interactions, the destruction of the natural environment is the most obvious example. To follow this line of argument, the safeguarding of the environment cannot be done as long as the dominant value is one of external constraints. (Banuri 1990, 57-58)

The Northern environmental movement is assumed to be a New Social Movement (NSM) i.e., one that arises in post-industrial countries after basic needs have been met (Buttel and Taylor 1992). NSMs often have radical and far-reaching objectives, but they are defined as being comprised of middle-class Northerners who do not have to worry very much about survival (but do have to worry about the meaning of life, which is also a valid quest). The Northern environmental movement also has roots in the natural science and conservation movements of the late nineteenth and early twentieth centuries whose members were those who had the means to enjoy the pleasures of nature. For this reason, environmental issues in the North are perceived to be removed from the means of survival and often in opposition to it (as is evidenced by the jobs versus environment conflict so prevalent in Canada); this means that in times of economic difficulty, environmental concerns become less of a priority.

Southern environmentalism has long been perceived (particularly by Northern environmentalists) as an offshoot of the Northern movement, but recently its distinct characteristics have begun to be explored. It is suggested that environmentalism in the South is linked more to survival or 'livelihood' (Redclift 1987; Taylor et al. 1993); this is not surprising as Southerners tend to be more directly linked to the natural resources that sustain them. This contact means that they also enjoy a more intimate relationship with the natural environment than Northerners (many of whom are restricted to a 'tourist' relationship) and this relationship is further enhanced by increased stability (or decreased mobility).

Southern environmentalism also focuses on links with traditional lands and, at a political level, on issues involving ownership and control of these lands (Taylor et al. 1993).[11] Southerners are more likely to live on their 'ancestral land' or in their place of origin where the history of family and community are intertwined with the history of the land itself (Tuan 1974). Thus the individual's identity is more closely linked to a particular place and environment than in wage economies where families and individuals move repeatedly in search of jobs. Even Southerners who move to cities usually maintain their links with 'home', sometimes over generations, returning for harvests and other events, or at least including it as an integral part of their identities. The same is also still the case in some European countries, although diminished, as migration to cities is a less recent phenomenon. This is much less the case in Britain where the Enclosures severed the relationship with the land (Short 1991).

[11] Environmentalism among indigenous groups in the North often shares these characteristics.

Another aspect of the Southern human-environment relationship which combines both the idea of the environment as a source of subsistence and a home is the belief that humans are part of the environment. This opposes the Northern idea that the really 'natural' environment is untouched by human beings; this idealization of wilderness, 'the lost Eden' has been prevalent in Western thought since the industrial revolution (ibid.).

A probable corollary to these constructions of the human-environment relationship is a more 'local' perspective on the part of Southerners versus a more 'global' one on the part of Northerners. After some years of being urged to 'think globally' and understand the big picture and all its inter-connections, concerns are beginning to be raised about where a global perspective may lead us. Some writers (see Esteva and Prakash 1994; Shiva 1993; Sachs 1993) think that it will reduce our ability to understand what is really happening on the ground and serve to remove control from the local communities who are most likely to protect their environments.

Ingold (1993) has explored the repercussions of the move to a global perspective from a more traditional spherical one where humans were situated within the sphere:

> the global outlook may tell us something important about the modern conception of the environment as a world which, far from being the ambience of our dwelling, is turned in upon itself, so that we who once stood at its centre become first circumferential and are finally expelled from it altogether (ibid., 31)...the movement from spherical to global imagery is also one in which 'the world' as we are taught it exists, is drawn even further from the matrix of our lived experience. It appears that the world as it really exists can only be witnessed by leaving it, and indeed much scientific energy and considerable resources have been devoted to turning such an imaginative flight into an achieved actuality. One consequence is the alleged discrepancy between what, in modern jargon, are called 'local' and 'global' perspectives. In so far as the latter, afforded to a being outside the world, is seen to be both real and total, the former, afforded to beings in the world (that is, ordinary people), is regarded as illusory and incomplete. (ibid., 35)

Ingold gives the example (which can also serve as an analogy) of how the child's experience of studying the globe in the classroom is privileged over the experience of his

or her surrounding environment.[12] Ingold also contends that the globe is a colonial image, "a pre-formed surface waiting to be occupied" and receive (Western) man's imprint and that,

> once the world is conceived as a globe, it can become an object of appropriation for a collective humanity. In this discourse, we do not belong to the world, neither partaking of its essence nor resonating to its cycles or rhythms. Rather since our humanity is seen to exist in the transcendence of physical nature, it is the world that belongs to us. Images of property abound. (ibid., 39)

This in turn can support the concept of 'management' of the earth, which Sachs (1993) finds so disturbing.

The final consequence of this discourse is to separate human beings from their natural environment; to destroy the intimate relationship to a local 'home' environment which allows them both to understand its workings and to be motivated to care for it. Those individuals and communities who manage to maintain the link find that control has been moved beyond their local sphere to the level of the 'global'.

> By framing local efforts within the context of global thinking -- the issues become abstract, stripped of their context: the local is mobilized in the cause of a global agenda that is universal in appeal but devoid of local concerns...Informed, shaped and determined by this global frame of mind, even local actions become disembodied. Instead of combating globalism, they serve to underwrite the very global order that most global Samaritans imagine they are opposing. (Esteva and Prakash 1994, 163)

According to Leff (1986; 1994), in industrialized countries the focus of environmental work is on nature conservation and policies to mitigate negative impacts, such as pollution control, within the framework of the prevailing economic framework. There is a

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[12] Shiva (1993) turns the dominant construct on its head: "The 'global' must accede to the local, since the local exists within nature, while the 'global' exists only in the offices of the World Bank/IMF and headquarters of multinational corporations" (P.154).

focus on technical solutions and trying to find a balance between conservation and growth. Concurrent with this is the discourse of the "environmental crisis, catastrophic and alarmist in its predictions, moralistic in its prescriptions" (1986, 29, my translation).

In Latin American countries, on the other hand, the emphasis is on the social, political and institutional changes necessary to make rational use of existing resources and the productive potential of underdeveloped regions in order to meet the basic needs of their populations. Leff (1986) explains some of the differences between the two, as follows:

> The general principles of environmentalism encounter richer ecological and cultural conditions and more complex conceptual and political perspectives in Third World countries than in industrialized countries. In industrial countries with more stable temperate ecosystems, the environmental movement can focus on the principles and practices of nature conservation and pollution control, while the problems associated with over-exploitation of resources are transferred to Third World countries. For the latter, located for the most part in more fragile and complex ecosystems[13], the protection of their resources and the use (*aprovechamiento)* of the ecological potential for sustainable development is associated with the transformation of the international economic order and the construction of an alternative productive rationale. (p. 36, my translation)

He then describes the way in which 'environment' combines the ecological, social, cultural and political:

> The development of this environmental potential includes deriving the benefits (*aprovechar)* [14] of the ecological potential of natural resources and the social energy contained in the cultural values and traditional practices regarding resource use in regions and local areas, via the opening of new spaces for

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[13] The 'fragile and complex ecosystem' may be a derivation of the 'inferior tropical environment' constructed by the Europeans (as described by Carillo Trueba 1991) which usually meant that it was not amenable to European agricultural and extraction techniques. The 'fragile ecosystem' has remained an important construct in Northern environmentalists' perception of the South. Although the previously widespread idea that tropical rainforests are extremely fragile and that any extraction can lead to rapid desertification (see for example Goodland and Irwin, 1965) has been tempered somewhat, 'fragility' remains important in eliciting emotional responses and a desire to protect tropical forests among Northern environmentalists. The 'fragile tropical ecosystem' parallels the idea of the 'delicate ecological balance' which as a metaphor seems to fulfil a human desire for stability and continues to play an important role in environmentalist values (Kempton et al. 1995) although it is increasingly questioned by the ecologists from whose discipline it originally arose (Solbrig 1991).

[14] In this text, as in statements from Mexican environmentalists, I had difficulty translating *aprovechar*, which in the phrases above is closest to 'make use of' but 'make use of' has a much more exploitative tone whereas 'aprovechar' has a sense of enjoying/benefiting from what is available. Similar difficulties arose with other words such as 'wilderness', which will be discussed in more detail later.

> multi-sectoral resource planning and community management and decentralization of production with the objective of generating self-sufficient and sustainable development. (ibid., 29, my translation)

For this reason, it is more appropriate to describe Southern environmentalism in a broader manner than that in which Northern environmentalism is usually defined.

> Given the diversity of the circumstances in which these emerging social movements in 'underdeveloped' countries arise and develop it would seem more appropriate to classify them as *ambientalistas* (environmentalists) and not as *ecologistas* (ecologists) for two reasons: first of all, the political, cultural and economic conditions that intervene in their forms of organization and struggle transcend those of the environmental movements in industrialized countries. The social movements situated within the environmental perspective of development in Third World countries incorporate a concept of environment which is much richer and more complete than that which is manifested in the conservationist policies of the 'ecologist' movement of the Northern countries. (ibid., 37, my translation)

Authors such as Leff have provided very comprehensive summaries of the differences that they have perceived between environmentalism in North and South. However, case studies documenting the differences between environmentalism and environmentalists in the North and South are limited.[15] The remainder of this literature review and the empirical research which follows will look specifically at the case of Canadian and Mexican environmentalism.

Comparing Canadian and Mexican Environmentalism

Neither Canada nor Mexico has ever been involved in a major study such as that comparing environmentalism in Britain, Germany and the United States undertaken between 1980 and 1982, as documented by Cotgrove (1982) and Milbrath (1984). This

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[15] One of the few examples is Lohmann's (1995) contrast of Western and Thai 'environmentalism' (his first complaint is that Western environmentalists label social movements in Thailand as 'environmentalist' whereas Thais might describe them altogether differently). He says that Western environmentalists see environmental action in a framework of a series of dichotomies e.g., society is dominated by state or market, land is public or private, attitudes towards nature are anthropocentric or ecocentric, actions are moral or self-interested, policies favour jobs or the environment and environmental action can be pragmatic or radical. Lohmann maintains that these dichotomies are not relevant to the Thai situation where land can be communal rather than public or private; where preserving the environment is often equal to preserving livelihood; and attitudes are neither anthro- nor ecocentric but something more complex that cannot be described by one word in English. This can often make communication and joint work between the environmentalists very difficult.

study, which compared environmentalists with business people and the general public, showed interesting (and somewhat predictable) cultural differences among environmentalists in the three different countries. For example, American environmentalists tended to be less concerned about limited resources than their European counterparts and were less willing to accept government controls--areas in which their opinions converged to a certain extent with the business community in their own country (Milbrath 1984).

Few specific studies of Canadian environmentalism have been published. Environmentalism in Canada is generally assumed to be typically 'Northern', i.e., very similar to European and, particularly, American environmentalism; with a primary focus on wilderness conservation, pollution control and 'quality of life' issues. Macdonald (1991) mentions the influences of American and European environmentalism and describes a mild sort of environmentalism, focused on wise resource management and the creation of parks, which grew out of and worked together with the mainstream. This does not account for the rise of an organization like *Greenpeace*, or for the radical bent of many contemporary environmentalists. Harries-Jones (1993) describes "five shades of green" (conservationists, pragmatist reformers, radical advocates, militant activists and environmentalists with links to native issues) in Toronto.

Toner (1992) divides Canadian environmental thought into conservationism (combining wise management and preservation), ecologism (holistic, i.e., focused on interrelationships and biocentric, i.e., earth-centred) and environmentalism (reformist,

seeking to mitigate and remove negative impacts of modern society)[16] and suggests that individual ENGOs may encompass a combination of these philosophies. Toner seems to echo Macdonald in stating that Canadian environmentalists have been able to combine ideas of preservation and wise use (he asserts that the wilderness preservation movement was never as strong in Canada as it was in the US) and have a tendency to work within the political process. He also mentions the early focus on careful management of resources or a 'storehouse' view of nature but says there has been a gradual shift towards perceiving nature as having intrinsic value.

Whereas some Canadian ENGOs receive a small degree of support from the Canadian government and frequently engage in consultation and impact assessment processes, Mexican environmentalists for the most part do not receive government support.[17] They must instead focus on resisting co-optation by government (Redclift 1987; Quadri 1990). The positive side of this is that lack of any real government support has encouraged Mexican environmentalists to be particularly innovative in developing alternative ways of doing things (Esteva 1993).

Environmentalism in Mexico reflects the country's range of lifestyles and economic systems. Redclift (1987) maintains that Mexico has two environmental movements: a middle-class urban one and a rural peasant/indigenous one. While most of the English

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[16] This categorization may create confusion when making the comparison with Mexico, where ecologist (*ecologista*) is used to describe someone with a scientific focus who is more likely to have a more narrow and conservationist perspective, and an environmentalist (*ambientalista*) integrates social, economic, political concerns and is generally considered to be more radical. In Québec, *écologiste* and *environnementaliste* are increasingly used in a way similar to the Mexican terms.

[17] My empirical research indicated that this is beginning to change and that SEMARNAP (the Mexican Secretary of State for the Environment, Natural Resources and Fisheries) is increasingly a partner in environmental education and sustainable development projects.

language literature focuses on the former (see Fox and Hernandez 1992; Simonian 1995), many Mexican authors stress the importance of the latter (see Toledo 1992; González Martinez 1994; Leff 1994). Toledo (1992) explains that the intersection of increasing poverty and degradation of the natural environment (which is often one of the roots of poverty) has given rise to the development of strong indigenous and peasant political movements which incorporate environmental issues as an integral part of their discourse. Toledo also points out the great significance of peasant and indigenous groups for the Mexican environment; as a result of land reform in the context of the Mexican Revolution, approximately half of the land, including 70% of the forests and 80% of agricultural land, belongs to either indigenous communities or *ejidos* (peasant communities who own land communally).

The rural and urban movements do not exist independently; they frequently borrow from one another's ideologies and work together (Garcia 1992). Several authors have documented examples of this, particularly in Oaxaca (Blauert and Guidi 1992; Campbell 1993) and Quintana Roo (Prell 1994). Often the link is through *asesores* or technical advisors who tend to be urban-based professionals who work in rural communities; they originate in or are linked to 'the generation of '68' (Toledo 1992).[18] There is also a third, less well-documented partner, the urban poor, who in their need to create homes out of wasteland, and to reuse, recycle and rely on local skills, also join the alliance (Esteva 1993).

[18] The 'generation of 68' is also evident in the work of many Mexican writers. It is interesting to note the prevalence of Marxist analysis in Mexican environmental writing (a tendency which is notably absent from contemporary Northern work).

Quadri (1990) describes four tendencies within Mexican environmentalism: (a) libertarian or anarchist, which he believes had a catalyzing effect on the environmental movement; (b) conservationist, linked to American conservationists and well-supported by international organizations; (c) alternative technology, with strong links to poorer rural and urban communities; (d) analytical/structural, where links are drawn between environmental problems and social, economic and political structures and institutions.

Leff (1986; 1994) situates environmentalism in Mexico and Latin America in the context of development, i.e., he states that environmentalism as theory and social practice has arisen in response to environmental problems caused by development. Environmental problems are one aspect, along with social and economic problems, of the dominant pattern of production, distribution and consumption. Leff believes that Latin America has been developing its own philosophy of environmentalism whereby the environment is perceived as offering the productive potential for alternative development rather than as a cost of or a limit to growth. Leff also stresses the heterogenous nature of the movement; it has its roots in a variety of popular struggles and provides the space for forming alliances among a variety of political actors all of whom are engaged in a struggle for democratization.

Some differences in cultural constructions of the environment--and as a result environmentalism--in Canada and Mexico may be related to the different environmental histories of the two countries. The indigenous people of what is now Canada did not leave many marks visible to Europeans and this allowed the Europeans to feel they were entering a pristine wilderness. The Europeans began to form their ideas of the Canadian environment on that basis. The early settlers confronted the wilderness with awe and fear,

which was in keeping with European perceptions of wilderness at the time, and negative attitudes were further encouraged by the difficulty with which the settlers adapted to their new and 'hostile' environment (Toner 1992). Canada continued to be influenced by European thought during the Romantic period and, given the relative abundance of wilderness areas in Canada and the resulting importance of wilderness in the Canadian identity, Canadian romanticists, and later environmentalists, easily found a place for themselves within this philosophy. So few indigenous people survived the settlement of Europeans that their particular constructions have had little impact on how settlers and later Canadian environmentalists saw their environment.[19]

In Mexico, there is hardly a landscape that does not contain some sign of human habitation (Bonfil 1994). When Europeans arrived, they were impressed by the size and sophistication of the Aztec cities (MacLaren Walsh and Sugiura 1991). The Valley of Mexico was home to millions of people and the Europeans could hold no illusion that they had landed in a place untouched by humans. When Romanticism developed in Europe and the rest of North America, it had little impact on Mexico, which was still predominantly rural, with little evidence of the urban horrors of the industrial revolution which inspired the Romanticists. Furthermore, the Mexican elite, following Mexico's independence in 1821, focused on modernization and economic growth; the ideas of the Romanticists ran completely counter to their agenda (Simonian 1995). Even among the minority who idealized nature, the focus was not necessarily on the pristine. Simonian describes the work of "Mexico's most famous transcendentalist", the landscape painter José Maria Velasco (1840-1912), who painted the "Valley of Mexico, with its hardened boulders, lofty volcanoes, and transparent air, all of which he imbued with a sense of

[19] This has begun to change very recently as First Nations groups have increasingly framed their concerns in terms of environmental issues and have begun to interact with non-native environmentalists.

tranquility and mysticism. He believed that the valley was a demonstration of the perfection of God" (ibid. 48). According to Simonian,

> In addition to depicting the works of God, he portrayed the works of human beings: the railroads, factories, and power plants. He neither glorified nor villainized these new fixtures. For Velasco, they were simply a part of a changing landscape. (ibid., 48-49)

McHarg (1971) notes the influence of Moorish constructions of the human-environment relationship on the Spanish which was still strong at the time of their arrival in the Americas. The Moors, according to McHarg, integrated the natural environment into their architecture and urban design (at a time when the British and French favoured walled gardens, controlled and sheltered from wilderness). He mentions that trends in England later became much more favourable to integrating the natural environment into space occupied by humans, but that this had limited impact on North America.

Some work has been done with regard to contemporary attitudes to the environment in Mexico and Canada. Graham (1991) writes about Mexican environmental attitudes and suggests that Mexicans are inherently anti-environment, but his perspective is narrow and he ignores environmentalists. Similar studies of attitudes have been undertaken in Canada (MacDonald 1991) but they have tended to focus on whether 'environment' is important to Canadians rather than what it means to them.

Mumme (1993) has looked at how American, Canadian and Mexican environmentalists worked together in the context of the NAFTA negotiations. His focus is on how environmentalists affected the process and how the experience changed the ENGOs, e.g., greater activity in certain regions, particularly along the US-Mexico border and in Mexico

generally; increased interest in trade and environment; and conceptualization of environmental issues in a trilateral context.

I am not aware of any study comparing environmentalism in Mexico and Canada. This will be the focus of my empirical research, as described in the subsequent chapters.

3. Methodology

Background

Studies that have analyzed and compared environmentalism have generally found the most significant aspects, or defining characteristics, to be how the environment (in its present state) is perceived and how an ideal environment is imagined (Cotgrove 1982; Milbrath 1984). Empirical research among environmentalists regarding their environmentalism has generally been carried out through questionnaires or interviews. Questionnaires are particularly popular because they allow for a large number of respondents and therefore increase statistical validity. The largest comparative study, that of environmentalism in Britain, Germany and the United States carried out in 1980 and 1982, was based entirely on questionnaires and at least one of the researchers admitted that this was not the most appropriate method and that it was chosen due to budget limitations (Cotgrove 1982). Another researcher (Milbrath 1984) acknowledged the tremendous impact that the wording of questions can have on the response. By adding the word 'government' to the 1982 surveys (a word thought to be implicit when absent from the 1980 surveys) to a question regarding acceptable levels of planning, the general response changed dramatically.

Kempton, Boster and Hartley (1995) chose to carry out open-ended interviews in order to elicit 'environmental values' and then presented descriptions of these values to a wider audience in order to gauge general agreement or disagreement with them. This approach ensures that researchers 'set the agenda' to a lesser extent than if they themselves design

the questionnaire from the outset. However, when the ultimate goal is to measure the prevalence of certain ideas and thus find the sentences or paragraphs with which large numbers of people agree, the original complex views expressed in the interviews are reduced to simpler, and often less meaningful, statements.

> To understand one's own perception of the world, then, one is obliged to uncover not only the responses to written questionnaires...but also to delve into foundational myths which underlie our civilization's value choices. (Buttimer 1989, 266)

Burgess, Lamb and Harrison (1988) are critical of the way in which studies of environmental values have generally focused on objectifying and quantifying human response to the environment.

> ...despite the recognition of the cultural embeddedness of environmental values, empirical social research is disappointingly narrow and limited in its focus...efforts by environmental psychologists to research the cognitive dimensions of the aesthetics and visual experience of landscape may be criticised for their reductionist concern to isolate individuals and landscape components, and for a reliance on psychometric tests which reveal little about the social and cultural contexts in which values are shaped, and less about the language which people would themselves use to describe their landscape experiences. Within geography, the received wisdom would seem to be that 'ordinary' people, unlike environmental 'experts', are unable to describe their 'inchoate' feelings for landscape; a view which arose from the inadequacy of standard questionnaires in elucidating landscape values, and which supported attempts at ever more complex systems of numerical evaluation of landscape. We do not accept this position, for we believe that it is the methodology that is flawed and not peoples' sensitivities or their capacity to express their values and attachments to places and landscapes. Quantitative analyses are not suitable media for discovering feelings and meanings for environment. (p. 309)

The authors go on to cite a number of examples of stereotypical responses to stereotypical questions in questionnaires and interviews.

Buttimer (1989) points out that the application of quantitative methods to studies of the 'behavioural environment' is rooted in the 'behavioural environment'[20] of geographers (i.e., the trends or fashions in the study of geography over the past few decades) rather than any clear indication that the most appropriate methodology is quantitative. The

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[20] Buttimer employs William Kirk's (1963) term, the 'behavioural environment', to refer to the environment as experienced by human beings.

author also mentions that rigid application of traditional western academic methodology may prevent us from understanding perception and inhibit cross-cultural communication.

> Our analytical modes of perception in the West have tended to fragment and ossify parts of sensory experience, submitting each to special examination. In that very process one may have truncated the prospect of establishing dialogue with researchers on perception in other civilizations. All of us are perhaps so imbued with the inherited myths of our respective cultures that we fail to recognize the challenge of exploring myth and metaphor -- that realm of symbolic transformation which humanity has used to gain some kind of comprehensive understanding of its physical environment and then to articulate insight on its own environmental experience. In short, there are realms of environmental experience which may have escaped the analytical net of conventional models in Euro-American environmental perception research: the symbolic, the mythical, and the metaphorical. (ibid., 267)

It would appear that an appropriate methodology for exploring constructions of the environment, particularly in a cross-cultural context, would feature an open-ended approach where intervention by the researcher was minimized. Burgess, Lamb and Harrison (1988) suggest 'the medium of the small group'.

> The crucial importance of the small group is that it enables individuals to share in a discussion within a social setting which in many ways mirrors those outside the group. The group enables researchers and group members to explore together the embeddedness of environmental experiences and values within different cultural contexts...the use of small groups is not yet common within geography, although, in applied qualitative research, considerable use has been made of group discussions. (p. 310)

> (This sort of exchange is) entirely appropriate for the study of environmental values and meanings. The group is empowered to raise its own 'agenda' and to develop its own associations and narratives. And to do so without the interference or direction of a researcher who given the current level of knowledge about the significance of places and landscapes, most probably does not know what it is that people want to say. (ibid., 314)

The group format is particularly appropriate for research with popular organizations and movements because they function naturally as groups and are more than the sum of their members whose responses would be captured by questionnaires or interviews.

The methodology chosen for this research is based on the approach of "Exploring Environmental Values through the Medium of the Small Group" (Burgess, Lamb and

Harrison 1988).[21] Whereas those researchers convened their own small groups, data in this case were collected through participation in existing group meetings. While this often meant waiting for the appropriate information to present itself, it also further diminished the risk of the researcher setting the agenda. This was particularly important given the cross-cultural nature of the research.

Research Design

1) Document Review

Prior to attending meetings of ENGOs for the purposes of this research, documents related to EDSP activities during 1991-1994 were reviewed. These documents (including reports and meeting minutes, as listed in appendix I) constituted an initial data source and also provided sufficient information to develop a framework for observation at meetings.

During a first review of the documents, sections were highlighted which contained information about how ENGOs participating in the EDSP (from Canada and a variety of places in the South) saw or understood:

(a) their own environment;

(b) the environment of their partners;

(c) a preferred or ideal environment;

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[21] I initially experimented with re-creating a more controlled version of my experience at the EDSP Constituents' Assembly (mentioned in the Introduction). I asked Canadian and Mexican environmentalists to draw 'environment'. I often got caught up in a discussion as to what I meant by 'environment' and did I mean 'their' environment or 'the' environment. I found that results varied enormously depending on the language I used or how the individual understood the question. Finally, I decided to drop the structured approach and adopt instead a methodology based on the 'medium of the small group'.

(d) differences of any kind between themselves and their partners.

During a second review, focused on the highlighted sections, 'themes' which were addressed in the sections were noted in the margins. This provided a miscellany of 'keywords', e.g., communication, economic, garbage, global, technology, time, wilderness, women.

The third review focused on the keywords in the margins. The themes were arranged into categories or dichotomous pairs. These were used as headings (e.g., role of women, global/local) in a table which served as a framework for the participant observation which followed. It should be noted that the framework served as an initial guide and additional headings were added throughout the research process. The highlighted sections of the documents were set aside for later review during analysis of the full set of data.

2) Participant Observations at Meetings

The meetings (listed in Appendix I) chosen as data sources were ones which:

(a) brought together a number of Canadian or Mexican environmentalists from different ENGOs (at least ten groups were represented at each of ten meetings);

(b) were long enough (one day or more) and broad enough in focus to make it likely that a variety of issues would be discussed.

The characteristics of the individual environmentalists varied considerably. In both Canada and Mexico, there were 'professional' environmentalists who worked full-time on environmental issues; their education levels varied, as did their focus on research or activism or community organizing, but middle class individuals of European origin with post-secondary education predominated. Most environmental groups are, however, largely volunteer-driven and while the professionals tended to be over-represented at environmental meetings because of greater availability, they were still out-numbered by the people who had other 'day jobs'.

The variation among the non-professionals was tremendous, particularly in Mexico, but also in Canada; they included teachers, students, homemakers, peasant farmers, doctors, civil servants, operators of small businesses and local politicians. Ages varied greatly also (again particularly in Mexico), from about 14 to 90. Approximately 5% of the Canadian environmentalists involved in the study were francophones and the remainder were anglophones.

Data were collected as follows:

(1) participation in the meetings and note-taking (including recording of quotes verbatim);

(2) approaching ENGO representatives who participated in the meetings for further discussion of issues raised in the meetings, either during breaks or through a later visit to their place of work (see unstructured interviews below);

(3) notes were typed up and sections were highlighted which corresponded to:

(a) how individuals described: their own environment; the environment of their counterparts in the North or South; an ideal environment; or differences of any kind between themselves and their counterparts in the North or South;

(b) the headings in the previously prepared table;

(c) other recurring themes which seemed to play an important role in how the environmentalists saw themselves or their work.

(4) reference to minutes or proceedings of the meetings to verify and make additions to notes; reference to documents produced by participating ENGOs to verify or more completely understand the issues raised;

(5) expansion of the table to include new headings, if necessary.

3) Unstructured Interviews

Unstructured interviews were used to validate observations and/or develop a more complete understanding of the data gathered at meetings. The approach remained that of the medium of the small group in that two or three members of a group were involved and intervention by the researcher was minimized. Many of the interviews were continuations of the discussion during the larger meetings (some took place during breaks and after meetings).

Unstructured interviews were carried out with representatives of fifteen NGOs (listed in Appendix I). All of them had participated in at least one of the meetings previously observed and thirteen had been involved in EDSP partnerships between groups in Canada

and Mexico. The other two were linked to significant events (in Tepotzlán, as described later) which took place during the period of my fieldwork in Mexico.

Data were collected in the small group setting as follows:

(1) participation in discussions with two or three members of a group either at a larger meeting or at their place of work. The discussions lasted an average of about two hours.

(2) The researcher generally participated in discussions rather than directing them; conversations did naturally turn to the work of the ENGO, their experience with the EDSP-supported partnership and issues raised at larger meetings. When these issues did not naturally arise, the researcher asked one or more very general questions, such as:

(a) What did you mean when you mentioned _____ during the meeting? Tell me more about _____ which you mentioned during the meeting.

(b) Tell me more about your work. How did you get involved in this work?

(c) How did you find the partnership with the Canadian/Mexican ENGO? How was your visit to Canada/Mexico?

(3) Notes were taken during the interview and further notes were written up following the interview.

(4) Notes were typed up and sections were highlighted which corresponded to:

(a) how individuals described: their own environment; the environment of their counterparts in the North or South; an ideal environment; or differences of any kind between themselves and their counterparts in the North or South;

(b) the headings in the previously prepared table;

(c) other recurring themes which seemed to play an important role in how the environmentalists saw themselves or their work;

(4) reference to documents produced by participating ENGOs to verify or more completely understand the issues raised.

(5) Expansion of the table to include new headings, if necessary.

4) Analysis

The highlighted sections of the notes from the document review, participation in meetings and unstructured interviews were reviewed together and cross-referenced to the expanded version of the table. Under each category, the context(s) in which the theme had arisen was noted (e.g., meeting with ___ , _____'s newsletter, etc.), as well as additional details (e.g., women's participation linked to Christian base communities). Headings with multiple entries were retained and ordered (matched with other relevant headings, placed in logical sequence, etc.) in order to create the categories in which the results are presented in the next section. Relevant examples and quotations were then placed in each category in order to document the appearance of each theme, explore it in further detail and discuss its significance.

In presenting the results, quotes are used extensively; this seemed to be the most appropriate way to convey the views of the environmentalists in their own words. The quotes are numbered and the numbers correspond to different speakers. Numbers preceded by 'C' represent Canadians and by 'M', Mexicans.

While it is possible to choose a methodology that will encourage the researcher to view things from another perspective, there are limits. During the literature review and in subsequent stages of the research, the Western (or Northern) tendency to sectoralize and dichotomize emerges as a significant difference; both in relation to the development of concepts by academics or the choice to focus on 'environment' to the exclusion of other issues by environmentalists. While conscious of this, I chose 'comparison' as a research objective and the 'natural' categories I perceive within the data set tend toward dichotomies.

4. Results and Discussion

As mentioned in the previous chapter, differences in the cultural constructions of the environment among the Mexican and Canadian environmentalists will be documented and explored by category or theme; the themes/categories themselves emerged in the course of the research. Within each category, characteristics and differences are illustrated with examples and discussed, often with reference back to the literature. The categories are grouped under constructions of: (a) the physical environment; (b) the social, cultural, technological, political and economic environment; and (c) the integrated environment. Division by category and group helps to organize the information but it should be noted that there is much overlap among the categories and among the groups. The chapter ends with a discussion of how 'the environment' is constructed and this is illustrated by a table which will also serve to summarize the results.

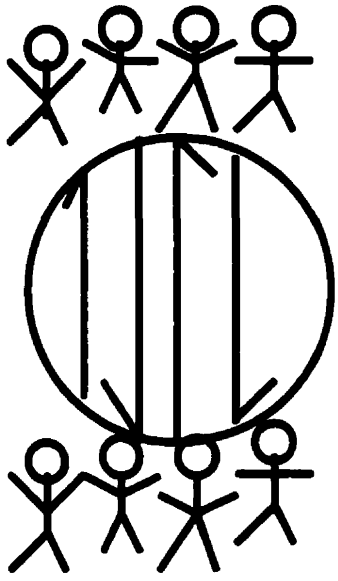
The Physical Environment and Human-Environment Relationships

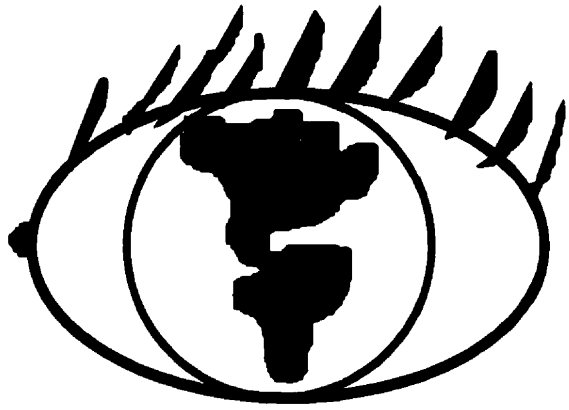
This represents an appropriate starting point because studies of cultural constructions of 'the environment' usually focus on the physical environment. As indicated in the literature review, human-environment relationships are generally inherent in constructions of the physical environment. This category is divided into several sub-categories of constructions of scale, harm, benefits and an ideal environment. The extent to which constructions of the physical environment are influenced by constructions of the social, cultural, political and economic environment will quickly become clear.

Scale: local versus global/concrete versus abstract

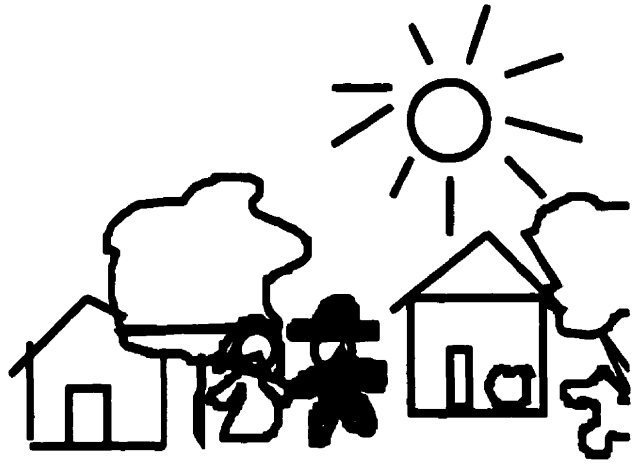
As mentioned in the Introduction, participants at the EDSP Constituents' Assembly were asked to visualize a 'sustainable community'.

Copies of sketches by Canadian participants:





Copies of sketches by Mexican participants:



The global symbolism is very clear in the two pictures drawn by Canadians. North-South cooperation and a global vision are seen as important characteristics of a 'sustainable

community'. The Mexicans focused more on the specifics of their local situation, i.e., healthy habitats for turtles and humans. The use of abstract symbols in the Canadian case, versus the portrayal of concrete objects in the Mexican case, is also apparent. These differences were also manifested in other situations, as described below.

During the *Escuela de Promotores Ambientales*[22], information was often presented in a local context, even when the focus was on scientific concepts. For example, when the water cycle was described, it was in terms of the local area and a picture of the local mountains and valleys was used to explain it. When the participants in the Escuela played the 'EcoJuego' (an environmental game developed by Margarita Hurtado of CED), their knowledge of the local system was impressive; they knew where their water came from and went to, and where their food was grown. When I played the game with a similar group of people in Montreal, they had limited knowledge of local systems and found the large number of questions pertaining to them irrelevant. They had also learned about the water cycle, but using schematic diagrams which did not pertain to any particular locality. The Social Investment Organization (SIO) had a similar experience when they facilitated the use of the game with organizations in Toronto. They drew the conclusion that in order to be relevant to the Canadian context, the EcoJuego would have to be adapted particularly with respect to diminishing the number of questions dealing with both rural and local issues.

The participants in the Escuela knew that most of their fresh food came from Cuautla (a neighbouring area) and were somewhat shocked to think that some portion of their food

[22] The 1995 "school for environmental activists", which I will continue to refer to as the 'Escuela', took place over six Saturdays in July and August at the Centro de Encuentros y Dialogos (CED) in Cuernavaca, Morelos. Environmentalists from throughout the state of Morelos and from Mexico City participated.

came from other parts of Mexico which they could not identify. This was quite a contrast to Canada where the environmentalists did not pay very much attention to the many origins of their food and took it for granted that it should come from many sources.[23] Apples imported from the North have become widely available in Mexico fairly recently and participants in the Escuela wondered if it would be appropriate to compost organic material from another type of ecosystem. This is not an issue that was raised in discussions or educational materials related to composting in Canada.

Some Mexican environmentalists commented on the global/local and concrete/abstract distinctions:

> When Canadians talk about environment, they talk on a very global level; everything affects everything, local issues are not so important to them. They are interested in people in South Africa and not the indians [in Canada]; in the aspects of their culture, their paintings, yes, but not the indians. They sell their things in expensive art galleries but they have no direct contact with them. (M6)

> There is also a focus [in Canada] on more abstract issues; here people don't know what ozone is. They probably teach about ozone in school. But people think that can't kill me, at least not now--not having water can kill me. (M5)

All of the Mexican environmentalists with whom I came into contact were rooted in local issues and environmental issues were almost always discussed in a local context[24]. The

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[23] This was demonstrated to some extent by the food served at the meetings. The Mexicans paid considerable attention to ensuring that healthy and indigenous foods were served. The Canadian meetings tended to be catered by hotels whose approach to food was distinctly at odds with any respect for health and environment. It should be noted, however, that at most meetings a handful of Canadian environmentalists did complain and two of the smaller meetings were very noteworthy exceptions to the rule. It should also be noted that a number of ENGOs have begun to pay attention to the sources of food in the context of their work on organic agriculture and fair trade. The Quebec Public Interest Research Group (QPIRG), for example, has been involved in these issues for a number of years.

[24] It should be noted, however, that in Mexico as in most of the world, experience is increasingly mediated by the mass media. Arizpe, Paz and Velazquez (1996) were told (in answer to a survey question) that pollution was the 'World's Greatest Danger'. The researchers were confused by this response in the Lacondona Rain Forest area where pollution did not seem to be a problem but soon realized that their respondents were reacting to televised reports regarding air pollution in Mexico City.

Canadians were also concerned about their local environment but there was more of a tendency to discuss general problems and also to focus on the 'abstract issues' mentioned above. As discussed at length in the literature review, the move to the global and abstract can remove the locus of control from individuals and communities. This may make Mexican environmentalists particularly uncomfortable because (as is also mentioned in the literature review, and again later in this section) the struggle for control and distrust of government and foreign powers are important characteristics of Mexican environmentalism. The constructed environment of Mexican environmentalists is one in which the physical environment is the object of an enduring power struggle. Canadian environmentalists, on the other hand, for whom the 'global' looms large, may have difficulty with too great a focus on the local because of concerns that impact will be too limited.

The local and concrete versus global and abstract constructions have some parallels in the constructions of direct and indirect contact with both positive and negative aspects of the environment, which will be the subject of the next two sections.

Harm: direct versus indirect contact with negative environmental consequences

> First the baby and the grandmother got sick and now the whole family can't get up! (M21, speaking during a sketch in which the other actors were rolling about the ground and moaning)

> There are a lot of birth defects in the area and a high rate of cancer but it's hard to get anyone to acknowledge the link. (C3)

> He said they had a container that would contain the stuff perfectly for 50 years, and we said, "What about after fifty years?" (C5)

In the second session of the Escuela, participants were asked to prepare 'sociodramas' on the theme of problems related to air, water and garbage. During their sketches participants

persuaded one another of the benefits of recycling, composting and appropriate disposal of wastewater in very concrete terms i.e., other forms of waste disposal entailed major health risks. Some actors played people suffering from various major illnesses related to garbage. There was a very clear link to direct human health consequences in the six sketches presented.

Mexicans often suffer the immediate, direct and very evident impact of environmental damage. The garbage is in the ravines for all to see and can often be directly linked to disease (there was an outbreak of dengue fever in Morelos during the period of my fieldwork which was linked to garbage dumps). Poor waste management in a primary agricultural area (Cuautla, Morelos) led to contamination of the groundwater so quickly and so seriously that the government prohibited the planting of crops (this situation was repeated in other agricultural areas throughout Mexico). These sorts of incidents were frequently mentioned by the Mexican environmentalists, whereas their Canadian counterparts more often talked about the endless task of having to scientifically demonstrate indirect links--between toxic substances and cancer, for example.

One factor in how the Canadian and Mexican environmentalists saw the link between environmental damage and harm to human health was the prevalence of systems to remove waste from its source.[25] In Canada, the sewage system carries the wastewater away and the garbage truck removes the garbage. In Mexico, the majority of homes have

[25] The understanding of cause and effect may have geographical as well as technological roots. Simonian (1995) points out that Mexicans were referring to the importance of maintaining forest cover in order to ensure the well-being of whole ecosystems for some time before other North Americans emphasized this aspect--Canada and the U.S. initially focused on protecting forests to ensure timber resources. This is possibly because Mexico (or perhaps heavily populated areas of Mexico) were more susceptible to environmental changes such as soil erosion, flooding, micro-climatic changes, etc. which resulted from deforestation. It may also be due to the influence of certain Mexican thinkers, such as Miguel Angel de Quevedo (1862-1946), who made the connection.

no sewage system at all and the waste is most likely to remain in one's own backyard; garbage, if it is collected at all, is dumped nearby.

Interestingly, while the Canadian environmentalists were horrified by the 'environmental situation in Mexico', The Mexican environmentalists almost seemed to see it as an advantage. All of the Mexicans who had visited Canada commented on the danger of the hidden nature of Canadian environmental problems.

> Canadians don't just come from another country, they come from another planet. When you see a postcard of Mexico, it's not true, it doesn't represent reality. You know that just outside the frame there is garbage all over the place. In Canada, it's just like in the postcards. Maybe not, things are just better hidden there. The City of Victoria is throwing waste into the sea, you can't really see it. Canadians are horrified when they come here and see the piles of garbage in the river. (M6)

> Technology, big systems create distance. They make us forget where the water comes from and where it goes. (M15)

Two Mexicans who had visited Quebec City wrote an article describing three 'events' of which the first is a visit to the incinerator in Lévi, which the manager proudly describes as a technological marvel:

> "Everything is antiseptic", the manager indicated (again with pride), "there's no smoke or smell. The employees don't touch the garbage. All the processes are mechanized, even the neighbours wouldn't notice that there was an incinerator here if it wasn't for the constant flow of trucks bringing garbage in and taking away metallic waste to be recycled, and carrying the other non-incinerated remains of the garbage to be buried far from here." (González Rodriguez and Esquivel González 1991, 43, my translation)

The second event is a visit to a paper recycling plant where another proud employee explains: "Canada is one of the countries which produces the most garbage; however it is first in the world with regard to recycling processes." The third 'event' is a poster at Laval University advertising a presentation entitled "Let's recycle our ideas" which leads the authors to reflect on the term 'ecological consciousness' (ibid.). They divide the term into

its two components and quote dictionary definitions for 'consciousness' (the faculty possessed by humankind to know its own reality and to judge this knowledge) and 'ecology' (the study of the relationships of organisms in their environment). By extension, the authors say, ecological consciousness supposes the faculty of knowing the relationships of organisms in their environment and the ability to judge this knowledge. Therefore (and the authors do not state this explicitly), Canadians have in effect, through technological and organizational 'success', put themselves outside the realm in which ecological consciousness is possible (and therefore, created a 'behavioural environment' which is particularly far removed from the 'phenomenal' one).[26]

Another reason that Mexican environmentalists construct potential harm in terms of direct and visible effects on human health is that immediate problems are so great (particularly access to clean water) that people have little time to dwell on longer-term issues such as ozone depletion or the presence of carcinogens. This means that collaborating Mexican and Canadian NGOs may find themselves out of synch when it comes to health issues both in terms of their approach (community capacity strengthening versus research and advocacy, as will be discussed later) and the current issues. While Canadians are presently worried about persistent organic pollutants (POPs), Mexicans must still concern themselves with cholera.

While it is perfectly reasonable that cultural constructions of environmental problems centre on the issues that appear most pressing in a particular context, such differences can

[26] It should be noted that the article (i.e., González Rodriguez and Esquivel González 1991) is not a critique of Canada, it is a general discussion of the human-environment relationship and the 'events' in Québec are presented as examples of something present in all modern societies. What interested me, however, was the authors' response to their experiences during their visit to Québec, which was so similar to that of other Mexicans I encountered.

lead to conflicts and a sense that there are wider cultural differences, e.g., a focus on the long-term versus short-term[27] or putting more emphasis on humans or environment[28]. An example of this situation is the case of DDT. Mexico is under considerable pressure from the rest of North America to eliminate DDT. The use of DDT is now illegal in Canada and the United States but it continues to be dispersed across the continent from Mexico. The Canadian environmentalists were not generally able to think of any justification for using DDT but the Mexican environmentalists were often prepared to put immediate community health first and agree to the use of DDT in a case where it might be the only available means to reduce the spread of malaria, and potentially death. The dilemma of prioritizing short- or long-term and one group of human beings versus the wider environment and less direct impact on other human beings is probably impossible to resolve philosophically. The most appropriate response is perhaps to recognize that both perspectives exist and have value and to concentrate on looking for alternatives (e.g., other forms of controlling malaria, in this case) which do not involve the sacrifice of one or the other.

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[27] Some Mexican environmentalists mentioned that they did perceive this difference:

M6: In Canada, people seem to think a lot about their retirement.

M5: In Mexico, people don't think in the long term, they think about what they're going to eat. There is a different concept of time.

M6: In Canada, people live 20 years in the future -- how awful!

M5: The different concept of time has a major impact on how we conceptualize solutions to environmental problems.

[28] This is addressed in detail later on in this chapter.

Benefits: survival versus quality of life and long-term economic well-being; access to resources versus conservation and wise use[29]

> Getting out to the lake on weekends keeps me sane. (C3)

> Wilderness sustains us spiritually. (C21)

> It's not in anyone's long-term interest to keep cutting at this rate. (C8)

> It doesn't matter if it's a reserve. Of course the local communities are going to cut the wood. They don't have anything else. (M18)

> The problem is that people get pushed off their land somewhere else and then they end up clearing the forested land for agriculture. (M3)

> The government grants permission to the wealthiest neighbourhoods to extract water while the poorest neighbourhoods are not able to afford the costs of extracting the water. While the poor suffer from the shortage of this life-sustaining liquid, the rich continually waste it. (CED 1995, 2)

In Mexico, environmental issues and the concerns of the poor intersect in questions of survival and the related issue of access to and control of land and resources. The Mexican environmentalists frequently offered the following analysis: Peasants and indigenous people (who represent a large part of the Mexican population) derive their subsistence directly from the environment and can do so sustainably when provided with their fair share of land and resources. However, government and large land owners interfere with this potentially sustainable livelihood by forcing people onto smaller and more marginal pieces of land. Faced with no alternative, they increase their pressure on the land and resources in an attempt at short-term survival; environmental damage and decreased capacity of the land to sustain the people results. Environmentalists must work towards remedying this situation. In other words, according to the Mexican environmentalists' cultural construction, a significant role of the natural environment is to provide for the

[29] This issue is discussed here because it deals with construction of the physical environment but it demonstrates how political and social frameworks cannot be separated from the physical environment.

sustenance of the people and equitable access to the resources required for survival is something that environmentalists must strive towards (for the benefit of the people and the environment--although the two were not generally distinguished during the discussions).

The Canadian environmentalists tended to blend ideas of conservation for its own sake and conservation (and wise use) for the future benefit of humans. The value of the natural environment in providing quality of life (recreational, aesthetic, emotional and spiritual) as well as long-term economic benefits was mentioned repeatedly. The Mexicans also appreciated the aesthetic aspects of their environment (although they appeared to have greater appreciation for environments which blended the human and the natural than their Canadian counterparts) and the urban dwellers among them very much enjoyed getting out of the city on weekends--although often in groups, rather than seeking the solitary experiences which attracted most of the Canadians. These aspects were, however, overshadowed by the issues mentioned above.

Discussions among the Canadian environmentalists were often based on the premise that ecosystems and resources should be safeguarded for the public good. The Mexicans seemed to have a weaker sense of 'the public good'--there was not an expectation that the public would benefit from resources. Environmentalists from both countries said things like: "this is our land, these are our resources", "we have the right...", "...should be protected for the benefit of the people", but for the Canadians it sounded like an assumption, whereas for the Mexicans it was something of which people had to be convinced.

The reason for these differences in ideas of what the physical/natural environment has to offer can be traced to the political and economic environments. A large part of the Mexican economy is subsistence and survival is therefore dependent on direct access to natural resources; whereas in Canada's industrial and post-industrial economy, the relationship is mediated by technology and institutions which blur the dependence on the natural environment. The Canadian political structure ensures that there is some degree of equitable distribution of resources, and environmentalists can focus on ensuring that these resources are used in such a way as to benefit the public good. In Mexico, establishing the rights of the people to benefit from resources remains a primary focus.

When the Canadian and Mexican environmentalists collaborated, the Canadians were obliged to take on a level of political analysis which was outside their usual sphere, which they did with varying success. The Mexicans, on the other hand, had a tendency to trivialize Canadian concerns.

Like the construction of harm, the construction of benefits from the environment is very dependent on how the human-environment relationship is mediated by institutions and/or technology. In both cases, Mexicans are generally in more direct contact with their environment (and therefore a focus by environmentalists on the local and concrete makes a lot of sense). Canadian environmentalists can benefit from a closer look at how human survival is directly dependent on the health of the natural environment (institutions and technology do not reduce dependence but simply displace the links--removing resources and dumping wastes at places distant from the consumer) and at the type of relationships that people who derive direct sustenance from their environment form with that

environment. The ability of Canadians to understand and tell some of these stories at home might help to get past the jobs versus the environment debate.

The Ideal Environment and the Place of Humans in it: Wilderness and the Community

> If I could be anywhere? In a forest, sitting on a rock, beside a waterfall... (C2)

> The bears were here before, this is their place. (C23)

> We are part of nature; we have to take care of it, aiso enjoy it and use it (*aprovechar*). (M6)

> I would have stayed living with the (indigenous) communities but various pressures brought me back to the city. (M17)

> A problem that I found working with Mexican environmentalists is that they put too much emphasis on human beings; they're too anthropocentric. (C11)

> We cannot think of nature in a pure state, but only of different levels of transformation.(M16)

At the 1993 Annual General Meeting of the Canadian Environmental Network (CEN), the extent to which the agenda was dominated by wilderness preservation and forest issues was striking. Most of the environmentalists present, like most Canadians, lived in cities but there was virtually no mention of urban issues. When I asked the Canadian environmentalists about this, there was a sense that the city was a 'write-off', a sort of necessary evil that we could do little to improve.

When the Canadian environmentalists talked about their positive feelings for the natural environment or simply 'the environment', I often had a sense that the image inside their heads looked like a postcard of Banff National Park (mountains, coniferous trees and clear streams or waterfalls often featured in the drawings or descriptions of an ideal

environment which I had requested[30]). This, despite the fact that they most likely lived in a 'Newtonian' landscape based on a grid (as described by Jackson, 1979), where natural features were largely replaced by the 'order' of a human-made environment. The fact that what we refer to as 'the environment' and the environment which many of us find most attractive is not our environment--i.e., most of us do not live in it, is an interesting point.

In Mexico, there is no word for 'wilderness'; the literal translation is *desierto* (desert) which has a connotation similar to that which 'wilderness' used to have, i.e., hostile to human habitation. The environmentalists did refer to *pura natureleza* (pure nature) but generally as something which did not exist. If there was an idealization of nature at all, the focus was primarily on the lifestyles of indigenous people and rural communities.

Interestingly enough, this idealization of the rural and indigenous also seemed to encourage many of the Mexican environmentalists to ignore urban issues. Between January 1991 and August 1997, I read approximately 450 environmental project proposals from Mexican NGOs[31]. About a third of these were from NGOs based in Mexico City, but only six were for projects to be carried out in Mexico City. There is a strange logic to this in that one of Mexico City's biggest environmental problems is its ever-increasing population, and sustainable development in rural areas would decrease migration to urban areas. However, this was not normally given as a justification. Mexico City remains a less appropriate target for the work of many NGOs, being

[30] This was at an early stage of my empirical research when I experimented with a more structured approach, as mentioned in the Methodology section.

[31] Proposals submitted to the EDSP and to the North American Fund for Environmental Cooperation (NAFEC) of which I have been Coordinator since May 1996.

perceived as a mixture of a hopeless case and a pinnacle of civilization (therefore not requiring the community development skills of NGOs).[32]

Many of the Canadian environmentalists, including myself, were surprised that Mexican environmentalists were willing to live in Mexico City at all. I asked a number of the Mexicans about this, including parents of young children, to whom I mentioned a recent study indicating dangerously high lead levels in newborn babies. The respondents most often shrugged this off in a fatalistic sort of way, probably as most Canadians react to the dangers of nuclear power--they are simply too extreme and beyond our control for us to think about them. A few told me that they would leave Mexico City if they could, and I met some who had left in search of healthier environments. For the most part, however, the Mexican environmentalists seemed to love Mexico City. Areas of lush vegetation, such as walled courtyards protected from exhaust fumes, parks, and the (UNAM) university campus, seem to belie the statistics.

Many residents seemed to see Mexico City as a sort of miracle. One Mexico City-based environmentalist told me: "If there were this many people, in this space, anywhere else in the world, they'd be killing each other, but here it works."(M1) Mexico City seems to represent some sort of Mexican ideal of community and civilization and it is interesting to

[32] This is not to say that there are no environmentalists working on urban issues. There are--and, as mentioned in the literature review, many authors have suggested that environmentalism in Mexico is centred on middle class residents of Mexico City reacting to urban problems. My research suggests however that they are a minority in relation to the ENGOs focused on rural issues (involving peasant and indigenous communities). This parallels the situation in Canada where environmentalists are working on urban issues but interest in wilderness issues still predominates.

note that the Valley of Mexico has been home to a population of millions since pre-Columbian times.[33]

The Mexican environmentalist mentioned above continued to be just as jovial when shortly afterwards she was stopped and fined for driving her car on a day when it was supposed to be off the road. The "Hoy no circula" program, whereby cars were labelled and owners required to keep them off the roads on certain days, was instituted to reduce air pollution, which in Mexico City is largely due to automobiles. The program was not very successful, as people often responded by purchasing additional, and more poorly maintained, cars. I suspect that Mexican environmentalists were not particularly helpful in this case; although they supported the policy, most environmentalists who I encountered made no effort to reduce their own car use. The Canadian environmentalists, like most Canadians also remained very dependent on their cars, but the vast majority had made some effort to reduce this dependence.

When a Canadian environmentalist said that she had made a decision not to have children in order to reduce environmental impact, the Mexican environmentalists present shook their heads or laughed. They found this perspective incomprehensible. In the case of having children, driving cars and a variety of other issues, the Canadian environmentalists seemed to feel more of a need to sacrifice for the sake of the environment and to derive a sense of moral good from doing so.

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[33] It is also interesting that Mexico City's Chapultepec Park is the oldest park in North America and pre-dates the arrival of the Europeans who were impressed by this natural reserve in the midst of human settlement (Simonian 1995).

One Mexican environmentalist (who was very concerned with the need to eat healthy and environmentally-sound food) was amused by a tendency on the part of Canadians to give up certain foods, etc. for some higher good:

> People in Canada get very obsessed about what they are going to eat and what they are not going to eat. Sometimes it's "we won't eat this so that others can eat this"... A lot of time it's for health reasons; gooseberries, vitamin b, one fad after another, natural product stores are very fashionable. All of the things you're not supposed to eat and people feel very guilty about it. (M6)

The lack of motivation to 'make sacrifices' on the part of the Mexican environmentalists seemed to stem from a tendency not to see things in an 'either/or' manner. They began from the assumption that the needs of human beings and the environment could be integrated and perhaps even that they could not be differentiated. This integration was evident in the construction of an ideal environment; whereas for most of the Canadians the ideal was a pristine wilderness with no sign of human intervention, for most of the Mexicans it was one where humans and nature co-exist.

These different ideals may be related to the influence of indigenous people. Lifestyles based on indigenous traditions persist today throughout Mexico and dominated until fairly recently; they provide Mexican environmentalists with evidence that a sustainable human-environment relationship is a possibility and this was frequently referred to by the Mexican environmentalists.

> You have more time in Canada because you have more space. We have very little time, but on the other hand we have only been destroying the earth for 20 years and we remember another way. The earth is not dead here, it is sick. We have to care for it, use it (*aprovechar*), but look after it. (M9)

> M8: In general terms for the Indians, the earth is the mother because it produces our sustenance. The sun is the father because without it there would be no life. There is an enormous difference between Christian beliefs of saints and miracles and the Indian religion. There are people who feel they have to go to church. The Indians don't have to go to a place because they have uninterrupted contact with nature.
>
> J.A.: Still?

M8: Yes, still. The earth gives us food even without cultivating it but if we cultivate the earth, we are in contact.

The idea that cultivating the earth is the most appropriate and the most spiritual way to be in contact with it, is an interesting one. For the Canadian environmentalists, not interfering with nature in any way, and standing in awe of it, was the most appropriate behaviour. In practical terms, we know we must 'interfere' and therefore strive to do so with as little as impact as possible; there is never a sense that by interacting with the earth, we may come closer to it and perhaps even have a positive impact.

At a meeting of Canadian environmentalists in the autumn of 1994, a First Nations representative mentioned how he had a tremendous feeling of closeness to nature while weeding his grass. He was laughed at, teased about having got it all wrong --"what are indigenous people coming to?" He lived in a suburb where possibilities for interaction with nature were clearly limited. I believe that had he said he experienced this feeling of closeness while walking through a forested park, it would not have aroused surprise or amusement.

Simonian (1995) describes the surprise of a European explorer in Mexico at the fact that indigenous people could simultaneously venerate and make use of nature. Europeans, in the move to a celestial god, seem to have adopted a belief that all that is worthy and sacred must be removed from and untouched by humans. This belief appeared to still pervade the constructions of the Canadian environmentalists, and not of the Mexicans. In the move towards sustainability--and accepting that it is increasingly difficult to set

portions of the natural environment 'aside'--the Mexican viewpoint may have something to offer.

The Canadian environmentalists tended not to construct the natural environment as a place of 'work' but rather as a place to be visited and observed when work was over. This relationship becomes that of the 'tourist', and as Tuan (1974, 95) states, "Tourism has social uses and it benefits the economy but it does not enjoin nature and man."

In the preceding discussion, the extent to which construction of the physical environment is affected by history, economics, politics, and other factors, has become increasingly clear. An examination of the cultural constructions of the 'larger' environment may contribute to a more complete understanding of the constructed environment of the environmentalists involved in the study.

The Social, Political, Cultural, Economic and Technological Environments

As was mentioned in the last section, the perception and, as a result, the construction of the physical environment is mediated by technology. Whether that technology is in place has to do with both attitudes (which are social and cultural) and access (which is political and economic) to technology. This is one example of how constructions of the physical environment are linked to the social, cultural, political and economic environment.[34]

[34] The relationship is even clearer in the case of many of the social, cultural, political and economic institutions that mediate perception and construction, a number of which have already been referred to in the last section.

Mexico is unlikely to suffer from the difficulty of having environmental impact mediated, and thus hidden, by efficient technology as two environmentalists informed me amidst a great deal of laughter:

J.A: How does the (recycling) centre work?

M9: When it does work! Either they're missing trucks or they're missing gloves...

M10: The municipality is responsible for the collection and is supposed to pick up organic waste one day and inorganic waste another day.

J.A.: What percentage of the community participates?

M9: We're not exactly sure. There was a survey done two years ago which indicated that 40% of people were recycling inorganic waste. For organic it is less.

J.A: 40% is pretty good.

M9: Well, we're not sure how accurate the survey was!

High-tech versus Low-tech Solutions

It seems that in Canada the government often takes the initiative and it often involves technical solutions. Here we have limited access to technology and no support from the government. We need to have a lot of creativity. (M7)

Just try to find examples of environmental change initiated by government--you won't find many! Government and industry only jump on the bandwagon once it's moving; it is the NGOs that always initiate the changes. (C20)

Almost all of the Mexican environmentalists who had had contact with Canadians expressed an opinion similar to that in the first quote and their tone inferred that Canadian

environmentalists were somewhat spoiled. Most of the Canadians shared the opinion voiced in the second quote.

The primary role of most Canadian ENGOs has been to influence policy whereas most Mexican NGOs tend to be predominantly involved in seeking concrete solutions to local problems and setting up demonstration projects.[35] This, of course, is largely due to the different political contexts, which will be discussed later in this section.

The ten Canadian environmentalists with whom I travelled to Mexico in 1991 were most struck by one aspect of the work of our Mexican counterparts: "It's incredible what they can do with nothing!" and similar phrases were constantly repeated. We visited a squatter settlement in Mexico City where what were essentially garbage dumps had been turned into parks which also supplied the residents with food and medicinal herbs. The financial resources required for the conversion, including bringing in uncontaminated soil from elsewhere, were largely contributed by the women who had stalls in the market.

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[35] Even very local Canadian projects focus on policy changes, such as zoning, whereas fairly large scale problems in Mexico tend to be dealt with through local actions. A discussion at the Escuela produced the following summary:

Actions needed to protect forests and jungles:

- promote practices of soil conservation and reforestation
- minimize clearing for agriculture
- minimize uncontrolled grazing
- sustainable use (*aprovechiamento*)
- recycling
- respect national parks

The limited financial resources were generally compensated for by:

(a) human resources ("How many people come to your weekly meetings?" one of the Canadians asked. "About two hundred" was the reply. "My god, we are lucky if we can get eight!") I believe the ability to mobilize human resources is not only due to the self-sufficiency required in the absence of government support; it is also related to the lesser fragmentation of communities and therefore energies. There were many overlaps among the work, family, social and political spheres of the Mexican environmentalists whereas for the Canadians, pursuing their interests meant interacting with a variety of different communities. This also may have some correspondence to a greater attention to the 'local'.

(b) what Mexican activist Gustavo Esteva refers to as the 'creativity of the margins'--or necessity is the mother of invention. Visiting his community in Oaxaca, I saw solar water heaters constructed from scraps and dry toilets made from local clay cast in homemade molds and water purification systems based on the use of local plants. In Canada, it had never occurred to many of the environmentalists that there was an alternative to purchasing expensive equipment. The only dry toilets I came across were being marketed by a branch of a Swedish company based in Ontario for prices averaging $1000.

The alternative technology movement does have a parallel in Canada; 'back-to-the-landers' and others constructed their own houses and installed alternative technology (although they usually used plans and purchased materials whereas Mexicans seem to just sit down and start experimenting with whatever is available). The technical innovation movement in Mexico is more pronounced than it is in Canada, and also much more politicized. In Canada, the ideal of self-sufficiency among environmentalists is linked to being closer to nature. In Mexico, if one is not dependent on public utilities, one is in a

position of power vis-à-vis the government (the issue of power relations is discussed in greater detail later in this section). Technical innovation is often associated with squatter settlements and 'land invasions' where landless groups take control of the land and fight the government's efforts to remove them. Technical innovation is of course required because there are no sewage or electrical facilities available when these settlements are created but it ends up becoming part of the discourse of the struggle.

Gustavo Esteva told our group of Canadian environmentalists about the "Politics of Shitting". According to Esteva, during reconstruction in some of the poorer *barrios* (neighbourhoods) after the Mexico City earthquake, there was a wide-scale introduction of dry toilets. These toilets meant that residents were no longer dependent on government to provide sewage facilities and therefore did not need to kow-tow to government officials to get needed services. The government eventually outlawed the construction of dry toilets despite the fact that by all accounts they were more effective than the sewage system, or lack thereof, in many parts of Mexico City. Esteva maintains that this was a result of the government's concern about erosion of their power in the increasingly self-sufficient barrios.

The technical innovation movement in Mexico is also related to a re-evaluation of the assumptions on which modern society and many of its processes are based. Most of the Mexican environmentalists complained that Canadian technical innovation (usually aimed at increased 'efficiency') is reformist rather than revolutionary. Another Mexican environmentalist involved with promoting dry toilets commented as follows:

> When I visited Canada, many groups were involved in a campaign to get people to put something in their toilets so that they would use 16 litres of water instead of 20 litres. I don't agree with this, it's better to

> use slightly less water but it is not good. It does not put into question the idea of using water to transport waste. (M15)

I mentioned this comment to a Canadian working on water issues and he seemed to find it strange. He replied, shaking his head, "but societies throughout history have used water as a means to transport waste."(C16)

The capacity for technical innovation found in Mexico puts into question the assumed need for a technology transfer from North to South in order to solve environmental problems. There is no doubt that the South would benefit from some of the environmental technologies developed in the North and should have access to them. However, poorer countries often have difficulty constructing and maintaining expensive, large-scale technologies (which also do not always provide solutions) and increasingly, 'rich' countries cannot find the resources to maintain them either; therefore there is also space for technology transfer from the South. Awareness of this does seem to be increasing, perhaps as a result of exchange between environmentalists.

> We hope to work with some Mexican groups on this. There's no question of transferring the technology; Mexicans are 'fixers', they can make anything out of anything, they're way ahead of us in doing this kind of stuff. (C20)

The emphasis on the need to get to the root of the problem, rather than using technical fixes, applies as much to the issue of solid waste as to sewage. Mexicans are natural recyclers because things considered garbage in Canada have value in Mexico (in part because of the fewer resources available to most people, and in part because of the talents of 'fixers') and recycling projects are increasingly prevalent (and, again, absolutely necessary because garbage is often not collected and may result in immediate health

problems). However, most of the Mexican environmentalists did not see recycling as the ultimate goal.[36]

> The schools in Canada had recycling machines which returned deposits on cans. I think this encourages people to consume more. It is completely contrary to our philosophy to consume less, to reduce. (M5)

In response to my question to an environmentalist running a composting centre: "If you think that garbage is a very important issue, are you also interested in recycling?"

> No, I'm not. For me, inorganic waste is a result of the consumer society and it is the consumption which is the problem. Organizing a recycling system would be like promoting consumption. (M7)

The construction by the Mexican environmentalists of technology as a reformist or revolutionary force was paralleled in other aspects of their constructions of the environment and environmental issues.

Reform or Revolution: critique of the development model

> The environmental crisis is a natural consequence of the social, political and economic systems. Environmental education should develop capacity to: (a) identify problems; (b) resolve them through one's own participation. Environmental education is essentially political because it is questioning society and environmental values. It questions, it criticizes, it is revolutionary. The form of the relationship between humans and the environment is the development model; forms of social organization to use resources. The existing development model overuses resources. Another model has to be found. The existing development model makes us buy things that we do not need. Bandage solutions such as recycling, etc. are not sufficient. A change in the development model is required. (M16)

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[36] Some of the Canadian environmentalists also complained about the emphasis put on recycling. Comments such as "Some of these places get a recycling program and they think they've dealt with environmental issues" (C6) were made repeatedly.

The belief in the necessity of revolution rather than reform which was manifested in relation to many environmental issues was rooted in an overall critique of the development model. This critique was an important aspect of the worldview of environmentalists in both Canada and Mexico but was much more prevalent in the Mexican case; it was a theme endlessly repeated during almost every meeting in which I participated.

This suggests that Mexican environmentalists are more politicized, or more radical, than many of their Canadian counterparts--contrary to assertions made by many authors (excluding those writing from inside the Mexican environmental movement) who often describe the Mexican environmental movement as middle class and conservative (and small). In my encounters with numerous Mexican environmentalists, the latter description never seemed appropriate. It seems that until quite recently, politically conservative academics did perhaps dominate the environmental scene but they are now a small minority in the environmental movement. It depends also on how one defines the 'environmental movement'. If it is limited to the types of organization which fit the stereotypical image of a (Northern) environmental group (which does not necessarily adequately describe Northern groups either), then the above description make some sense. However, as a result of my empirical research I share the view of the Mexican authors who assert that the vibrancy of the Mexican movement is based on the popular organizations of various origins who have begun to articulate environmental issues as a fundamental aspect of their struggles.

As Toledo (1992) points out, Mexicans see themselves more clearly as victims of the Western model of development and are more critical of it because they are at the wrong end of the stick. Mexico's environmental crisis is in part a result of suffering the adverse effects of the Western development model to a greater extent than countries like Canada, as a result of its position as a Third World/peripheral country in the global economy. Consequently, the Mexicans involved in this study focused more than the Canadians did on the role of the Western development model in creating environmental problems and subjected this relationship to much deeper analysis. They also saw the development model in terms of a threat of cultural and economic imperialism and as a result were more likely to put it into question. The products of this analysis are something that they can share with their Canadian counterparts.

Inherent in the tendency of the Mexican environmentalists to construct the environment and environmental problems within the framework of the development model, was a focus on power relations.

Issues versus Power Relations

> We must ask how are things produced and for whom are they produced? In this development model, production is for maximum profit in minimum time. For what? For whom? How? It is a question of power analysis. In all cases somebody wins and the deterioration is for all. (M16)

The struggle for democracy and against oppression which is so prevalent in the discourse of Mexican NGOs (regardless of the issue they work on, and many have added environmental issues to a variety of others that they work on) results in a construction of environmental issues which is framed by an analysis of power relations. This is also

related to the question of technology: "a type of technology implies certain political consequences depending on who uses it, who controls it, and who benefits from it." (Aguilar, 1990, quoted in Romani 1992)

Role-plays or sketches are common components of NGO workshops in both Canada and Mexico. Small groups are asked to develop a scenario, corresponding to a workshop theme or issue under discussion, and present it to the other workshop participants. Several of the meetings I attended included this type of activity. Many of these sketches ended up, owing to the nature of the medium and the context, as a representation of a struggle among conflicting interests. What is interesting is that whereas the Canadians always decided which issue to focus on first and then developed the roles, the Mexicans often focused on the protagonists first and the issue became secondary. The cast of characters was usually the same: the community or 'the People' (*el pueblo*), normally represented as poor and oppressed; the powerful, who are rich, corrupt (usually government officials, landowners or big business) and often in cahoots with foreigners;[36] and the helpers, either the church (which has moved into this category as a result of liberation theology) or the NGOs. As a Canadian, I was very surprised on several occasions to see the roles assigned and the characters fully developed before a decision was taken on an issue. Pollution, deforestation and other issues were easily tacked onto an exchange among the antagonists, which remained more or less the same regardless of the object of discussion. Paralleling this lack of emphasis on any particular issue, I did not encounter a Mexican organization which was focused on a single issue (this will be discussed in greater detail later in this chapter).

[36] The negative role of the "foreign capitalist imperialists" was so emphasized that even to me, with my Canadian guilt complex and tendency to see transnationals as evil manifest, it began to seem a bit excessive. It is clearly important to undertake an analysis of power relations, including the international ones, in order to clearly understand our situation and find solutions. On the other hand, the endless characterization of oneself as a victim, particularly of far-removed foreign powers, can be somewhat counter-productive.

The focus by Mexican environmentalists on an analysis of power relations also played out in how they constructed their own role as environmentalists.

Facilitators versus Advocates

> The impact assessment doesn't matter, it is what the people of Tepotzlán want that matters, the issue is that their opinion should count. (M4)

> In Canada, people have confidence that their vote will be respected; there is democratic process. In Mexico, the traditional education system has taught people to submit rather than participate politically. In Canada people have the right to participate, here we have to demand everything, there is no assumption of any rights. (M5)

> We fought for a long time to have our say but now that the government is involving us in consultations, we wonder if it is a waste of time. It is a huge drain on our resources and seems to have little impact on decision-making. (C1)

Most of the Canadian environmentalists would not agree with the glowing characterization of Canada in the second quote above. Relative to Mexico, however, those with some understanding of the Mexican context agreed that they were in a slightly better position to influence government, and advocacy (aimed at government) was a central focus of the work of many of the Canadian ENGOs. Canadian ENGOs have also become increasingly involved in consultation with government. It is worth noting, however, that a persistent theme of discussion among the Canadian environmentalists was whether or not there was really any value in being involved in these consultations.

The Mexican environmentalists did not discuss environmental issues for very long without mentioning access to decision-making processes. Discussion during their

meetings usually included some reference to the struggle for democracy. Seeing democracy as intimately linked to environmental issues resulted in the Mexican environmental groups having a greater focus on the process of democracy and a different idea of their role. Whereas most of the Canadian ENGOs were involved in advocacy work either through public awareness campaigns or lobbying government and industry, most of the Mexican ENGOs saw their role as that of facilitation and technical support (asesoría). [37]

Most Mexican NGOs have developed within the traditions of popular education[38] and community development (with origins in the Sixties) where it is the role of the NGO to assist the community in empowering itself. It is of particular interest that the value of democracy is usually placed above the value of protecting the environment (or the former is seen as a very important aspect of the latter). One Mexican environmentalist who was very committed to preventing deforestation responded to my question as follows:

> J.A.: And what if after you've worked with the community and they're aware of all the issues and consequences, they still decide to cut down the trees?
>
> M4: Then that's what they'll do. We have to support their decision.

[37] There are some exceptions, of course, such as the high-profile Grupo de Cien, which is a Mexico City pressure group made up of influential writers, artists, academics, etc.

[38] Conventional education views students as empty vessels to be filled with knowledge imparted by a teacher or books. 'Popular education' places students, or 'participants', at the centre of their learning. The participants bring their own knowledge and experience to bear on solving problems that are of concern to them or to improving their own situation. A facilitator or 'popular educator' replaces the teacher. The primary objective of popular education is empowerment, and therefore it is widely used with people who are disempowered or oppressed, as described by Paolo Friere in his well-known book, "Pedagogy of the Oppressed".

The difference in roles also has an impact on the size and composition of environmental groups. In Mexico, there are few environmental groups with a large membership. Again, there are exceptions like the Movimento Ecologista Mexicana (MEM) which has thousands of members (and which has also functioned as a political party) but the vast majority of organizations do not have a formal membership beyond their active volunteers. It should be noted that the Canadian environmental movement is not characterized by extremely large groups either. There are about a dozen large national groups, with thousands of members who support their work and receive information from them, but most of the approximately three thousand Canadian ENGOs are relatively small (less than 50 members), local groups that often form in reaction to a specific issue. However, most Canadian groups, if they do move towards some sort of institutionalized existence, do attempt to introduce and expand formal membership and seek some sort of financial support from members. In Mexico, it is virtually impossible to rely on a membership or the general public for financial support.

The Mexican environmentalists usually made their point through local demonstration projects like the innovative technology efforts discussed previously. Most of the funding proposals I received from Mexican NGOs dealt with small local demonstration projects and their hope was that these would be replicated elsewhere. Leff (1986) sums up the Mexican environmentalist view that environmental action is based on an analysis of political and economic conditions and carried out through facilitating community participation in demonstration projects (which integrate alternative technology); the combined results of these projects add up to an impact at a national level.

> The activation of this [environmental] potential and its putting into practice implies an analysis of the economic and political conditions which determine community participation in the definition of their needs, the management of their resources and the satisfaction of their needs; of the cultural and ecological factors which are involved in the innovation, assimilation and adaptation of alternative technologies and of the conditions of integration of these local and regional development projects to promote a national development project which will be ecologically sustainable, regionally balanced, economically sustainable, socially equitable, incorporating principles of technological self-determination, cultural autonomy and political independence of the people. (Leff 1986, 29, my translation)

Having reviewed some of the significant aspects of the constructions of the physical and non-physical environment, we can turn to how links were made, or not made, among the different components within the constructed environments of the environmentalists.

The Integrated Environment: Multi-sectoral versus Single Issue

> We learned much about the ways in which we were the same--and very different. Both the North and South are working in similar climates of critical environmental degradation and a less humane economic system than we would like... It is very apparent that individual Mexicans suffer much more directly than most Canadians due to the greater disparity in Mexico between those with access to resources and those without. There, the struggle to protect the environment becomes integrally meshed with other social and political struggles: they do not have the (false?) luxury of segregating the environment as an isolated issue, as often occurs in Canada. (Pembina Institute for Appropriate Development, quoted in EDSP 1995, 25)

One of the most striking differences between the constructions of the Canadian and the Mexican environmentalists was that the former tended to separate environmental issues, i.e., those related to the physical environment from other concerns, whereas the latter integrated a variety of concerns. A number of examples follow which demonstrate the Canadian dichotomies and the Mexican links.

The EDSP came into being partly in response to requests from ENGOs for a source of funding for ENGO involvement in international cooperation. It was argued that ENGOs were different from development NGOs (DNGOs) and could not easily access the funding sources that CIDA made available to the latter. The main difference had to do with the inability of ENGOs to raise the matching funds, which CIDA required of NGOs. However, as a result of the effort to distinguish ENGOs from DNGOs, we embarked on a lengthy debate regarding: "What is an ENGO?" A 1991 EDSP report summarizes the discussion at that time:

> During the first phase of the EDSP, the [EDSP Program] Committee has also tried to come to grips with the new concepts involved in this type of program; in particular with trying to determine the type of project on which this program should focus, an ENGO project as differentiated from the type of projects traditionally undertaken by development NGOs. The Committee believes that in this program, which has been set up to meet needs different from those normally processed through the CIDA NGO division, we should be supporting ENGOs (or other interested NGOs) in the South to undertake the type of activities normally associated with ENGOs such as networking, information exchange, policy development, advocacy, etc. rather than development projects with an environmental bent. At the same time there is a realization that ENGOs in the South do not necessarily operate along the same lines as those in the North.

Out of this discussion came a decision to settle on advocacy (particularly as opposed to 'physical projects'[39]) as being most characteristic of what environmental groups did. However, advocacy--as we understand it--is only effective in certain political contexts and physical projects or 'demonstration projects' are sometimes a very effective form of

[39] This becomes increasingly confusing within the context of funding projects. The EDSP, like most funding programs, required that NGOs carry out 'projects' with 'concrete results' within specific periods of time. The Southern NGOs frequently complained about being forced to adapt to Northern ideas of 'results' (which often come down to quantifying things that could not usefully be quantified) and of 'time' which from the Western/Northern perspective is linear rather than cyclical and does not accommodate the uncertainties inherent in the real world, and particularly in situations involving human beings.

advocacy. As mentioned in the previous section, the Mexican environmentalists often hoped to effect widespread change as a result of the combined effect of small, local, demonstration projects.

With regards to how Mexican NGOs dealt with environment and development, a 1993 EDSP site visit to Mexico and Costa Rica concluded the following:

> It was assumed that because these two communities (environment and development) are substantially different in Canada, that this would be the case overseas. It was discovered, however, that there are no good development projects that have no concern for the environment and vice versa. Furthermore, in the South the line between environmental organizations and development organizations is much more blurred than in the North. (EDSP Site Visit Report)

Environment and Economy

> [Certification of sustainably-produced agricultural and forest products] is not an environmental issue, it's a trade issue! (C22)

> The final lesson learned [by a Canadian ENGO from a joint project with a Mexican partner] was that the economic factor assumed greater importance than had been envisioned. Although there was a strong desire to take actions that improve the environment, at a realistic level, such actions were supported much more strongly if direct or indirect economic benefits could be identified. (Citizen's Clearinghouse on Waste Management, quoted in EDSP 1995, 11)

> Our focus on the environment comes from a concern to help people to live better. And some of it is economic, the natural resources are coming to an end and there is no work. Our community lives off the land, from its natural resources. (M9)

The vast majority of Mexican environmental projects with which I came into contact included some component of income-generation. The Canadian environmentalists were surprised, and sometimes uncomfortable, at being obliged to consider economic aspects in their collaborative work with Mexicans. Interestingly, whereas some of the Mexican

environmentalists saw recycling as encouragement to consume, most of the Canadians saw attention to income-generation as too akin to the materialism that they rejected. The Canadians generally sought to promote the idea that 'environment' had higher value than money and material goods. In recent years, however--perhaps as a result of North-South exchange, some Canadian environmentalists have begun to pay more attention to the concept of sustainability and accept that it applies to economic health as well as the health of the natural environment.

The Canadian environmentalists often discussed the repercussions of accepting funding from government, and discussion about how to appropriately support the work of ENGOs increased in the context of the cuts in government funding to NGOs which has characterized the Nineties. The discussion has evolved more or less as follows: Even the most self-sacrificing environmentalist needs some resources in order to work effectively; writing proposals and accepting money from sources with their own agendas is not morally superior to incorporating an income-generating aspect into one's work. Furthermore, a number of Canadian ENGOs have begun to realize that setting environmentalism apart from economic survival and not admitting the importance of sustaining livelihood along with sustaining the natural environment simply exacerbates the jobs vs. environment dichotomy--which is perhaps the most important factor in reducing support for environmentalism among the general public in Canada.

Environment and Human Health

[A project dealing with indoor air quality] doesn't really fit, it's more of a health problem. (C14)

[I got involved in environmental work because] It's a health issue, and prevention is the best measure. (M10)

As mentioned previously, the links between environmental problems and direct and visible impacts on human health were very clear to the Mexican environmentalists. Many of the Mexican NGOs became involved in environmental work as a natural consequence of their work on health issues. Their approach to the work was generally as community health workers (*promotores*) and they have simply integrated environmental issues into the capacity strengthening (through training and technical support) that they do. Their focus is often on things like domestic waste management and reducing the use of toxic substances in the home and garden or small farm.

The Canadian environmentalists also frequently discussed links to human health, but in Canada organizations that work on health issues are usually separate from those who focus on environmental issues. The environmentalists tended to focus on research regarding links between environment and human health and to carry out public education campaigns. They did not have any relationship to the people working on the ground in health care. Some of the Canadian environmentalists, such as those working on the elimination of mercury, said that the health care system (through its use of toxic substances and disposal of wastes) was an important contributor to environmental damage.

Women and Environment

> Women, the poorest and the most affected by environmental deterioration... (CED 1995, 3)

The Mexican NGO focus on the relationship between environment and basic human health is perhaps the reason for another strong link: between environment and women's issues. Women predominated at most of the grassroots meetings I attended, and most of the groups that I met were composed mainly of women (although often with men at the head).[40] On a number of occasions the role of women in environmental work was discussed at these meetings and when women were asked why they tended to be more involved, they cited a greater concern for both health issues and the future because of their children, and also a greater awareness of accessing resources (such as clean water or fuelwood) to meet basic needs.

I was surprised to discover the important role that the church, particularly the Christian Base Communities (CBOs), had played in bringing women into the environmental forum; numerous women (including some of those active in the very politicized conflict over the proposed golf course in Tepotzlán[41]) described how important the CBOs had been in terms of empowering them to participate in the political sphere. I wondered if this

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[40] It was interesting to note that when people divided into working groups at meetings, they tended to be chaired by men or have a man as a spokesperson (although women predominated in every one). This situation persists in Canada as well, although to a lesser extent.

[41] In late 1994, the community of Tepotzlán heard about a proposed golf course project which would cover nearly 200 hectares of land which the community considered to be communally-owned (some of the land had been sold--illegally, many people claimed). The land is also part of the Ajusco-Chichinautzin Ecological Corridor, decreed by President Miguel de la Madrid in 1988. The "Tepozteco Country Club" was to consist of a professional 18-hole golf course, 800 luxury homes, a hotel, an artificial lake, an equestrian club, shopping centres, a heliport, and offices of national and international corporations. In January 1995, the municipal government unanimously rejected the land-use change sought by the company heading the project. In March, the state governor assured the investors that they had full government support for the project to go ahead (and later the town council gave way). During the next several months, over 3,000 local people were involved in trying to halt construction through legal processes, demonstrations and petitions. Having exhausted all legal means, residents took over the town hall on August 24, 1995, claiming that the municipal government had betrayed their interests. In September of that year, the community held elections which appeared to be very legitimate (although considered illegal). Ensuing wrangling with various levels of Mexican government resulted in considerable, and sometimes violent, conflict. Presently, however, the golf course is permanently on hold and those opposed to it succeeded in winning municipal elections held in March 1997.

terms of empowering them to participate in the political sphere. I wondered if this particular intersection was unique to a certain region of Mexico but later came across an article describing the links among CBOs, women and environment in Central America (Lorentzen 1995). It seems that liberation theology had a significant impact on the ability of women to participate at a political level and that once they felt empowered to speak out, environmental issues were something that they wanted to talk about.

Women are also extremely active in the Canadian environmental movement and perhaps for many of the same reasons. There are, however, some differences in perspective at the analytical level. While in Mexico, an analysis of the relationship between gender, poverty and environment is beginning to emerge, there is no clear equivalent to Ecofeminism[42]. As stated earlier, Mexican environmentalists are more likely to apply a Marxist analysis to environmental questions and there is not much discussion of the gender of the perpetrators of environmental destruction.

Integrating Elements--A sense of place, of tradition and of justice

At an August 1995 meeting of the Tepotzlán community group who opposed the golf course development, I was struck by both the important role played by women, and by

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1995, claiming that the municipal government had betrayed their interests. In September of that year, the community held elections which appeared to be very legitimate (although considered illegal). Ensuing wrangling with various levels of Mexican government resulted in considerable, and sometimes violent, conflict. Presently, however, the golf course is permanently on hold and those opposed to it succeeded in winning municipal elections held in March 1997.

[42] 'Ecofeminism' offers an analysis of environmental issues from a feminist perspective, often making a link between patriarchal social structures and environmental damage. It has attracted interest and support in Canada and other Northern countries.

the advanced age of many of the people involved. The relationship among generations in the Canadian environmental movement is generally characterized by younger people (although we are certainly getting older), along with a few enlightened elders, trying to persuade the older, more conservative and materialist sector of society that the environment matters. In Tepotzlán, this situation was reversed as the older generation tried to persuade the youth of the importance of traditional values, particularly that of the relationship with the land.[43] The relationship with the land, as constructed by the Tepotzlán community, is one which is difficult for most Canadians to grasp. Tepotzlán is a physically beautiful place and very capable of providing for the needs of humans[44]; it is a place of cultural and spiritual significance for the region and it has maintained strong community values. All of these elements seemed to be rolled into one for the local people and add up to 'Tepotzlán', which is home and a place of immense value. While Tepotzlán has been a destination for people seeking alternative lifestyles for some decades, the majority of the population are 'from Tepotzlán' and they describe their ancestry as another, and inseparable, aspect of the landscape.

This construction, in which the different elements of an environment are not separated, made me think of Mexican pre-colonial maps (mentioned in the literature review) where time and space were integrated and landforms were interspersed with family trees (Harley 1992). There was a time when similar maps existed in Europe and some authors (see Lewis 1992) have suggested that if Europeans had travelled to the Americas at a slightly

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[43] Radio commercials promoting the golf course featured actors portraying young people informing their 'out-of-touch' elders of the benefits of progress (the post-modernist context to which contemporary environmentalism is often attributed obviously made no sense).

[44] Although care must be taken in relation to certain limiting factors, such as water. A central element in the Tepotzlán conflict involved access to water, which local people felt would be threatened by the golf course development. As mentioned previously, access to resources to meet basic needs, and particularly the need for water, is an important element in many environmental conflicts in Mexico.

earlier stage of European history, the proximity of worldviews and styles of mapping might have been conducive to better communication and greater compromise as to the future of the Americas. For better or worse, however, the heritage of most Canadians (although it should be noted that among some First Nations people another perspective on mapping still exists) and Mexicans, both of whom have enjoyed a 'Western' education, is the trigonometric survey and maps in which only the 'physical' and the 'objective' are acknowledged and place is a point on a grid.

Just as Mexican cartographers in the years following the Columbian Encounter integrated indigenous and European elements in their mapmaking (Butzer and Williams 1992), Mexican environmentalists continue to integrate cultural traditions with their work:

> In July and August of 1993, we were looking for some sort of event that would attract people's attention and give us the opportunity to explain composting to them. We thought of the *Chimelos* of Tepotzlán, it's a folkloric dance. So we organized a *Brinco Ecológico* through the main streets of the *Colonia* (district) on October 24th, 1993. We marched and danced through the streets with placards saying "Compost" and "Start a vegetable garden" and at the end of the route, we presented a play with the same theme. We did an evaluation of the effectiveness of this activity and the results were very good...Then at Christmas, we organized *Posadas Ecológicas*. You know how the *piñata* works, when you smash the piñata, you're getting rid of the bad. Well, we made piñatas in the form of smoking factories and polluted rivers. We made them out of garbage and we decorated the streets with garbage. (M21)

The interrelationships among many elements, the working across sectors, indicates that in the Mexican context the environment cannot be separated from other aspects of people's lives, and environment is integrated with an overall struggle for social justice.

> We have to keep doing what we are doing but also go beyond it. We put in dry toilets because there is no water. We want a higher price for onions so we don't starve to death, but it is part of a bigger picture. This is our work [as environmentalists]. (M17)

Constructing the Environment

This section will examine the process through which the Canadian and Mexican environmentalists constructed the environment. This refers to both how the environmentalists received information about the environment and to the context in which their constructions developed.

Ways of Knowing - Science & Information

As mentioned previously, institutions and technology tended to mediate the relationship between the Canadian environmentalists and their environment; direct links were more difficult to make than in the Mexican context. As a result, the Canadian environmentalists needed to receive information from a number of sources other than their direct experience of their environments. They received this information through a variety of media (print, radio and television) and via other environmentalists (who often produce their own information through the studies that they undertake and transmit information from other sources). Many of the Canadians complained that they were overwhelmed with information and had difficulties sorting out both what was true and what was most important[45]; they had most faith in scientific studies produced by ENGOs and others who were not likely to have 'another agenda' (e.g., a desire to downplay environmental impacts).

[45]Many of the Canadian meetings entailed a lot of sorting out of the huge quantity of paper contained in the 'information package'. At one meeting in Canada, which had goals similar to those of the GEMA meeting described in this section, approximately half of the time was spent trying to make sense of the documentation and the sheer magnitude of it made it impossible to adequately discuss it, draw any conclusions or take decisions.

Canadian ENGOs themselves, in their efforts to be effective advocates, have increasingly engaged in scientific research. The 'professionalization of ENGOs', as it is often described, has potentially had some negative effects with regard to adapting their constructions to those of the dominant culture, as some authors (see Grove-White 1993) have suggested, but it has also allowed them to level the playing field in their dealings with government and industry. While 'speaking the language of the enemy' may have some drawbacks, it can demonstrate that this language is open to a variety of interpretations. The vastly different conclusions drawn by ENGO scientists and their adversaries demonstrates that the underlying assumptions, the perspective of the scientist, and the design of the research has everything to do with the outcome.

The Mexican environmentalists, in keeping with the previously mentioned tendency to frame their analysis in the context of power relations, were wary of the validity of all outside information. Mexico has a strong academic and scientific tradition--perhaps reflecting a particular need to speak the language of the enemy, in this case, the North. The Mexican environmentalists sometimes had a tendency to treat science as elitist and in the service of the dominant groups against which they struggled, and therefore distrust its conclusions. At a meeting of GEMA (a coalition of organizations involved in environmental education), participants came together to survey the state of the local environment and environmental education. None of the information presented was taken as given; data were questioned, interpreted, added to. The participants generally distrusted the information, particularly if it came from government sources and/or if they themselves had direct experience which contradicted it. In general, they were not willing to accept that 'scientific' or 'statistical' information was superior to their personal knowledge about the place where they lived.

This does not mean that Mexican environmentalists eschew science in their work. On the contrary, the work of the *asesores* (technical advisors) has long focused on putting the tools of science at the disposal of the people. The result is an approach that both makes use of science--and makes a tremendous attempt to popularize it--while also taking it with a pinch of salt. Science is integrated with other forms of knowledge and adapted to the needs of the users. At the Escuela, the 'Elements of Ecology' were presented in the context of "How can they help us in forming opinions/judgements?" rather than something which had some sort of intrinsic value or represented absolute truth.

While the Canadian environmentalists were suffering from information overload, their Mexican counterparts complained often about inadequate reliable information. A relatively large portion of the Mexican meetings was spent transmitting and discussing baseline information. I was struck by the extent to which most of the environmentalists received information (and their motivation to be involved in the work) through direct personal experience, interaction with the 'community' and contact with other environmentalists (one Canadian described a Mexican environmental project in which he was collaborating as "almost too sociable"). This also seemed to contribute to a construction of 'environment' which was personal, social and political.

The Roots of Cultural Constructions

This final section bridges Chapter 4 (Results and Discussion) and Chapter 5 (Conclusions) by summarizing much of the information contained in the former and

attempting to analyze it. The table below represents an attempt to outline the context in which the Mexican and Canadian environmentalists may have constructed their environments. The information in bold text describes the resulting influences on, and/or characteristics of, the cultural constructions that are linked to different aspects of the context (information in standard text). The table helps to find patterns and make sense of the information collected during the empirical research, although its limitations as an imperfect and tentative construction should be particularly noted.

Table 1 - Differences in context and resulting influences on/characteristics of cultural constructions of the environment among environmentalists in Canada and Mexico

Aspect	Context **Characteristics of the constructed environments of environmentalists**	
Historical:	Mexico	Canada
Influence of indigenous people	Large populations survived conquest (or at least 'bounced back' following decimation by disease, etc.); continue to be subjected to visible oppression **- indigenous people have a significant impact on the constructed environments of environmentalists**	Populations greatly diminished as a result of conquest; recently subjected to more subtle oppression but with a growing political voice **- indigenous people have a limited, but growing, impact on the constructed environments of environmentalists**
Perception by European settlers	Marked by humans; integration of humans and nature **- 'natural state' seen as an environment where humans and nature interact; idealization of indigenous lifestyles**	Pristine wilderness **- idealization of wilderness**
Perception by imperial power	Potential for resource extraction; some efforts to safeguard resources but often commands from afar out of touch with local realities and ineffective **- continuing struggle to control local resources** **- fear of exploitation by foreign and national elites**	Potential for resource extraction, but also potential for settlement; some attention paid to wise management of resources for longer-term **- 'resource' or 'storehouse' view of environment**
Post-independence	Difficult struggle for independence; complete change of environmental/resource policy following independence; focus on 'catching up' with regard to economic development at whatever cost; top-down policies **- the 'development model' is at the root of all environmental problems; people and environment are continually sacrificed for an economic growth which rarely benefits the people**	Relatively easy transition to independence, continuity of policies; (relative) emphasis on wise use of resources for sustained economic growth **- environmental damage is often caused by over-emphasizing economic growth; environmental values should be given greater priority, both for the benefit of the environment and for long-term public good**

Current:		
Political context (institutional)	'democracy' -- in reality, one-party (PRI)* rule, high degree of state corporatism (co-optation of social movements), attempt to centralize power as much as possible, high degree of corruption, sense that government serves the needs of the elite **- fear of co-optation by government, suspicion, reluctance to work with government; lack of confidence in government to provide solutions, therefore more focus on concrete grassroots actions, local solutions; environmentalism linked to power struggles, particularly decentralization of power, therefore focus on relationship among protagonists; belief in the importance of real (participatory) democracy, therefore emphasis on the role of facilitators**	'democracy' -- limited public participation and political alternatives but regarded as legitimate, although not entirely effective; generally seen as serving the people, but with a leaning towards the needs of business; limited and subtle corruption **- belief, if somewhat jaded, that environmental change should come through public policy reform; pressure government for NGO participation in policy process but often frustrated by the results and question the value; concerns that demanding multi-stakeholder processes ends with a bigger voice for business; look to environmentalism to provide alternatives that partisan politics does not seem to offer; advocacy focusing on issues**
Distribution of /access to land and resources	Inequitable and subject to discussion/conflict, lacks legitimacy; **indivisibility of issues of environmental quality/deterioration and access; continuing emphasis on Marxist analysis; significance of illegal land settlement in terms of both environmental degradation and alternative technology movements**	More equitable and generally considered legitimate; **distribution is not being challenged, what is challenged is the right to exploit both public and private land in ways which threaten the public good**
Economy	"Developing" (pre-modern and modern). Focus on basic survival, sustainable development. Livelihood based on direct access to resources by individual/community for sustenance (partial subsistence economy) and increasing industrialization; **environment and development integrated; environment linked to basic needs; ideal is human-environment integration, 'home' relationship with environment**	Post-industrial (modern and post-modern). Resource-based industry combined with livelihood divorced from direct access to resources; **jobs vs. environment dichotomy -- separation of environment and development; environment linked to quality of life; ideal is wilderness, 'tourist' relationship with the environment; other tendencies such as environmental justice**
Social movements	socialism/community development (generation of '68), church, women; **focus on empowerment, facilitation -- democracy**	NSM, advocacy groups, women; **policy, advocacy**

* The Institutionalized Progressive Revolutionary Party which has held power in Mexico since 1946 (and its precursor since 1929); its power does however seem to be eroding.

Technology	Lack of capital investment; lack of government will to invest in technology which would benefit the public good; direct health effects; proximity to problems/direct and visible impact; **local/concrete perspective; alternative technology; challenge to status quo**	"successful" technology mitigates impacts; indirect health effects (mediated by complex technological systems); **focus on increased efficiency; global/abstract perspective**
Information	limited access; distrust; **importance of direct experience and networking**	available in large quantities, most often indirectly through a variety of media; **importance of indirect information; information overload**

5. Conclusions

This research project grew out of an idea that environmentalists in the North and South were not quite speaking the same language; that when they referred to the environment and environmentalism, they did not mean exactly the same thing. It was not clear initially how these differences could be described. As was mentioned in the Introduction, the abstract global images and the concrete local ones that I observed during the 1993 workshop seemed to offer some clues. This study represents an attempt to fill in the details in those pictures. Figure 1 represents a final product of that process. The 'details' were to some extent surprising. In setting out to describe the 'behavioural environment' (Kirk 1963) or the 'geography within the mind' (Watson 1968) or the 'cultural constructions of the environment' (Simmons 1993b) of Mexican and Canadian environmentalists, I initially expected to find elements such as forests and pollution and perhaps human settlements. Those elements were there but so were democracy, technology and development models. [46]

These diverse elements are illustrated in Figure 1. The drawings summarize and portray the characteristics of the cultural constructions of the environment among the Mexican and Canadian environmentalists as described in the last chapter.

[46] Ironically, geography is perhaps the one discipline where one can study all of these elements but integrating them remains a challenge. According to Simmons (1993b, 62): "Since (geography) brings together both the physical and cultural worlds, it might be thought of as *the* discipline of environmental constructions but its plurality of approaches and its recent history have combined to prevent any such development."

Figure 1 - Cultural Constructions of the Environment among Mexican and Canadian Environmentalists

Figure 1 illustrates some of the characteristics of the *culturally constructed environments* of the Mexican and Canadian environmentalists encountered in the process of this research. Whereas the former tended to situate themselves inside, as part of, 'the environment' (an environment existing within the framework of "the development model"), the latter were more likely to view 'the environment' from the outside, often in terms of global imagery, and tended to idealize the separation of humans and natural environment. The environmentalists in the two countries perceived the positive and negative impacts of humans on the environment and vice versa differently as a result of their distinct histories, economies and use of technology. The Canadian environmentalists generally saw the overall impact of human beings as negative but potentially mitigated by behavioural and technological changes. The Mexicans were more likely to see a potentially positive interaction between humans and their natural environment, with humans taking on the role of gardener. As Mexicans are likely to experience more direct health effects of damaged environments and the inability of those environments to provide for basic human needs, these aspects loomed large in the Mexican perspective. In Canada, basic needs are generally met and impacts are often mitigated or hidden, thus attention was focused on more indirect and abstract aspects. The Canadian construction focused on benefits from the environment in terms of 'resources' and 'quality of life' whereas the Mexican construction emphasized the direct link to 'livelihood'. The Canadians tended to construct their ideas of the environment on the basis of information received through various media and to promote change through advocacy. The Mexicans were more likely to receive information through and focus their work on direct interaction with communities and concrete demonstration projects. Cultural constructions of the physical environment overlap with and cannot be separated from constructions of the social, cultural, political and economic environment; attempts to understand cultural constructions of the environment should integrate all of these elements

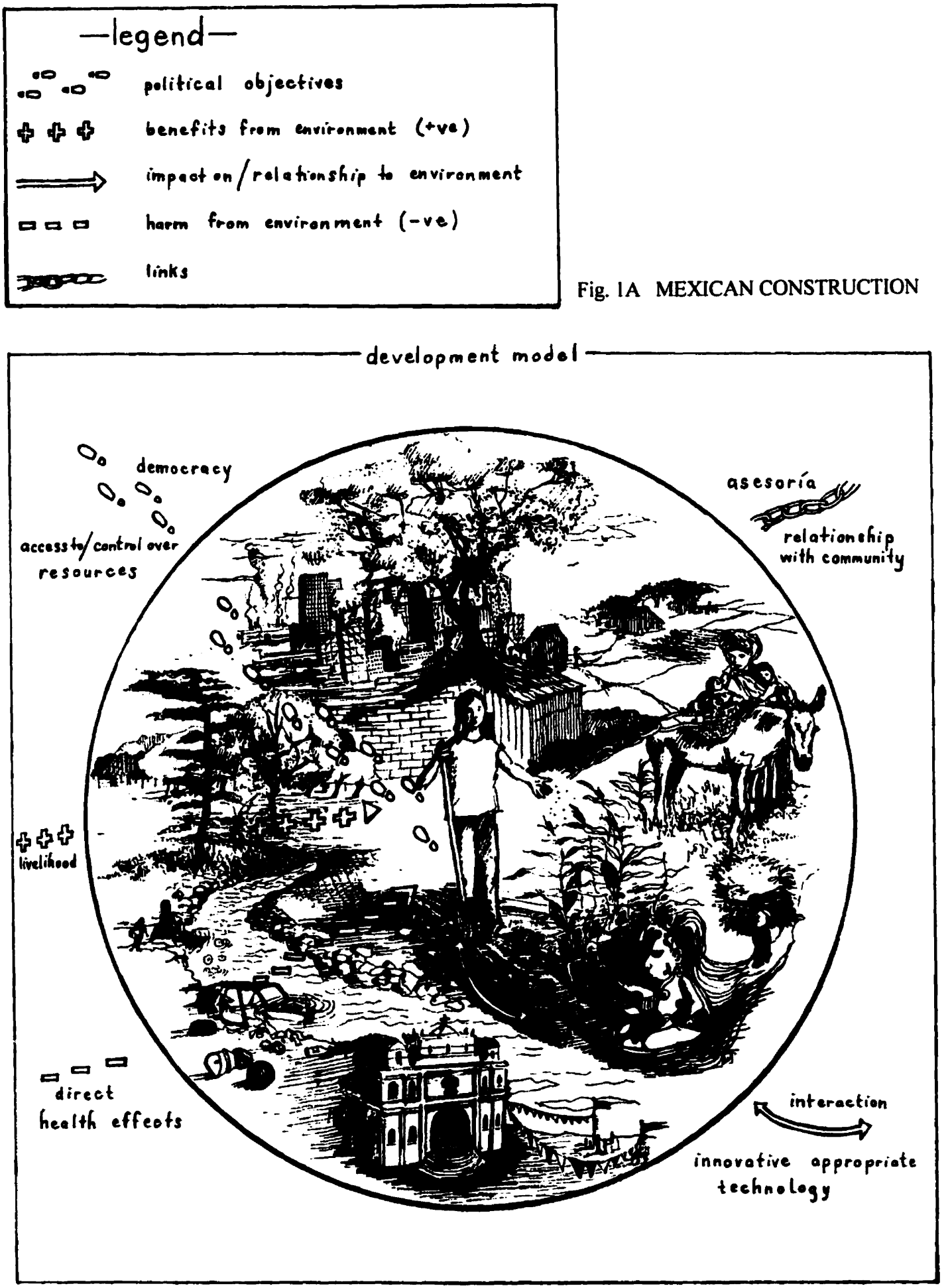
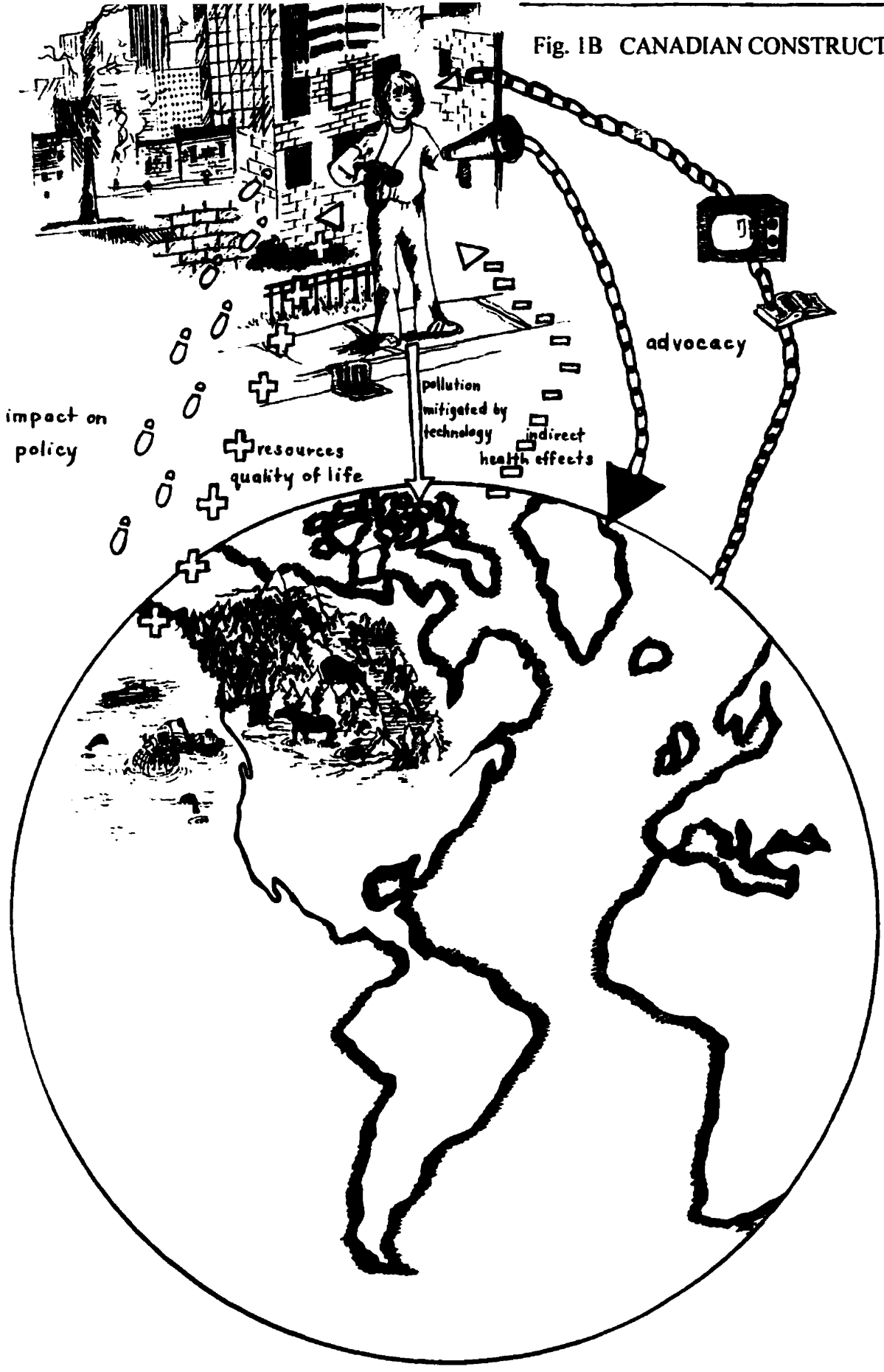


Fig. 1A MEXICAN CONSTRUCTION

Fig. 1B CANADIAN CONSTRUCTION



As Figure 1 illustrates, some significant differences in the cultural constructions of the environment among the Mexican and Canadian environmentalists were identified:

(1) The Mexican environmentalists tended to situate themselves inside, as part of, 'the environment' (an environment existing within the framework of "the development model"); the Canadians were more likely to view 'the environment' from the outside, often in terms of global imagery.

(2) The Canadian environmentalists tended to perceive the environment as separated into different components, e.g., physical and non-physical, which needed to be dealt with separately. The Mexicans were more likely to see different aspects as linked or even inseparable.

(3) The Canadian environmentalists generally saw the overall impact of human beings as negative but potentially mitigated by behavioural and technological changes. The Mexicans were more likely to see a potentially positive interaction between humans and their natural environment.

(4) Direct health effects of damaged environments and the inability of those environments to provide for basic human needs loomed large in the Mexican perspective. In Canada, where basic needs are generally met and impacts are often mitigated or hidden, attention was focused on more indirect and abstract aspects.

(5) The Canadian construction focused on benefits from the environment in terms of 'resources' and 'quality of life', whereas the Mexican construction emphasized the direct link to 'livelihood'. (6) The Canadians tended to construct their ideas of the environment on the basis of information received through various media and to promote change through advocacy.

The Mexicans were more likely to receive information through and focus their work on direct interaction with communities and concrete demonstration projects.

The different constructions of many aspects of the environment, e.g., scale, harm and benefits, reflected the extent to which the relationship with the environment was mediated by institutions and technology. In Canada, the 'success' of institutions and technology has served to distance humans from the natural environment and therefore to limit direct interaction. In the Mexican case, contact tended to be less mediated, more direct.

This was reflected in the environmentalists' construction of what is 'natural' (and by extension, desirable) with respect to the human-environment relationship. For the Mexicans, direct interaction with the environment was natural and an ideal environment integrated human and natural elements, as personified by the rural or indigenous community. In the Canadian construction, humans and environment were separated and 'wilderness' was idealized.

In summary, the Canadian and the Mexican environmentalists did tend to construct the environment differently, as was hypothesized. Many of the differences were rooted in a tendency to separate, in the case of the Canadians, or not separate, in the case of the Mexicans, the elements of the environment. This was apparent at the level of the human-environment relationship and was manifested in constructions of (direct or indirect) benefits and harm; in information-gathering and action; and finally in their ideals (humans as integrated with or separate from nature). It was also manifested in the

separation or integration of the human environments (e.g., social, cultural, economic) with the physical environment.

The purpose of this study was to question the implicit, and sometimes explicit, assumption[47] that (a) environmentalism is essentially the same in different cultures, i.e., it is all like Northern environmentalism; and (b) environmentalism is more developed in the North. Both the literature review and the empirical research indicated that environmentalism, assuming that how environmentalists perceive and construct the environment is a significant characteristic, is quite different in North and South.

Environmentalists in North and South are on different paths within different contexts. It is difficult to assert that one group is more 'advanced' than the other. There are, however, at least some indications that the environmental constructions of environmentalists in the South more closely reflect some values espoused by the Northern environmentalists than do the constructions of the Northern environmentalists themselves. One example is the value attributed by Northern environmentalists to a close relationship with nature. Recognition of the complexity and inter-relatedness of the world around us is also considered important. Both of these aspects are better represented in the Mexican construction than in the Canadian one.

Direct contact with the environment can allow for greater 'ecological consciousness', as it was defined in the last chapter. To use Kirk's terms, the behavioural environment of the Southern environmentalists may be closer to the phenomenal one than that of their

[47] This assumption was originally noted among Canadian participants in the EDSP and later documented by the literature related to the UNCED process (see Chapters 1 and 2).

Northern counterparts.[48] Close interaction with the environment also assists in developing an emotional attachment, a sense of home--an intermingling of the landscape with the personal histories of those who inhabit it. This often characterized the relationship of the Mexican environmentalists with the place they lived--and worked. It characterized the situation of some of the Canadians as well, but they were a minority. Most of the Canadians did not live--and certainly did not work--in the environments they cherished, their emotional attachment was more often to an idea. There are advantages to caring greatly for one place and being there on the ground to look after it and there are also advantages to caring about an idea which can offer some protection to many places.

The EDSP Program Committee had an on-going discussion regarding whether to focus on the 'global policy dialogue' or the 'local demonstration project'. This was never resolved. Effecting policy change sometimes appears to have a more significant impact; but policy can change again, and will do, as politicians are pressured from different sides. Changing behaviour, lifestyle, community structure (and demonstrating that there is an alternative that gives encouragement to others) can sometimes have a more lasting effect. On the other hand, a supportive policy framework can greatly facilitate the amplification of that effect. In the end, it may be that this question of the most appropriate focus is irresolvable and efforts should be directed at both levels.

Environmental problems across the globe present enormous challenges and neither North nor South has all the answers. However, both can offer different ideas and new ways of

[48] Such considerations may lead to questioning the Western assumption that what is formally 'learned' is more valid than what is directly experienced, i.e., the globe in the classroom is valued more than the child's knowledge of his or her (local) environment. There is a possibility that one can best 'know' the environment with which one is in direct contact, with which one interacts. At least, direct knowledge should be considered to be as equally valuable as indirect knowledge.

thinking that can enrich the analysis of the other. 'Wilderness', for example, has some value as an ideal; places where human beings have left little imprint are important both biologically and culturally. However, wilderness is also culturally constructed and presents dangers both in terms of alienating large sectors of society and serving to conceal history and complexity, as Cronon (1996) and others have recently argued.

Separation of nature from human activity should not be seen as the only environmental ideal, but one among several which are mutually supportive. If more people are in contact with the natural environment in their daily (often urban) lives, it is likely to increase their appreciation of nature and their support for protecting it in a variety of ways. Saunders (1996) argues for the need to include natural areas within human communities rather than outside them where people have limited access to them. He refers to Michael Hough's warning that "the absence of nature can put environmentalists at a disadvantage". Hough has argued that "the perception of human settlements as separate from nature has long been a central problem for the environmental movement and for environmental thinking" (p. 27).

The cultural constructions of the Mexican environmentalists can offer some alternative viewpoints but, again, no clear answers. Their idealization of indigenous communities must also be subject to analysis. Simonian's (1996) research regarding the environmental sustainability of pre-Columbian societies in Mexico demonstrates that these societies were very heterogeneous and that some of their practices were sustainable and some were not. There were, for example, religiously sanctioned efforts to avoid overexploitation of nature, but there were also practices that involved excessive burning of wood as a sacrifice to the gods. The *chinampas* (constructing raised beds of mud and decayed

organic material in the shallows of lakes for growing crops) provided an example of sustainable agriculture, whereas other practices did not.

Some of the approaches used by the indigenous people are clearly worthy of exploration, but they do not provide a clear-cut recipe for sustainability. What they do provide is a model for a different kind of relationship, caring combined with use, as mentioned previously. As human beings put pressure on increasingly large areas of the earth, it becomes very difficult to set aside enough areas where nature can be preserved and protected from human intervention. We must place more emphasis on exploring ways in which to make human activity compatible with nature.

Northern environmentalists might try to put themselves into the position of those who 'work' in the natural environment. Pollan (1993) describes what happens to a (Northern) environmentalist worldview when it is taken into the garden and believes that the experience of direct interaction can lead to a more balanced and useful construction of our relationship with the natural world. When one interacts directly with the environment, the environment becomes part of the cultural, social and economic sphere, as much as the physical. One recognizes that all of these elements are integrated and must be considered in order to understand the complexity of the environment and environmental problems, and to find solutions. There are many examples of how 'protecting' an environment without protecting the economic welfare of the people in and around it does not provide long-term solutions.

To return to Simmons' explanation of cultural constructions, as quoted in the Introduction: "In order therefore to reduce the mass of information to something which we can tell ourselves that we understand...and especially so that somebody can do something about it, we make constructions of various kinds...[the constructions] are all imperfect and can be only provisional" (Simmons 1993b, 3). We cannot avoid making constructions; it is the only way that we can make sense of the world around us and decide how to act on it. The process of preparing a thesis is a particularly explicit example of quite deliberately seeking a framework and then slotting pieces of information into it; information from which we could extract quite different meanings if a different framework was applied. It is important to keep in mind the imperfect and provisional nature of constructions; they should help us to understand our world, not limit our understanding of it. We must recognize that wilderness is not the only possible form of nature, nor science the only way of understanding it.

While it is harder to live in a world without a clear framework and human beings tend to be less comfortable with gray than with black and white, coming to an understanding that the environment, like all aspects of 'reality', is largely socially/culturally constructed can be reassuring for environmentalists. The implication is that change, even radical change, is possible. People see and have seen the world in very different ways across cultures and throughout history and have acted in accordance with their mental geography. There is no reason why we should not in the near future find ourselves in a different world, potentially one that we value immensely and undertake to care for.

The potential for moving into the gray area between existing cultural constructions and subsequently broadening our perspectives and developing new ones is the most important

and the most essential product of exchange and collaboration among environmentalists. If we disregard the possibility that someone else's perspective on environmental issues may be quite different from our own, then we miss a tremendous opportunity, perhaps the whole point of working together. Fortunately, the evolving perspective of the ENGOs who have participated in the North-South collaborative work indicates that they are increasingly taking advantage of the opportunity.

> The project [has] illustrated the difficulty in making meaningful exchanges...between cultures, where the groups do not share similar environments. There have been natural limitations to the degree to which shared experiences and methodologies can be of direct use. The process of sharing the information has, however, been very valuable in that it provides a vision to other problems and approaches to solutions... with questions and feedback from international partners often lending a very different perspective to familiar work. (Pembina Institute for Appropriate Development, quoted in EDSP 1995, 6)

In tracing the evolution of environmental ideas, as Worster (1985) has comprehensively done, the provisional nature of our constructions becomes very evident. There are, however, also indications of the persistence of certain themes. Arnold (1996) points out that in the course of European expansion, foreign environments and their inhabitants were characterized in many different and often contradictory ways, but almost always in a way that made them inferior to Europe and Europeans. Human beings undoubtedly tend to create constructions that serve their own interests. Whereas Northern environmentalists hold views about the environment which are in almost complete opposition to the imperialists who sought to exploit the world's riches, the theme of superiority may, at least implicitly, persist. This irony should be borne in mind by contemporary Northern environmentalists.

Being conscious that human beings construct worldviews to their advantage can sometimes help us to avoid doing so. It can also help us to promote social change.

A prevailing worldview must take the concerns of many sectors of society into consideration and be linked to their current values, but with the assumption that those values will evolve. For example, an environmental ethic must include attention to people's livelihoods. Over time, one can imagine that maintaining livelihoods will be seen as inseparable from maintaining the health of the natural environment rather than in opposition to it.

Changes in worldview are possible, and in fact, probable. How do we ensure that the new worldview that we construct is one that protects the planet and its inhabitants? Perhaps by taking the best elements of many worldviews and avoiding those elements which are most destructive. In order to do so, we must pay attention to history and to the voices of other cultures. We must value different types of knowledge and avoid limiting our options as a result of expansion of a global monoculture. G.K. Chesterton made this point well in his 1904 novel, The Napoleon of Notting Hill, when the British civil servant, James Barker, encounters the President of Nicaragua:

> '...We moderns believe in a great cosmopolitan civilisation, one which shall include all the talents of all the absorbed peoples-'
>
> 'The Señor will forgive me,' said the President. 'May I ask the Señor how, under ordinary circumstances, he catches a wild horse?'
>
> 'I never catch a wild horse,' replied Barker, with dignity.
>
> 'Precisely,' said the other; 'and there ends your absorption of the talents. That is what I complain of your cosmopolitanism. When you say you want all peoples to unite, you really mean that you want all peoples to unite to learn the tricks of your people. If the Bedouin Arab does not know how to read, some English missionary or schoolmaster must be sent to teach him to read, but no one ever says, "This schoolmaster does not know how to ride on a camel; let us pay a Bedouin to teach him."

The blanket of smog hanging over much of North America in this summer of 1998 is raising questions about the feasibility of wide-scale automobile use. Access to water is becoming a pressing issue in many parts of the world. We had better make sure that some among us are still comfortable around camels and wild horses.

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Appendices

Appendix I - Data Sources

Documentation of EDSP activities:

EDSP Annual Programs and Reports from 1991-1993

Minutes from EDSP Program Committee meetings 1991-1993

Reports on EDSP-funded projects submitted between 1991 and 1994; these reports cannot be quoted directly but permission was gained to include some of the quotes in a publication, Long-Distance Relationships: Guidelines for Global Environment and Development Initiatives (Canadian Environmental Network, 1995) which allowed me to also make use of them in this paper

Report from May 1991 EDSP Study Tour to Mexico and Nicaragua (which I led) and journal kept by the ten Canadian environmentalists who participated in the tour

Report from March 1992 EDSP ENGO workshop in Winnipeg (in which I participated)

1992 Report from the Linking Environment and Social Justice tour by Margarita Saravia of the Centro de Encuentros y Dialogos (CED), part of an EDSP-funded project with the Social Investment Organization (SIO) of Toronto. I attended the tour's Ottawa workshop.

Evaluation Report from December 1992 CIDA-ENGO Consultation Meeting in Hull (in which I participated)

Report from February 1993 Partners' Meeting (in which I participated) which brought together Canadian and Southern partners (of which two were Mexican) from five EDSP projects to evaluate their partnerships.

Report from June 1993 site visit (by representatives of the EDSP Program Committee, Canadian, Mexican and Costa Rican ENGO communities and CIDA) to EDSP-funded projects in Mexico and Costa Rica

September 1993 EDSP Interim Evaluation Report (prepared by Universalia, a Montreal-based consulting firm)

Evaluation Report and my personal notes from November 1993 EDSP Constituents' Assembly (which I attended as an evaluator)

Meetings observed:

EDSP Program Committee meeting and annual meeting of the Réseau québécois des groupes écologistes in Quebec City, June 1994

Vision and Strategy Session, Merrickville and CEN AGM (Annual General Meeting), Ottawa, September 1994

Meeting (organized by L'éducation au service de la terre) to review the state of environmental education in Quebec, Montreal, October 1994

EDSP Program Committee meeting in Ottawa (I tried out the workshop I had developed at this meeting), March 1995

GEMA meeting to review the state of environmental education in Morelos, Cuernavaca, July 1995

CED Escuela de Promotores (as) Ambientales (school for environmental activists), six sessions were held one day per week during July and August, 1995 in Cuernavaca. The approximately 30 participating environmentalists came from throughout the state of Morelos and from Mexico City.

CIDA-ENGO meeting, Hull, November 1995

CEN AGM, Hamilton, May/June 1996

Commission for Environmental Cooperation (CEC) Public Meeting, Montreal, June 1996

CEC Public meeting, Mexico City, March 1997

Unstructured Interviews (with representatives of):

Centro de Encuentros y Diálogos (CED)
Grupo de Educación para el Medio Ambiente (GEMA)
Espacios Culturales de Innovación Tecnológica
Espacio de Salud
Espacio Ecologico Cuautla
Taller Espacio Verde
Comité Parroquial de Ecología -- Col. Gral. Antonio La Barona
Centro de Compostaje, Tehuixtla
Amigos de Tepoztlán
Social Investment Organization (SIO)
Citizens for a Safe Environment
Citizen's Clearinghouse on Waste Management
Falls Brook Center
QPIRG-McGill
EDSP Program Committee members and staff