BRIDGING THE GAP: AN EMPIRICALLY-SUPPORTED PHENOMENOLOGICAL STUDY OF ENVIRONMENTAL LIVING

A Dissertation

Submitted to the Graduate School

of the University of Notre Dame

in Partial Fulfillment of the Requirements

for the Degree of

Doctor of Philosophy

by

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August 2000

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Abstract

by

Jeffrey Bryant Noethe

All environmental and conservation issues ultimately depend upon human behavior, both for their origins and their timely solutions. Unfortunately, human responses are slow and seem to reflect naive, linear perspectives about what the future holds. While collective human impacts are the obvious source of natural destruction, change must occur at a more personal level. Therefore, this study focuses on individual decision-making, particularly on the role of values. Initially, theoretical models of value structure and value change are proposed, but these are only precursors to a thorough exploration of living environmental value systems.

This study utilizes structured interviews and a form of phenomenological analysis to capture the environmental values of 21 dedicated environmentalists and conservationists. Unlike most qualitative methodologies, this analysis includes a ratings phase to establish empirical grounds for the construct validity of summaries derived from the phenomenological analysis. An extensive

qualitative exploration of these summaries was then conducted. This process yielded emergent models of value structure and value change, along with a comprehensive picture of environmental living, all of which have implications for future environmental interventions.

The most prevalent values that emerged from the qualitative exploration were awareness of current realities; connectedness of land, ecosystem, and people; and active involvement. The emergent model of value structure revealed five key dimensions: reverence, positivity, clarity, scope, and foundation. The emergent model of value change revealed two paths for moving an individual from passive ignorance to active awareness. One path is based on the development of self-awareness, while the other is based on the development of environmental awareness. Both paths involve stages of observation, understanding, reaction, commitment, and involvement.

As a methodological study, this research bridges the gap between quantitative and qualitative approaches. As a values study, it provides new resources and ideas for bridging the gap between traditional and environmental perspectives. It also offers some ideas for bridging the gaps that exist between diverse approaches to environmental reform.

For those who catch glimpses of the truth and do not turn away.

You are all heroes.

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PREFACE

Though the Tao is *wu-tse* (nonlaw), it has an order or pattern which can be recognized clearly but not defined by the book because it has too many dimensions and too many variables. This kind of order is the principle of *li*. . . . *Li* may therefore be understood as organic order, as distinct from mechanical or legal order, both of which go by the book. *Li* is the asymmetrical, nonrepetitive, and unregimented order which we find in the patterns of moving water, the forms of trees and clouds, of frost crystals on the window, or the scattering of pebbles on beach sand. . . . As soon as this beauty is pointed out it is immediately recognized, though we cannot say just why it appeals to us. When aestheticians and art critics try to explain it by showing works of art with Euclidean diagrams superimposed on them–supposedly to demonstrate elegance of proportion or rhythm–they simply make fools of themselves. Bubbles do not interest one merely because they congregate in hexagons or have measurable surface tensions. Geometrization always reduces natural form to something less than itself, to an oversimplification and rigidity which screens out the dancing curvaceousness of nature. (Watts, 1975, pp. 45-46)

CHAPTER 1

ENVIRONMENTAL CRISIS

1.1 Assumptions

Throughout this research project, it will be assumed that environmental problems do exist. It will also be assumed that these problems pose severe enough threats to humanity and existing ecosystems to necessitate an immediate human response. Beyond these basic claims, assumptions about environmental problems and their solutions will be minimized. This approach is intended to reduce subjective ranting and biased logic, which are common in environmental discussions and serve only to divide the movement and alienate potential supporters.

1.2 Evidence

The assumptions being made are simple and reasonable. Nevertheless, these basic claims remain controversial. For anyone seeking a more informed perspective on the current environmental situation, an abundance of information and evidence is available. General introductions are offered by Ehrlich and Ehrlich (1991, 1993); Gore (1992); Hardin (1993); Howard (1997); Meadows, Meadows, and Randers (1992); and Wilson (1992). The Worldwatch Institute

publishes an annual report on global ecological health (Brown et al., 1984-2000). Several edited volumes are also available that present a wide spectrum of perspectives and ideas (Chiras, 1995; Clark, 1994; Roszak, Gomes, & Kanner, 1995; Sterba, 1995). For the purposes of this project, a few critical pieces of evidence will suffice to emphasize the reality and urgency of the environmental crisis.

1.2.1 Mass Extinction

The first piece of evidence is the current trend toward mass extinction of species. According to the IUCN World Conservation Union (Baillie & Groombridge, 1996), 25 percent of all known mammal species and 11 percent of all known bird species are currently threatened with extinction. It is estimated that 20 percent of reptiles, 25 percent of amphibians, and 34 percent of fish are also currently threatened. These estimates reveal only part of the problem, because more than 90 percent of the 1.7 million documented animal species have not been evaluated, including most invertebrates. One area where much is known about the impact of humans on biological diversity is the rainforests, where over half of all species of plants and animals are found (Wilson, 1992). According to Wilson, the most conservative estimate is that 27,000 species of plants and animals become extinct in rainforests every year. That means three species vanish every hour, most of which have never been documented. If the natural baseline rate of extinction is one species per million per year, then human

impacts have multiplied this rate by 1000 to 10,000 in rainforests alone. Worldwide, Wilson estimates that 50,000 species of plants and animals become extinct every year, a rate unparalleled since the disappearance of the dinosaurs 65 million years ago.

1.2.2 Ecosystem Destruction

The second critical piece of evidence is the global destruction of ecosystems, which contributes directly to species extinction and reduced biodiversity. Almost half of all the Earth's old-growth forests have been cleared, fragmented, or degraded in some way, and 39% of the remaining forests are currently being threatened by logging, mining, and development (Population Reference Bureau [PRB], 1999). Rainforests are being burned at a rate of over 142,000 square kilometers per year, which is equivalent to one football field every second (Wilson, 1992). Despite their rich content and reputation for rapid growth, these fragile forests may take centuries to grow back. If the soil quality and seed availability are low enough, recovery may never occur. In the United States, over half of the natural wetlands have been lost (approximately 119 million acres), along with 75 percent of the shortgrass prairies, almost all of the tallgrass prairies, and almost all of the virgin forests (Burton, 1997; Vickery & Carlson, 1995). While the number of acres of forested land in the United States has increased during the last hundred years, many huge tracts of diverse hardwood forest have been replaced by monocultures of softwood conifers

(Gore, 1992). These monocultures can be vulnerable to plant diseases and do not support the diversity of life that once thrived in the hardwood forests.

1.2.3 Exponential Population Growth

The third piece of evidence is that, despite reductions in the rate of population growth, the number of human beings continues to grow exponentially. Human population is a primary concern for the environment, because it is the one ingredient that can undermine all of the other critical efforts at reform. No amount of conservation, recycling, technology, or lifestyle change will make the slightest difference if the global human population continues to skyrocket. Figure 1 presents global human population over the last two thousand years, including United Nations projections for the next fifty years (Gore, 1992; PRB, 1999; United Nations Population Fund [UNFPA], 1999).

The exponential progression for population is directly influenced by two primary factors, birth rate and death rate. As long as birth rate exceeds death rate, the population growth rate will remain positive and the global population will continue to increase exponentially. At present, humanity is on the steep part of the curve, where even the smallest positive rate of growth produces huge annual increases in population. Recent reductions in growth rate, from 2.4% to 1.3% over the past 30 years (UNFPA, 1999), have slowed the exponential progression, but the overall shape of the curve has not changed. The only way to reverse this skyward trend is to establish a non-positive growth rate, where the

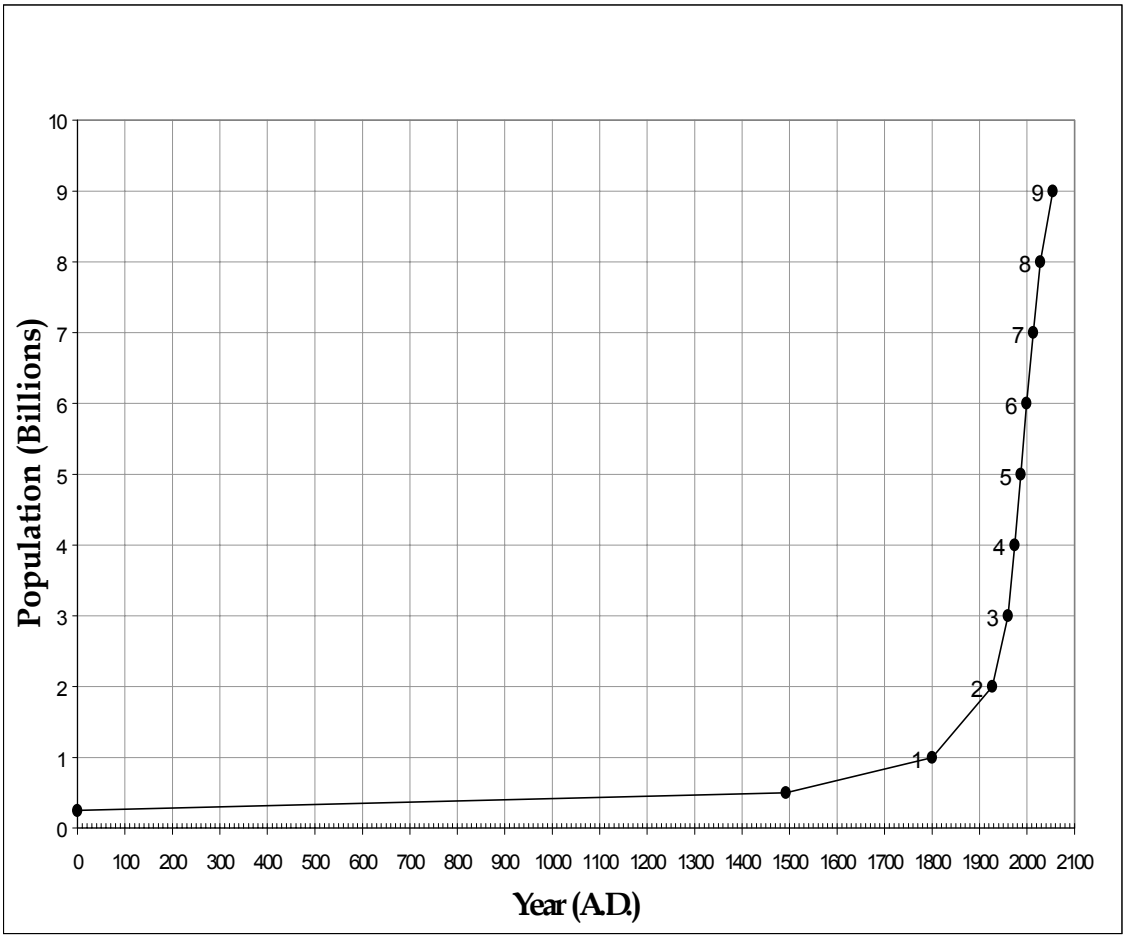

FIGURE 1. Global human population growth curve from A.D. 0 to 2054.

death rate exceeds or equals the birth rate. Given that the Earth is of finite size, it is reasonable to assume that the Earth has a limited carrying capacity for human beings. If humans do not choose to implement a birth rate solution for exponential population growth, then nature will impose a death rate solution sooner or later. One of the two events must occur before the growth rate can be stabilized.

CHAPTER 2

HUMAN RESPONSE

2.1 Dangerous Delays

Human beings are responding to many of these issues, which indicates some acknowledgement of the basic assumptions of this research project. Unfortunately, the rate of change is far too slow to reverse negative environmental trends. This is the basic issue faced by the environmental and conservation movements.

The lag in human response to environmental destruction is reminiscent of Nero, the Emperor who ruled Rome from A.D. 54 to 68. As the story goes, Nero fiddled while Rome burned, and the city was largely destroyed. Rumors held that Nero had set the fires himself to make room for a lavish new palace (Linderski, 1993), but whether his intentions were malicious or naive, he still failed to fight the blaze.

As residents of the modern world, we too are fiddling, but it is now the world that burns. Seen from space, the plumes of smoke over South America seem to validate this comparison. Perhaps our intentions are naive, as we live happy illusions full of work, play, and family. Perhaps our intentions are malicious, as we selfishly push the limits of nature and risk the lives and futures

of others for our own personal gain. Either way, we are dangerous, because while we play our fiddles, rain forests burn, soils erode, reefs die, resources grow scarce, human populations boom, and entire species vanish forever.

2.2 Linear Thinking

Current human responses seem to indicate a naive, linear perspective, one that does not appreciate the exponential nature and subsequent urgency of many environmental problems. This response is somewhat understandable, because exponential growth can appear linear and very predictable in the early stages. However, as the steeper part of the curve is reached, change happens quite rapidly.

The danger of maintaining a false linear perspective is clearly illustrated by the following French riddle for children:

> Suppose you own a pond on which a water lily is growing. The lily plant doubles in size each day. If the plant were allowed to grow unchecked, it would completely cover the pond in 30 days, choking off the other forms of life in the water. For a long time the lily plant seems small, so you decide not to worry about it until it covers half the pond. On what day will that be? (Meadows et al., 1992, p. 18)

From a linear perspective, it is expected that half the pond will be covered on day 15, but this conclusion does not take into account the exponential growth of the lily. If the lily doubles in size every day, then half of the pond will not be covered until day 29, leaving only one day to respond to the threat! On day 15, the lily will actually cover only 1/32768 of the pond (0.003 percent), which hardly evidences a threat from a linear perspective. This simple example may appear

extreme due to the high growth rate (100 percent per day), but the growth rate only affects how quickly the steep part of the curve is reached. The shape of the curve is always the same. Using linear thinking, humans are capable of making similar mistakes with respect to real, exponential environmental trends such as human population growth, resource use, and pollution (Meadows et al., 1992). It may seem like there is plenty of time for a response, especially when the growth rate is very small, but exponential growth can quickly get out of control.

2.3 Collective Effects

Grand theories of human irresponsibility and cultural degradation are commonplace in discussions of environmental destruction. Listen to enough of these discussions, and "humanity" begins to sound like the name of a plague infecting the planet. The problem with promoting this extreme view of humanity is that it does not fit the self-image of most individuals. Who among us sees their existence as that of a parasite or virus? In truth, no one individual will ever epitomize all the negative qualities suggested by our collective environmental impact, because our collective impact is not a matter of malicious individuals. Rather, it is a matter of billions of small, seemingly harmless, individual choices that add up to a massive destructive force. Each individual may live an honest life full of good, if somewhat naive, intentions, but on a global scale, even the best intentions can and will produce unexpected and catastrophic collective effects (Schelling, 1978).

2.4 Individual Decision-Making

While our collective behavior is the undeniable cause of environmental problems, it is individual behavior and decision-making that holds the solution. Humanity as a single organism cannot be reasoned with, and so it is futile to discuss environmental reform at this level. Real change has to occur at the personal level where reason, emotion, and spirituality still have meaning. Global environmental issues may seem less impressive at this microscopic level, but this is where such problems can and must be solved. Thus, the focus of this research project is on individual decision-making.

Identifying individual decision-making as a basic causal element in the environmental crisis is not the same as accusing people of being irrational. Rather, the problem with individual decision-making is that, while decisions may seem optimal from the individual's perspective, they are often less than optimal for the environment. Even choices that appear to be perfectly rational, appropriate, and benign can contribute to environmentally destructive trends (Noethe, 1996). As long as people fail to appreciate that human health and satisfaction are tied directly to the health of the natural world, individual decision-making will continue to produce behaviors that are improper (sub-optimal) from an environmental perspective.

The failure to fully consider the environmental consequences of daily decisions is due to at least three factors: the complexity of global environmental

issues, the limited and often contradictory information that is available about these issues, and the inherent limitations of human information processing. The complexity factor simply reflects the staggering complexity of the natural systems that are being corrupted. There are countless variables, conflicting interests, unknown chains of interdependency, unpredictable outcomes, and ambiguous moral dilemmas, all of which serve to overwhelm even the most determined efforts at understanding and prediction.

The information factor is a byproduct of another complex system, modern media. Newspapers, magazines, books, radio, television, and the Internet all offer a wealth of information, but the most accessible of these sources are also the most conservative. In effect, the volume of information is actually part of the problem, because environmental issues and messages are easily buried in the mounds of available data. Add this to the fallibility of media, the subjective truths, and the hidden agendas that underlie many of the messages, and a puzzle of near-infinite scope is revealed.

Finally, there is the human limitation factor. As human beings, we are precluded from considering every aspect of every decision, so we must arrive at decisions using imperfect estimates of probabilities, frequencies, and expected utilities (Ashcraft, 1989). These estimates allow room for systematic errors and sub-optimal choices, which are an inherent part of human decision-making. A single human being simply cannot keep up with an entire planet of events and information. Humans are also precluded from making objective decisions, even

in simple situations, because we never see the world from an objective viewpoint. The information that is considered relevant to a particular decision is always determined by personal values. Thus, individuals can only strive to make subjectively optimal choices, and the environmental and conservation movements can only strive to help people make choices that are also optimal for the Earth.

Complexity and information issues can be at least partially addressed through intensive research and education efforts. Unfortunately, such efforts may only succeed in adding to the existing clutter and complexity. In order to insure that new information will be relevant, useful, or even noticeable to individuals, it is also necessary to explore how human beings cope with information and their own limitations. The resulting awareness may reveal essential strategies for effectively promoting decisions that are good for both individual and environment.

2.5 The Value System

Humans cope with complexity issues, information issues, and their own limitations by applying personal value systems to decision-making. These value systems exist as enormous collections of priorities, strategies, goals, and beliefs, which allow people to weigh the importance of available information and estimate the probabilities and expected (subjective) utilities of possible outcomes. In most cases of decision-making, these cognitive tools are applied automatically

and without our awareness. To simplify discussion, this collection of tools (i.e., the value system) will be divided into two primary components: heuristics and values.

2.5.1 Heuristics

Heuristics are cognitive strategies or mechanisms that individuals use to reduce the complexity of decision-making (Tversky & Kahneman, 1974). One example is the availability heuristic, which estimates frequencies for events according to the ease with which they come to mind. Because the speed of retrieving information is positively correlated with its frequency of occurrence, the availability heuristic is a reliable strategy for deriving frequency estimates. However, when ease of retrieval is affected by factors other than the actual frequency of occurrence, this heuristic can produce inaccurate estimates. For example, an estimate of recycling frequency might be based on the number of recyclers who readily come to mind. In a community with a well-established recycling program, this heuristic could easily produce an overestimate of recycling nation-wide, while in a community with no recycling program, it could easily produce an underestimate. Despite the possibility of inaccurate estimates, heuristics serve an absolutely vital role in simplifying the decision-making process.

2.5.2 Values

Values provide a frame of reference for decision-making (Tversky & Kahneman, 1974). That is, they serve as the basis for evaluating the relevance of information that is automatically retrieved during the decision-making process. Values consist of the preferences and beliefs that encompass everything we think we know about the world and ourselves. Many of these specific values, which may be held consciously or subconsciously, are directly relevant to the environmental crisis. For example, we may have seemingly innocent preferences for automobiles, lush lawns, daily papers, and pre-packaged and frozen foods. We may even believe that we need such things to be happy. Unfortunately, each of these simple values leads to choices that exact a toll on the natural world.

In addition to specific preferences and beliefs, values also exist as more general themes. If specific values are the brush strokes of decision-making, then these themes are the images that emerge. The brush strokes form the images, but the images also guide the brush strokes. They are inseparable aspects of the same whole. Value themes simply reveal the natural structures and patterns of the whole value system, which, like a painting, can be ordered or confused, vivid or murky, driven or wandering, anthropocentric or biocentric. Not surprisingly, some of the most common value themes are also directly relevant to the environmental crisis. These include such themes as convenience, security, individualism, anthropocentrism, detachment, and growth. Historically, these common value themes have proven to be highly adaptive for humans, but in a

modern world of six billion people, they also bring heavy costs.

Convenience is a value theme that leads people to avoid complexity and extra effort. It also promotes reductionistic and myopic thinking. The manufacturers of most consumer products depend on this value theme to create demand for their convenience-maximizing goods, while producers of durable and sustainable goods, which typically involve higher initial costs, find themselves struggling against this theme (Noethe, 1996). The *security* theme has a similar effect by promoting choices with predictable outcomes and minimal risks. One common example is choosing immediate savings (certain) over long-term returns (uncertain). The security theme also promotes an aversion to change, which can greatly restrict the pace of social reforms.

Individualism, which is the antithesis of a social or communal theme, contributes to myopic decision-making by negating the personal significance of other people and future generations. A slightly broader form of individualism is *anthropocentrism*, which promotes humans as separate from and superior to the rest of the natural world. Both of these value themes serve to disempower the environmental and conservation movements by denying their relevance to individual humans.

Detachment promotes further ignorance and irresponsibility by disconnecting individuals from the destructive acts that are taking place. This theme is greatly facilitated by the market system, which separates consumers from the production and preparation processes. The consumer sees only the

neatly packaged end products, which show little direct evidence of environmental impact. Nevertheless, this deception only works if individuals collude by not asking questions.

With individualism, anthropocentrism, and detachment firmly in place, the *growth* theme is free to promote the ideal of "more, bigger, better" and create an ever-expanding market for consumer goods. In addition to disrespecting future generations and the natural world, this value theme blatantly ignores the modern reality of limited resources and the need to restore sustainable systems.

2.5.3 Interactions

The frame of reference provided by values, both specific and thematic, interacts with heuristics to determine the decisions that are made in daily life. Heuristics, insofar as they reflect basic aspects of cognitive processing, have a substantial impact on the values that develop, and values have a direct influence on how heuristics are applied. For example, if a person has a specific value for driving cars, then that person will apply heuristics in a way that promotes car use and reinforces that value. People sometimes condemn such biased decision-making as mere rationalization, but in truth, we all use these processes on a daily basis. We simply interpret the world in a way that reinforces our understanding of the world. In considering these interactions, which underlie all decision-making, it may be useful to form a basic visual model (see Figure 2). In this model, heuristics and values influence each other and decision-making. Other

factors, such as past experiences, enter this model through their influence on the whole value system, which includes both heuristics and values.

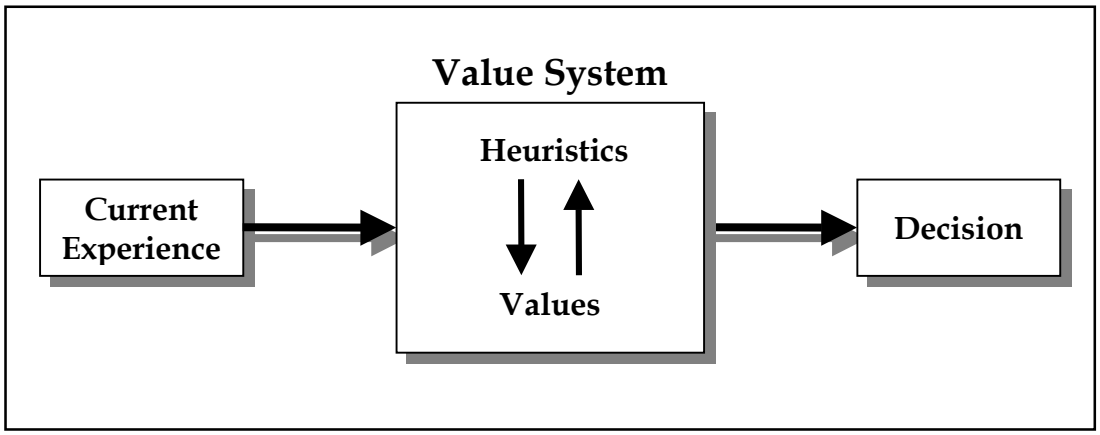

FIGURE 2. Model of decision-making.

CHAPTER 3

A VALUE SHIFT STRATEGY

3.1 Focusing on Values

Heuristics and values are a tremendous blessing for their general efficiency and effectiveness in the decision-making process, but due to the limitations mentioned earlier, they can also lead to environmentally-inappropriate or sub-optimal decisions (Medin & Ross, 1992; Tversky & Kahneman, 1974). One strategy for minimizing these negative environmental effects is to shift the frame of reference (i.e., specific values and value themes) of the value system, so that it works more directly in favor of the environment. The strength of this approach is that it focuses on influencing decision-making and behavior without trying to eliminate the three factors that contribute to sub-optimality (i.e., complexity, information, and human limitation).

Using this value-oriented approach, systematic errors and sub-optimality would still be present in human decision-making, but their cumulative effects on the natural world would be greatly improved. For example, consider the anchoring-and-adjustment heuristic, which is related to the availability heuristic. This heuristic uses an initial estimate and then makes adjustments until an acceptable answer or solution is found (Tversky & Kahneman, 1974). It is the

nature of this heuristic to make adjustments that are rather conservative, which results in a bias toward the initial estimate. If the initial estimate is based on individual preferences, beliefs, and themes that do not appreciate the natural world or the magnitude of current environmental threats, then this bias will inevitably work against the natural world. However, if those preferences, beliefs, and themes can be influenced in a way that raises the significance and urgency of environmental issues, then the initial estimate will shift and the bias will work in favor of the natural world. Similar shifts should be possible for other heuristics as well, because they all rely on values to guide their functioning. By understanding the inherent biases of human decision-making, it may be possible to transform human limitations into assets without changing the way that human beings process information or make decisions.

Identifying values as the most critical element in environmental change may seem like a significant step in simplifying environmental issues and reform strategies, but up to this point, it is merely a theory. A single golden thread has been identified, one that runs through all environmental issues and has some potential for change. Unfortunately, the task of shifting values may be no less daunting than the others in which environmentalists and conservationists have engaged. After all, human values (i.e., preferences, beliefs, and themes) are developed and reinforced through a lifetime of experiences, thoughts, and feelings. Nevertheless, this may be the one task that makes all other changes more feasible. Preserving habitats, controlling population growth, conserving

resources, reigning-in consumption, and cleaning up human waste are all important issues that must be addressed, but environmental reform will remain an up-hill battle unless the root cause of destruction is also addressed. By working toward a shift in values, especially in the underlying value themes, environmentalists and conservationists may eventually get individual value systems to work in favor of the environment, which would be a major turning point in the crisis at hand. The big question is how to promote such a shift.

3.2 Promoting Change

The only direct means of influencing a human value system, and of overcoming the bias of destructive values, is through experience. More specifically, values systems are influenced by experiences that are frequent and/or salient (Reason, 1990). The challenge is figuring out the kinds of experiences that will promote the desired changes effectively and efficiently. This may seem like a simple task, but it is hard to know what experiences will be salient to an individual, and it is even harder to know how those experiences will be interpreted. Sometimes, good intentions go awry.

For example, using an argumentative approach to challenge the "rationality" of existing values can be very unproductive, even with a seemingly solid argument. This happens because, from the individual's perspective, those existing values are already perfectly rational and appropriate. The environmental argument simply does not fit the preferences, beliefs, and themes of that person's

value system. By failing to respect this existing frame of reference, environmentalists and conservationists accomplish very little. Argumentative strategies may also be too philosophical and academic to be salient. As Alan Durning (1995) said: "New values never arrive in the abstract. They come entangled in concrete situations, new realities, and new understandings of the world" (p. 75).

Using a direct, confrontational approach can also be unproductive, even counterproductive, because it forces people into defensive positions, thereby polarizing and entrenching the two sides of the debate. Examples of this polarization can be seen in cases involving logging and fishing communities. The need for immediate intervention forces the environmentalists and conservationists to act quickly, often with scientific support, but while they may win small battles, they do not win local support for their efforts. The loggers and fishermen experience only the immediate threat to their way of life, which is very salient, but in the wrong direction. Thus, nothing is accomplished on the battleground of values, and the environmental and conservation movements make enemies rather than friends. Similar chains of events can be imagined in the debates over other ways of life, including Western consumerism. At the 1992 global environmental summit in Rio de Janeiro, Brazil, representatives of third world nations became frustrated with the demands being made on their ways of life. When they challenged the United States on its excessive energy consumption, President George Bush responded: "The American way of life is

not up for negotiation" (Kanner & Gomes, 1995, p. 78). Needless to say, that particular discussion did not result in any major environmental reforms, nor did the experience foster positive changes in individual decision-making.

It appears that a non-accusatory, non-inflammatory approach is needed, one that is grounded in real-life experiences and that acknowledges the existing value systems of individuals. Because the volume of available information is actually part of the problem, this approach must also be focused enough to get to the heart of the individual value system. Therefore, it is necessary to establish a basic understanding of the value structures and change processes that are most essential to environmental reform. One of the central purposes of this research project is to lay a practical groundwork for this understanding by exploring the living value systems of dedicated environmentalists and conservationists. First, however, it may be useful to explore theoretical models of value structure and change.

3.3 Theoretical Model of Value Structure

Specific values and value themes can probably be broken down and sorted in countless ways, but one set of dimensions that might be relevant to this discussion includes entity priority, time priority, motivation, and vividness. This model is not based on any one existing source or theory. Rather, it is derived from a general exposure to both environmental and counseling literature.

3.3.1 Entity Priority

Entity priority is a dimension that taps into who or what is considered to be relevant in decision-making. It provides the answers to several questions. Who or what do you really respect? Who or what do you really care about affecting through your actions and choices? Who or what do you care about others affecting through their actions and choices? The answers to these questions can be found along a continuum ranging from an extremely narrow perspective (self only) to an extremely broad perspective (the universe). Between these two extremes, the general entity priority of any individual's values can be found. Some of the intermediate points might include family, community, country, humanity, mammals, animals, life, and the Earth. Those people with a humanistic perspective most likely have entity priorities somewhere between self and humanity. Those with a more biocentric perspective are likely to have entity priorities at or above the mammal level. At the other extreme, sociopathic perspectives most likely correspond to very narrow entity priorities limited to self or family. Looking at the common value themes presented earlier, it becomes apparent that entity priority is a useful dimension for understanding individualism and anthropocentrism.

3.3.2 Time Priority

Time priority is a dimension that relates to the time frame that is considered relevant in decision-making. This dimension ranges from the extreme

short-term perspective (now) to the extreme long-term perspective (infinite time), with intermediate points that might include the next ten years, the individual's own lifetime, the lifetime of the individual's children, two generations, three generations, and so forth. The Haudenosaunee Confederation, composed of five indigenous nations, has maintained a centuries-old philosophy (i.e., value theme) that all major tribal decisions must take into account the effects on the next seven generations (LaDuke, 1996; Morris, 1995). In this modern world, few people seem to think beyond their own lifetimes, much less those of their children. Time priority may be a useful dimension for understanding the common value themes of convenience, security, and growth.

3.3.3 Motivation

Motivation is the dimension that is most difficult to define, possibly because it is the most personal and ambiguous aspect of the entire value system. It is the answer to questions about the perceived source of an individual's values. How are you driven? Who or what guides you? Where do your values come from? Considering the wide range of possible answers, it is likely that motivation actually includes several dimensions. The most apparent dimension of motivation would be a continuum ranging from purely internal to purely external. Another dimension might be a continuum from purely practical to purely mystical. Using just these two dimensions, it is possible to account for general value themes such as theism (external mystical), self-guidance (internal

practical), and soul-guidance (internal mystical). This is a very subjective dimension, one that does not easily lend itself to analysis. Fortunately, it also seems to be the dimension of least concern in environmental reform, a point that will be explained shortly.

3.3.4 Vividness

Vividness is a dimension that describes the strength and clarity of values. At the low end, it indicates values that are unclear or inconsistent for the individual. At the high end, it indicates values that are clear and cohesive. Within the complexity and confusion of the modern world, it is easy to understand how the vividness of a value system can become diminished. Another way of conceptualizing vividness is along a continuum from passive to extremely active. The passive individual suffers from uncertainty in the presence of confused values and lacks the confidence to express values vividly to others. Meanwhile, the extremely active individual does not suffer from uncertainty at all and lives confidently as an exemplar of personal values. Because internal experience and external application are so obviously linked, vividness can be conceptualized in either of these ways. This dimension may be helpful in understanding the detachment value theme, because a lack of clarity and confidence could quite easily dissuade an individual from actively connecting to the world.

3.3.5 Essential Dimensions

Four theoretical dimensions have been presented for looking at the structure of specific values and value themes. Entity priority and time priority identify the inclusiveness of an individual's values, motivation shows how those values are driven or guided, and vividness shows the clarity of those values in the individual's life. Of these four dimensions, only entity priority, time priority, and vividness seem to be absolutely essential to the environment. Motivation is a very intriguing concept, but it is not clear that any one type of motivation is superior to any other. By contrast, on the entity and time priority dimensions, it is quite clear that broad, long-term values are environmentally superior to narrow, short-term values. It is also clear that the environment cannot benefit from values that are passive or unclear on the vividness dimension, though active or clear values are not necessarily pro-environment.

While the motivation dimension does not pose a direct threat to the environment, arguments spurred by differences on this dimension have greatly delayed the progress of the environmental and conservation movements. Thus, it may be best to allow for maximum diversity in motivation, while pursuing the more essential goal of fostering values that are broad, long-term, and vivid. Figure 3 provides a summary of these essential dimensions, with arrows indicating the preferred direction of change on each dimension, from an environmental perspective.

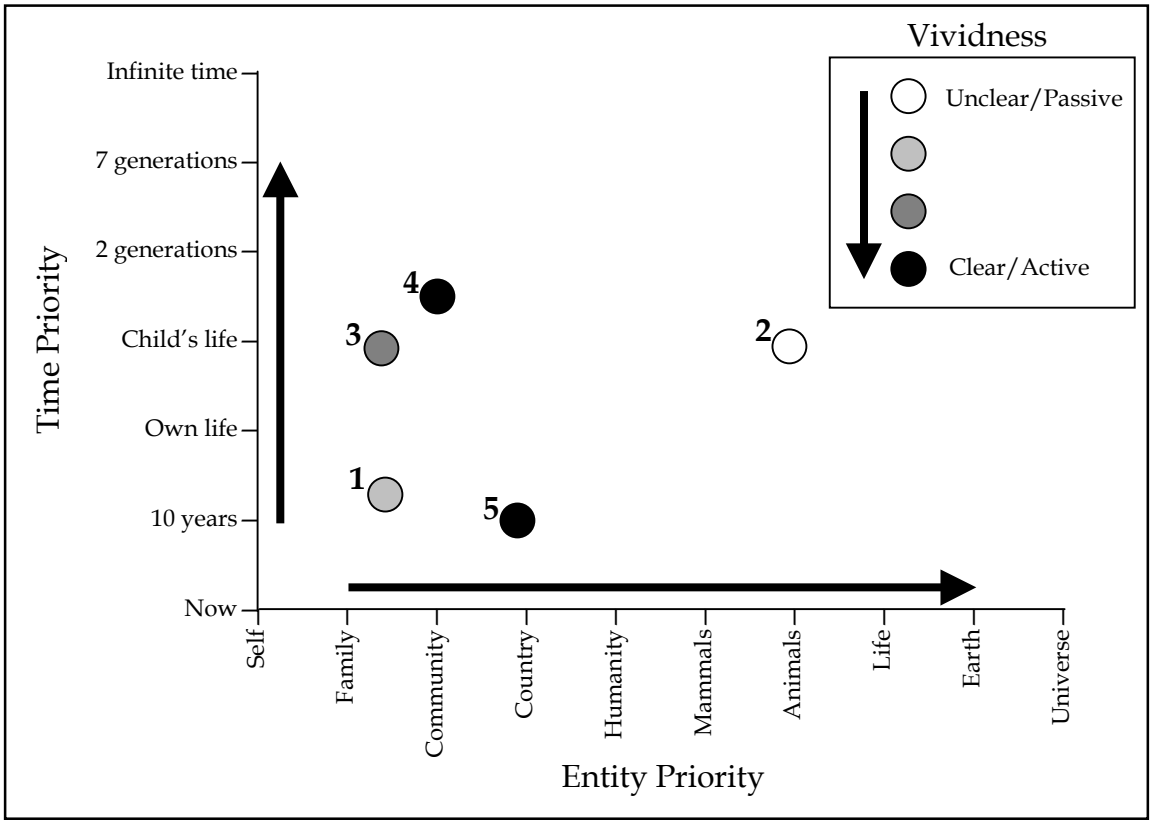

FIGURE 3. Theoretically relevant dimensions in value structure.

3.3.6 Examples

A few simple examples will help clarify the nature of these essential dimensions. First, consider the value system of a typical non-environmental consumer. This person will likely have values with a relatively narrow entity priority (somewhere between self and country) and a short-term time priority (see Figure 3, point 1). Another non-environmental consumer may have some values that are broad and long-term, but they are not made real due to a low vividness (see Figure 3, point 2). Next, consider an investment-oriented consumer. This person has a longer time priority and possibly a higher level of

vividness than the normal consumer, which allows this person to make decisions that are more optimal in terms of personal finance (see Figure 3, point 3). A stereotypical priest or preacher, with a strong theistic source of motivation, probably has a community entity priority and a time priority limited to one or two generations. However, the priest or preacher may have a very high level of vividness based on a very clear set of values (see Figure 3, point 4). Other highly committed people are the extremist, whether they be arch-conservatives, extreme liberals, or even environmental terrorists. The extremists have very vivid values that are applied with conviction, but the entity and time priorities of these values can lie anywhere on the two continuums. Early missionaries were extremists of a sort. They spread the word of their God around the world. Unfortunately, the breadth of their entity priority did not always include the cultures that they were corrupting, nor did their time priorities always see beyond the immediate effects of their actions (see Figure 3, point 5). As a result, many cultures have suffered at the hands of missionaries (Anderson, 1985; Diamond, 1993a, 1993b; Goehring & Stager, 1991). Extremists know what they believe, and they are fully committed to acting on their values. However, a simple lack of perspective can turn this noble effort into a horrid catastrophe.

3.3.7 Applications

In applying these dimensions of value structure to the theory being developed, it is possible to identify the naive individual decision-maker as

having a limited perspective on entity priority and/or time priority. The other possibility is that this individual has unclear values that do not bring confidence in applying specific environmental preferences or beliefs. All of the individuals represented in Figure 3 fall into at least one of these categories. The goal of shifting values for environmental reform requires that all three dimensions be addressed.

It is possible that an individual could already be high on any or all of these dimensions without being aware of the significance to environmental issues. For example, the investment-oriented consumer has a long-term time priority but may fail to see the environmental perspective as an extension of that priority. Activists for human rights issues may also fail to see environmentalism as a natural extension of their broad entity priorities. Ultimately, it is not necessary that personal values carry an environmentalist or conservationist label, as long as those values support environmental decisions and behaviors.

All names and labels aside, the ideal value system (from this theoretical perspective) demonstrates a broad entity priority that includes more than just humans, a long-term time priority that sees beyond two generations, and a clear and active level of vividness. These three elements provide a simple and practical definition of an environmental value system. If motivation is allowed to be maximally diverse, these elements may also define a common ground shared by all true environmentalists and conservationists.

In applying this theory of value structure, it becomes apparent that a

spokesperson or intervention would likely be most effective when the values of the message and the target audience are very similar on the motivation dimension. This similarity offers common ground even when none exists on the other three dimensions and minimizes the perceived distance between the two perspectives. An effective spokesperson or intervention should also present a broader entity priority and a longer-term time priority, but neither of these priorities should be extreme. Extreme perspectives do push the limits of what is possible, but they can also be intimidating and provoke a reactionary response.

3.4 Theoretical Model of Value Change

Rather than invent a completely new theoretical model for value change, an adaptation was made of Prochaska and DiClemente's transtheoretical model (1983, 1992), which is typically applied to changes in addictive behaviors. The transtheoretical model includes five stages: precontemplation, contemplation, preparation, action, and maintenance. The decision to use this model was based on two realizations. First, value change is intricately tied to behavior change. In their discussion of the processes of change, Prochaska, DiClemente, and Norcross (1992) identified value clarification as part of the self-reevaluation process, which is typically emphasized during the contemplation and preparation stages. In adapting the model specifically to value change, the focus is simply shifted toward those core internal changes that accompany behavior change. Rather than addressing environmentally destructive behaviors one at a

time, the emphasis is on the value changes that will produce more general environmental behavior changes.

The second critical realization is that environmentally destructive lifestyles actually involve multiple addictive behaviors. As members of the Western World, we are addicted to consumption (Durning, 1992; Glendinning, 1995). What once were luxuries have become necessities in our lives. We are addicted to automobiles, electricity, disposable products, fossil fuels, packaging materials, and the seemingly-ideal lifestyle that is supposed to accompany all these things. In this way, it makes sense to use the transtheoretical model to address environmentally destructive behaviors. If all of our addictive consumer behaviors are rooted in a common set of values (e.g., narrow entity priority and short-term time priority), then it also makes sense to address these similar behaviors as a single problem.

By focusing on values rather than specific behaviors, very little of the transtheoretical model will be altered. The perspective is simply a bit broader and deeper. In a practical sense, the same behavioral changes (e.g., recycling, use of durable goods, having smaller families, conservation) will be supported, because these changes are a critical part of value change. However, the goal of behavior change will always be secondary to the goal of value change. This means that behavior changes should not be accomplished by whatever means happen to be effective (e.g., force, coercion, injunction). There is always the higher goal of building environmental awareness and support at the value level.

In the past, the urgency of particular environmental problems has been used to justify intrusive and disrespectful tactics, with little effort at ameliorating the potential negative effects of these tactics. As a result, bad feelings and anti-environmental sentiments have been fostered within certain groups, such as loggers and fishermen. If intrusive tactics must be used, then efforts must be made to educate and support the affected communities.

Each stage of change will initially be presented in the terms of the original transtheoretical model, along with the processes of change that are relevant to that stage. The adaptation of the stage to value change will then be presented. This reframing will take into account the model of decision making represented in Figure 2 and the theoretical dimensions of value structure represented in Figure 3. Finally, some basic goals and potential interventions will be offered.

3.4.1 Precontemplation

Individuals in this stage either lack awareness of the problem behavior or lack the desire to change the behavior in the foreseeable future (Perz, DiClemente, & Carbonari, 1996; Prochaska et al., 1992). Even with some level of awareness, a precontemplative individual may demonstrate resistance, feel coerced into changing, and readily revert to old behaviors when pressure subsides. Pushing solutions at this stage is futile, because the problem has not yet been accepted. Change processes are used very little at this stage. Little information is processed, self-reevaluation is avoided, helping relationships are

not utilized, and negative aspects of the problem behavior are not fully considered. Overcoming the problem behavior is simply not a priority at this stage.

Adapting the precontemplation stage to value change is a simple matter of wording. Rather than a single behavioral problem, the focus is on an underlying value problem. A precontemplative individual might say: "My lifestyle isn't perfect, but there really aren't any problems worth changing." The individuals in this stage are either unaware or under-aware that their values, and the lifestyles that arise from them, are a problem. They do not fully see the connection between their values and environmental consequences, and therefore, they do not experience significant levels of doubt, guilt, or uncertainty. The existing value structure creates a rather stable and efficient illusion, but it does not coincide with environmental realities. Thus, the illusion is like a glass house.

Internally, the precontemplation stage may involve a mix of specific values, which may or may not reflect consistent underlying value themes. Some behaviors may coincide with environmental ends, but the motivation for these behaviors probably lies elsewhere (e.g., personal gain). Values could lie anywhere along the continuums of entity and time priority, but at least one of the three relevant dimensions of value structure must be low. Some individuals with low vividness may suffer from a confused and inconsistent set of values, which does not provide a clear framework for decision-making. This set may include many good values, and the underlying time and entity priorities may

even be high, but the uncertainty present in the system leads to seemingly random decisions and behaviors. Other individuals may have a clear value structure, one that seems efficient and effective to the individual. Unfortunately, this structure may have a limited perspective, which produces environmentally destructive choices. The real danger is in the level of confidence such individuals demonstrate in applying and defending their destructive values.

Fostering change at the precontemplative level is a very difficult task due to the level of resistance and lack of awareness. Therefore, the goal is simply to expose without pushing, to plant the seeds that might produce some internal conflict or incongruity. This should be accomplished through exposure to real examples and experiences, not theories and philosophies that can be argued and rebuked.

3.4.2 Contemplation

Individuals in this stage have a growing awareness that a problem exists and are seriously considering overcoming it, but they have not committed themselves to taking action (Prochaska et al., 1992). This stage involves weighing the pros and cons of the problem behavior and its solution, a process which often leads to an intense struggle over the pros of the addictive behavior and the cons of changing (e.g., effort, energy, loss). Thus, individuals may remain stuck at the contemplative stage indefinitely. The change process that is most effective at this stage is consciousness-raising, which increases knowledge of self and problem.

As awareness grows, the process of self-reevaluation may begin, which involves a cognitive and affective exploration of self, values, and problems. The effects of the problem behavior on significant others may also be explored during this stage (social-reevaluation). In summary, the shift from precontemplation through contemplation is centered on cognitive, affective, and evaluative processes, which Perz et al. (1996) call the experiential processes.

At the level of values, individuals in the contemplation stage still live in glass houses, but they are starting to notice some of the cracks and flaws. Doubts, dilemmas, and complexities are arising, which produce stress and cannot be ignored. These individuals are also starting to see the consequences of their values and resulting lifestyles. Initially, this new awareness may produce a reaction of disbelief, detachment, or rationalization, especially in individuals who are committed to very vivid values. This process of patching and defending old values can become highly inefficient, but the prospect of change may still be overwhelming.

As awareness grows during the contemplation stage, the effectiveness and efficiency of decision-making is reduced. Decisions and behaviors that used to be automatic now require more thought and consideration, because the complexity of conflicting values has been added or elevated. For individuals with high vividness, the clarity of the value structure is being seriously challenged. Initially, their level of commitment and action may increase, but eventually, commitment to the old perspective must drop as awareness continues to grow.

For less-committed individuals, the added complexity brought by awareness simply pushes commitment even lower. As commitment drops in both groups, specific values can be questioned and reevaluated, and the entity and time priorities can begin to shift. Near the end of this stage, both entity and time priority should be moving in the desired directions.

The goal during the contemplation stage is to raise awareness of the problems and to foster acceptance of the need for change. This requires two primary forms of intervention, education and support. Education efforts should be direct, relevant, and in-depth. They should reveal the consequences of current values, shake existing assumptions, and offer alternative values that have a better fit with the natural world. Observation, confrontation, and interpretation are all potential interventions. While real examples and experiences are still essential, some theory and philosophy can be offered during this stage, especially when the individual begins to question at a deeper level. Support efforts are critical to prevent individuals from stalling or regressing. This is a stressful and unstable stage, and some people will need guidance and/or emotional support to help them navigate it successfully.

3.4.3 Preparation

As the cognitive, affective, and evaluation processes continue, individuals in the preparation stage start to take some small steps toward the big change ahead (Prochaska et al., 1992). These small steps may include practice runs for

behavior change, or they may be preparatory changes that will make the transition easier. The individuals in this stage have not yet reached a criterion level of effective action, but they intend to do so in the near future. The change processes used in the contemplation stage continue to be effective, but some behavioral processes should be introduced as well (Perz et al., 1996). Counterconditioning is a process that reduces the magnitude of the problem by introducing substitute behaviors. Relaxation, desensitization, and positive self-statements can all be used as part of this process. Stimulus control is another important process that helps individuals avoid or counter the situations or stimuli that typically elicit the problem behavior.

During the preparation stage, the individual is still trying to clarify what the new values are about and how they will be applied in daily life. The basic perspective is almost completely in place, but its newness makes it somewhat scary. Also, old preferences and beliefs are still vying for attention, which means continued tension and frequent incongruities. Individuals in the preparation stage might say: "I really need to change the way I do things."

While the new values are coming together into a cohesive decision-making structure, old values are still being applied in daily life. Nevertheless, small changes in behavior are being made, which may include efforts at recycling, better buying, voicing a few ideas, or supporting an environmental group. These small changes may also include cutting back on some old automatic behaviors. The success of these preparatory changes builds clarity and

confidence, and when confidence reaches a high enough level, the transition to action will take place.

The goals for this stage are to set the new perspective in place, to test the waters, and to build commitment. Continued education and support efforts are essential, because this is the stage where peers will begin noticing and reacting to small changes. This is also the stage that leads up to the big jump into a different set of values and a new lifestyle. While the magnitude of the actual behavior change being contemplated may not be enormous, the perceived change is often far greater. Thus, support efforts must help individuals identify new peers and new communities that will validate the changes being made. Support efforts should also help individuals work through counterconditioning and stimulus-control processes that will reduce the likelihood of relapse into old values and behaviors.

3.4.4 Action

This is the stage where "individuals modify their behavior, experiences, or environment in order to overcome their problems" (Prochaska et al., 1992, p. 1104), and it is the stage that typically requires the highest commitment of time and energy. The most visible behavior changes take place during the action stage, and individuals remain in this stage from the moment they reach criterion until they either relapse or reach the maintenance stage after six months. The behavioral change processes are central to success in the action stage.

Counterconditioning and stimulus-control were introduced in the preparation stage, but others will also now be useful. Self-liberation is a process through which individuals come to believe in their ability to change their own lives in specific ways, while helping relationships facilitate change through positive support and stress relief. At the experiential level, it is important for individuals to continually assess threats, both internal and external, and to monitor relapse potentials.

At the level of values, very little change takes place during the action stage. The changes in value structure are almost complete, and all that remains is to fully apply that structure to the world. Prochaska et al. (1992) acknowledge that action is not the same as change, and that action is only made possible through all the work that goes into the change process. From the perspective of the theory being developed, this work occurs at the level of specific values and value themes. Because the value system guides decision-making and behavior, enduring changes in behavior (actions) are only made possible by shifts in the value system. Prochaska et al. (1992) also acknowledge that it is the changes that must be maintained, not the specific actions. In other words, as long as the new values are maintained, decisions and behaviors will naturally fall in line.

During the action stage, individuals are maintaining a criterion level of "living as if nature matters." These actions are no longer viewed as a sacrifice, but as a natural, direct, and genuine extension of a new perspective. The global environmental problems continue to exist, but individuals in this stage can feel

some consolation that they are no longer blind or willing contributors to those problems. Insofar as the actions are overt, visible, and fully recognized by their peers, these individuals also become living examples of their new values. Unfortunately, this stage can still involve a high level of stress, because the new perspective is likely to be in the minority, especially within old, familiar environments.

Once individuals reach the action stage, decision-making processes should become effective once more, producing relatively clear choices and behaviors. Some complexity remains as small incongruities are resolved and new habits are formed, but the big shift in values is complete. Vividness will continue to rise as the new perspective becomes clearer and as confidence in the new perspective grows. It is possible that the rate at which confidence grows will be influenced by the level of vividness experienced prior to the change. If vivid values are a novel experience, then it may take additional time to make the transition to stable and clear actions.

The goals for the action stage are to maintain the big shift toward applying the value changes, to deal with any old values that arise, and to foster recognition of the pro-environment lifestyle that has emerged. Interventions should include a push to act, to voice ideas, to establish new support networks, to teach, and to explore. Old peers will continue to pose a serious challenge to new behaviors, and individuals will probably be forced to explain or defend their actions. Thus, support remains critical in this stage.

3.4.5 Maintenance

Individuals in this stage have demonstrated successful, consistent action for at least six months without relapse. According to Prochaska et al. (1992), this is the stage where people "work to prevent relapse and consolidate the gains attained during action" (p. 1104). It is here that individuals fine tune the value and behavior changes made during the other stages. While change processes from previous stages can continue to be utilized, other processes that are useful at this stage include assessing conditions that might lead to relapse, developing alternative responses, and fostering confidence that one is doing the right things.

Maintaining new values involves making small adjustments in the specific values that are applied in daily life. Preventing relapse means avoiding old habits and behaviors, especially when tempted by familiar surroundings, situations, and stimuli. This is the stage where new values are reinforced, leading to the formation of new habits. It is also the stage where stress finally begins to subside, as the new values become stable, efficient, and effective. Complexity is being reduced during this stage, and decision-making is becoming coherent, perhaps for the first time. Nevertheless, change is still occurring. Entity and time priorities may still be shifting as experience accumulates, and even vividness may falter at times.

The goals for this stage are to reinforce new decisions and behaviors, and to deepen and clarify the new values. The change processes should remain

available as tools, but the primary intervention should be continued support. This is a good time to encourage individuals to teach others. Openly engaging in discussions will force these individuals to present their new perspective in a way that others will understand, which keeps the ideas salient and fosters a deeper level of understanding, acceptance, and confidence.

3.5 Implications and Applications

Much of this document has been dedicated to creating theoretical models of value structure and value change. Assuming that this logic is sound, it is now necessary to examine the implications of these insights and ideas. What might all of this mean? How might individual change be fostered? How could this understanding be used most effectively?

A large proportion of individuals in the Western World live as if environmental problems do not exist, which indicates not only a value problem, but also a large pool of individuals at the precontemplative end of the change spectrum. Furthermore, many of the existing environmental groups, programs, and opportunities are primarily action-oriented, which means they are most useful and accessible to individuals in the preparation and action stages. Prochaska et al. (1992) emphasize the importance of a good fit between stage and treatment intervention. Programs that are highly effective with individuals at the preparation and action stages may actually prove detrimental to individuals at earlier stages. Based on this understanding, there is an immediate need to fill the

gap between the unaware majority and the available interventions. In other words, an accessible starting point for change is required. Therefore, future efforts might focus on the experiential processes, which are critical for moving individuals from precontemplation, through contemplation, and into preparation. These experiential processes include consciousness-raising, self-reevaluation, and social-reevaluation (Perz et al., 1996).

To avoid adding to the clutter of available information, it is critical to stay focused on the lessons and guidelines that can be derived from this new understanding of the crisis at hand. Table 1 summarizes some of the basic principles that have emerged from the discussion thus far. Keeping these principles in mind, it may be possible to formulate an efficient and effective intervention that facilitates experiential processes, thereby respecting the needs of the under-served majority of individuals.

One possible intervention is to present information on a maximally diverse set of environmental perspectives and paths. This information would be intended to expose environmentalism as a big, diverse world of ideas and strategies, thereby expanding stereotypical conceptions and definitions. In practical terms, the goal would be to help normal people see how environmental values might fit their lives, and this would be accomplished by revealing a wide range of possibilities. The economist may never join Earth First!, and the human rights activist may never care about high-efficiency lighting, but each person is still capable of following a unique path that will lead to behavior and value

TABLE 1

PRINCIPLES FOR EFFICIENT AND EFFECTIVE INTERVENTION

Establish common ground. Don't argue. Battles between incompatible value systems are rarely won.
Be patient and respectful. Avoid being accusatory, inflammatory, or intrusive. Avoid cynicism in the presence of genuine naivete.
Think Deeper. Focus on changing relevant values, not behaviors.
Allow maximum diversity. Don't alienate people with different motivations.
Personalize the message. Match interventions to a person's current value system and stage of change.
Keep it real. Use living examples and experience whenever possible.
Educate and support. Use these interventions at all times.

changes that respect the natural world. Each unique path would reveal ideas, insights, rationales, emotional struggles, and even potential setbacks. The challenge lies in offering new possibilities that will be salient enough to stimulate and facilitate that unique personal progression. Ideally, there would be something for everyone, a path that bridges the gap at the narrowest point. Some of these paths will be very different, even contradictory, in terms of preferences and beliefs. Other paths may seem very different but actually only differ on the motivation dimension. Ultimately, maximizing acceptance of the most general values (i.e., broad entity priority and long-term time priority) is far more

important than resolving the specific discrepancies between diverse environmental and conservation groups.

Once this new comprehensive picture of environmental living is created, the information could be presented through living exemplars and their stories. This strategy avoids the trappings of a philosophical discussion and offers an immediate connection to real environmental worlds inhabited by real people. The experience may not be direct, but the psychological connection could still be a source of initial encouragement and support. Furthermore, the stories would offer ideas on how to proceed and what to expect in terms of costs and benefits. The final presentation of these stories could take the form of a book or a series of articles.

3.6 Exploring Living Value Systems

Speculating about value systems and strategies is a useless endeavor, unless the products of those speculations are validated against the living world. Therefore, this research project includes an extensive exploration of the living value systems belonging to a group of dedicated environmentalists and conservationists. The data drawn from these participants will be used to generate relevant models of value structure and change, to support or reject the theoretical models presented earlier, and to create a new comprehensive picture of environmental living. These data may also be used in future interventions for promoting values that respect the Earth.

The first hypothesis of this research project is that it is possible to observe and summarize environmental value systems using structured interviews and a qualitative methodology. The second hypothesis is that these value summaries can be validated as accurate and unique using a quantitative methodology. In this way, the research project serves two agendas. It offers support for an empirically-supported phenomenological method, thereby helping to bridge the gap that exists between quantitative and qualitative research. It also explores the nature of environmental values, thereby helping to bridge the gaps that exist between diverse value systems, both environmental and traditional.

CHAPTER 4

METHOD

4.1 The Abstraction Problem

Traditional quantitative research methods tend to reduce the full human subject matter to abstract quantities and constructs. This process of abstraction serves the goal of precision, often at the expense of richness and real-life relevancy. In the present study, traditional quantitative analyses would produce data that are amputated from the vivid stories of the participants. Such narrow and reductionistic data might meet the traditional criteria for reliability and validity, but they would lose the individual human context to which real people can relate. In a purely academic realm, this may be an acceptable loss. However, the essential purpose of this research project is to broaden and expand the understanding of environmental living, not to identify a mean environmentalist to which no individual can relate. In other words, this project is intended to focus on the information found in the scatter, not just in the means. The scatter includes the real, experiential components that might allow individuals to walk in the shoes of the participants and to imagine what those other lifestyles and values might be like.

If the problem is a loss of connection between abstract concepts and real

human experience, then the solution is to ground abstraction within real life. Abstraction cannot be avoided or eliminated, because it is an essential part of human conceptualization and understanding. However, it is possible to create a methodology in which abstraction is "the last step of a rigorously open ended process that is rooted in the concrete" (Fischer, 1995, p. 65). Using a narrative approach, the initial priority is to amplify and clarify the rich detail presented in the participants' stories. Through this process, a conceptual structure is allowed to emerge from each story, rather than being imposed by a preconceived theory. By using this approach, abstraction is not devalued. Rather, it is taken more seriously through a refusal to sacrifice or ignore the subject matter. Ultimately, abstraction will emerge in the form of essential meanings, which will be drawn from each participant's story. These essential meanings are the core elements that are necessary and sufficient to make each story what it is (Fischer, 1995). These meanings are essential, because the sense of the story would be lost if even one were left out. In the present study, the essential meanings take the form of environmental values.

4.2 A Phenomenological Approach

The methodology being used in this study is based on the phenomenological method of psychological description offered by Wertz (1982, 1984), Giorgi (1985), Hannush(1985), Barrell, Aanstoos, and Arons (1987), and Polkinghorne (1989). This methodology relies on personal communications as the

link to human experience and awareness. By looking into and beneath the narrative language, a person's fundamental relationships with self, others, and nature are extracted from the communications. In other words, the structure of the narrative is used to identify the structure of lived experience, which includes environmental preferences, beliefs, and themes.

The process of phenomenological analysis of narratives typically involves some variation on the following five steps offered by Giorgi (1985): (1) read for a sense of the whole, (2) differentiate units of meaning within the text, (3) express in a direct, thematic, psychological way the meanings implicit in each unit, (4) synthesize these themes into a consistent statement which summarizes the structure of the experience for the author, and (5) attempt to say something consistent about all the narratives in the group, so that more general conclusions can be approached. These are the basic steps that will be utilized in the phenomenological analysis of interviews in the present study.

4.3 The Best of Both Worlds

Phenomenological methodologies are very useful for describing human experiences. They provide a rich answer to the question: "What is the nature of this person's environmental values?" Unfortunately, these same methodologies have trouble answering the question: "How well is the true experience being captured by the description?" With no means of addressing issues of construct or criterion validity, phenomenological researchers have had to rely on the

assumption that the story is an adequate and accurate representation of the author's life and values.

Traditional quantitative methods suffer from the opposite problem. They allow researchers to test for construct or criterion validity, but they rely on assumptions or arbitrary standards about face and content validity. Put simply, quantitative methods have trouble describing *what* is being measured, while phenomenological methods have trouble describing *how well* something is being measured. Fortunately, each methodology is strong precisely where the other is weak, and it is possible to use this complimentarity to create a methodology that is rationally superior to either on its own.

The methodology being used in the present study was first implemented by Howard and Fischer (1990) and Fischer (1995). It incorporates descriptive (phenomenological) methods to address *what* has been captured, specifically the nature of each participant's environmental values. This methodology also incorporates a quantitative component, analogous to a construct validity study, to address *how well* those environmental values have been captured.

4.4 Recruitment

Four groups of individuals were recruited for this research project: participants, significant others, independent raters, and summarizers. Summarizers served as research assistants, while the other three groups served as sources of data. Consent documents were signed by all participants,

significant others, and independent raters.

4.4.1 Participants

The participants for this research project were selected using a set of basic guidelines intended to promote a quality sample. First, all participants must have devoted substantial time and energy toward environmental ends. Second, all participants must be considered leaders or exemplars within their respective fields or organizations. Third, all participants must have lived and worked primarily in the Western World. Other cultures surely have much to offer environmental reform, but because this project is focused on shifting the values of modern Western consumers, it seemed more important to recruit participants who are relevant and accessible to this population.

Beyond these basic guidelines, the selection process focused on assembling a group of participants that would represent the widest possible range of fields, philosophies, and approaches. This focus coincides with the goal of redefining and expanding the very idea of "environmentalism." Random selection was not possible, because the population of qualified environmentalists and conservationists is extremely amorphous, decentralized, and reluctant to participate in projects outside their own work. In fact, a considerable selection bias was likely, because only individuals with some respect for academics would have bothered to participate. This bias was not considered a problem, however, because the goal of recruitment was not to draw a representative sample of

environmentalists and conservationists. Rather, the goal was to tap into as diverse a group as possible.

Ultimately, after exploring over 80 leads, 23 environmentalists and conservationists agreed to participate in the study. The number of usable interviews was reduced to 21 due to two taping failures, but no further losses were experienced. Of the remaining participants, 33 percent were female, and 48 percent were employed as professors in university settings. Brief biographies for these individuals can be found in Appendix A.

4.4.2 Significant Others

Significant others were recruited as raters for the validation stage of the project. One significant other was recruited for each participant. These individuals had to possess a personal knowledge of the environmental values of their respective participants, and they could not be involved with the research project in any other way.

4.4.3 Independent Raters

A group of independent raters was also recruited for the validation stage of the project. These individuals consisted of graduate students and alumni from a small, Midwestern university, and they could not be personally acquainted with the participants assigned to them. Seven independent raters were used, each of whom did ratings for three participants.

4.4.4 Summarizers

A panel of four summarizers was selected and trained in the process of phenomenological analysis. They received a handout explaining Wertz's (1982, 1984) basic procedures and the attitude necessary for constructing a summary (see Appendix B). They also received a handout presenting a modified version of Hannush's (1985) method for psychological-phenomenological analysis of biographical texts (see Appendix C). The summarizers participated in several practice sessions, during which the summarizing process was explained and explored. Each individual completed one full practice summary, and revisions were made until the process was clearly understood. To facilitate a common focus among all the summarizers, a set of focus questions and guidelines was distributed (see Appendix D).

4.5 Interviews

Each participant was engaged in a structured interview lasting between thirty and ninety minutes. All interviews were conducted by one of two interviewers, and all interviews were audio taped. The preferred interview setting was face-to-face, but telephone interviews were necessary for six of the participants. The goal of these interviews was to extract information about environmental value systems, including specific values, value themes, and the life contexts within which these values and themes developed. Participants were asked to tell the story, in as much detail as possible, of how they became an

environmentalist or conservationist. They were also asked to describe their personal understanding of environmentalism. Finally, they were asked to describe (1) a situation where they struggled to do the right thing for the environment, and (2) a situation where they gained or realized a sense of purpose. Follow-up questions were used to clarify aspects of each story that related directly to the participant's current environmental perspective and to how that perspective emerged over time.

After each interview was completed, the content was transcribed, cleaned-up, and sent back to the participant for clarification, relevant expansion, and content approval. This process served several purposes. It allowed relevant material to be added, which might include afterthoughts, reflective insights, examples, or anything else that did not come up during the interview. The review process also provided an initial validation of the content from which the summaries were to be drawn.

4.6 Summaries

One summarizer read the approved content of each interview and produced a summary paragraph, containing between 175 and 250 words, that was faithful to the lived experiences of the participant. This paragraph was intended to capture the values that are essential to understanding the environmental life of the participant, especially those that are relevant to the participant's current environmental perspective. Specific information that might

reveal the identity of the participant was carefully excluded, and gender cues were alternated. The end result of this process was 21 concise summaries of unique environmental value systems.

4.7 Ratings

Summary paragraphs were validated using the methodology set forth by Howard and Fischer (1990), which requires the collection of summary ratings from participants, significant others, and independent raters. This rating process began with the creation of summary sets, each containing a target and three foils. The target is the summary from the participant's own interview, while the foils are summaries from other participants' interviews. It might have been interesting to have each participant rate all 21 summaries, but this task was deemed too time consuming, especially for such an overworked population. Therefore, sets of three foils were randomly selected for each target. To average across differences in summarizer ability and style, one foil was drawn from each of the three summarizers who did not create the target summary. In order to minimize repetition, these draws were made without replacement for all the targets of each summarizer. This selection process also minimized the number of independent raters needed for the study, a point that will be explained shortly. The result was 21 unique summary sets, one for each participant.

Rating packets containing the appropriate summary sets and rating scales were assembled and distributed to the participants. The order of the four

summaries within each set was randomized. Participants were asked to review the four summaries and rate each one on a ten-point scale. A value of "one" indicated that a summary was not at all descriptive of the participant's environmental values, while a value of "ten" indicated that a summary was exactly descriptive of the participant's environmental values.

A second set of rating packets was distributed to significant others, who did not have access to the interview tapes or transcripts. Each packet contained the same summary set that was rated by the corresponding participant, although the order of the summaries was randomized again. Significant others were asked to review the four summaries and to rate them on a ten-point scale, based on their knowledge of the corresponding participant's environmental values. In this case, a value of "one" indicated that a summary did not at all describe the environmental values of the participant, while a value of "ten" indicated that a summary described the environmental values of the participant exactly.

A third set of rating packets was distributed to independent raters, who had access to the approved interview content but no personal knowledge of the participants. Each packet contained transcripts and summary sets for the three participants assigned to that independent rater. Once again, the order of the summaries was randomized. The task for the independent raters was to read each transcript and to rate the four summaries on the same scale used by the significant others. It was decided that independent raters should not see the same summary twice, neither as foil nor as target, because their ratings might

become biased as they figure out which summaries go with which transcripts. It was also decided that independent raters should not see multiple targets from the same summarizer, because they might learn to identify a particular summary style as the target. Therefore, the packets for independent raters were assembled manually with no summary overlap and no target summarizer overlap. This process resulted in seven packets of three interviews.

4.8 Validation

During the rating phase, participants, significant others, and independent raters each produced one rating for each of the four summaries in a set, resulting in twelve data points for each of the 21 participants. For construct validation purposes, it was the ability of these three rating groups to consistently discriminate targets from foils that interested the researchers.

Traditionally, construct validity has been derived from a correlation table which reveals the two components of construct validity: convergent and discriminant validity. In this research project, there is no way of ranking participants' environmental values or of producing a correlation matrix, so convergent and discriminant validity must be established in another way. Discriminant validity is established by a significant difference between target and foil ratings, which reveals that the individual environmental values are uniquely captured in the target summaries. Convergent validity is established by agreement across rater groups, in terms of significance and direction of effect.

With the presence of both of these outcomes, it can be concluded with reasonable certainty that the individual environmental values of the participants have been adequately captured. This validation procedure makes the rich qualitative data all the more compelling, because it adds construct validity to the face and content validity already associated with phenomenological analyses.

In the present study, A multivariate, one-way, within subjects design was used, resulting in three F-values. To establish construct validity, it is expected that the mean rating of the targets will be significantly higher than the mean rating of the foils for all three rater groups. Mean foil ratings were used rather than individual foil ratings, because it was impossible to control for overlap in values or for writing quality in specific foils. Essentially, the object of interest is the ability of rater groups to identify the targets from a field of foils.

Significant other ratings are included in this validation procedure to address the possibility that significant results merely reflect recognition of interview content. Independent rater ratings are included to address the possibility that significant results merely reflect recognition of personal or superficial information that is not in the transcript but is recognizable to participants and significant others. These inclusions do not insulate this methodology from all threats and problems, but they do provide a relatively simple way of bolstering construct validity claims. Throughout this process, it is important to keep in mind that this methodology attempts to address the existing validity problems associated with purely quantitative and purely qualitative

methodologies.

Ultimately, independent raters are expected to produce the largest preference for targets over foils, because they have access to the exact interview content and are free of other life information specific to the participants. Similarly, significant others are expected to produce the smallest preference for targets over foils, because they do not have access to interview content and are directly exposed to other aspects of the participants' lives. Participants have both access and information, so they are expected to fall somewhere in the middle.

4.9 Qualitative Exploration

With the validation procedure complete, attention was turned to the content of the summaries. During this qualitative exploration, the essential values found in the summaries were utilized, as well as the contexts revealed through the original interviews. This dual focus served to maintain both figure and ground throughout the analyses. However, with almost 300 pages of interview content and an average of 18 values per summary, the task of maintaining this dual focus became rather daunting. Therefore, all of the essential values were carefully sorted and transferred to a spreadsheet, where they could be observed and handled more easily. Each column represented a participant, while each row indicated a specific value. This spreadsheet served as an index of values and greatly facilitated the identification of value patterns and participant similarities.

At this point, it is important to acknowledge the nature of the data contained within the summaries and the spreadsheet. After all, it would be tempting to use the spreadsheet data as the basis for all kinds of quantitative analyses. Such analyses are not appropriate, because despite its structured format, the spreadsheet data do not even qualify as ordinal. During the interview and summarizing processes, participant values are not collected in a manner that allows a lack of endorsement to be interpreted as a lack of agreement. Non-endorsements can only be interpreted as "maybe." For example, if a summary does not mention education as a value, it cannot be concluded that the participant does not value education. The summarizer may have omitted that value, either intentionally or accidentally, or the participant may have simply neglected to mention it in the interview. Given the complexity and depth of human value systems, such omissions are guaranteed. Therefore, while the spreadsheet data offer a convenient and useful visual representation of the summaries themselves, they cannot be used to draw meaningful quantitative conclusions about the participants. To attempt to draw such conclusions would be to ignore the nature of the data.

The first phase of the qualitative explorations was to create an accessible and comprehensive picture of environmental living, one that is inclusive and that encompasses the essential values of all 21 participants. The resulting text should resemble the outcome of a huge brain storming session, as if the participants had been brought together into a group and given the task of describing all the values

that might be essential to an environmental value system. This text was intended to serve both as a foundation for further qualitative explorations and as the basis for a future intervention targeted at individuals who need a starting point for change. The spreadsheet data may guide the creation of this comprehensive picture, but the original summaries and interview transcripts must provide the content itself.

The second phase of the qualitative explorations was to identify commonalities, consistencies, and unifying values for the entire group of participants, using the same basic steps employed by the summarizers. Ideally, this phase results in a single general summary, which represents the common environmental values shared by all 21 participants. In a sense, the general summary also represents the greatest common factor of the individual summaries. In the absence of a single set of unifying values, controversial or distancing values could also be identified to help establish clusters of participants, each with a unique set of unifying values.

The third phase was to look for an emergent model of value structure, based on the values endorsed by the participants. The purpose of this model was to reveal the dimensions that are essential for understanding diverse environmental values. At the very least, this model was intended to encompass the values of the participants, but it was also hoped that the model would offer some general insights into a broader range of people, including naive individual decision-makers. Once this exploration was complete, the theoretical model of

value structure (see Chapter 3, Section 3) was evaluated for fit and utility against the emergent model and against the summary data.

The final phase was to look for an emergent model of value change, based on the approaches to change endorsed by the participants. It was hoped that this exploration would reveal essential strategies for fostering efficient and effective change. The theoretical model of value change (see Chapter 3, Section 4) was then evaluated against the emergent model and against the summary data. If the five stages of change could be mapped onto the essential strategies, then new refinements for future interventions might emerge.

CHAPTER 5

QUANTITATIVE RESULTS

The participants (P), significant others (S), and assigned independent raters (R) each rated a target summary (T) and three foil summaries (F1, F2, F3) on a ten-point scale. A rating of "one" indicated that a summary was not at all descriptive of the participant's environmental values, while a rating of "ten" indicated that a summary was exactly descriptive of the participant's environmental values. This rating process producing twelve data points for each of the 21 participants (See Table 2).

Initial inspection of the data reveals that 19 of the 21 participants rated the target summary higher than the mean of the foil summaries, while two rated the target summary equal to the mean of the foil summaries. Of the 21 significant others, 16 rated the target higher than the foil mean, two rated the target equal to the foil mean, and three rated the target less than the foil mean. Finally, the seven independent raters rated 20 of the targets higher than the foil means, while one target was rated less than the foil mean. In some instances, the raw data do reveal individual foils that were rated equal to or higher than their corresponding targets, but these findings were not unexpected. High levels of

TABLE 2

RATINGS DATA

	P T	P F1	P F2	P F3	S T	S F1	S F2	S F3	R T	R F1	R F2	R F3
DC	10	8	10	7	9.5	7.5	9	8	9	6	3.5	3
HD	9	7	8	8	9	9	7	8	8	3	3	6
AD	8	1	3	5	7	2	4	8	6	4	8	7
TG	9	7	6	8	10	9	8	9	10	8	2	5
GH	8	3	7	7	7	5	2	8	8	3	4	4
JH	9	9	6	7	9	8	7	8	8	2	7	5
GX	10	3	5	3	10	4	4	1	9.5	2	6.5	5.5
AK	8	9	7	7	8	8	8	9	9	6	6	4
MK	8	2	3	2	9	4	7	3	10	4	3	7
WL	9	9	9	9	9	8	9	8	9	5	4	3
CL	9	4	8	3	7	9	8	8	9	7	7	6
KP	10	3	8	4	10	5	4	7	10	3	3	2
TR	8	3	8	8	9	4	9	9	10	3	4	4
DR	9	5	3	5	10	10	10	10	9	3	4	4
SS	9	8	9	4	9	9	8	8	9	3.5	3.5	1.5
AS	9.5	1.25	1.5	1.25	9	3	4	4	9	2	2	1
GS	5	5	5	5	10	10	10	10	9	3	6	2
DS	10	4	7	5	10	6	8	5	9	6	7	7
JS	10	5	9	9	8	8	10	8	10	1	2	3
KW	10	8	7	7	10	8	5	9	9	8	7	6
PW	8	3	3	5	9	6	5	6	8	7	7	6
means	8.83	5.70			8.98	7.02			8.93	4.46		

value overlap and differences in writing quality virtually guaranteed that some foils would receive high ratings.

For all three rater groups, the mean rating of the target summaries is significantly higher than the mean rating of the foil summaries. As expected, the independent raters produced the largest preference for targets over foils, [$\underline{M}_{target}$

= 8.93; $\underline{M}_{foils}$ = 4.46], $\underline{F}(1, 20) = 94.65$, $\underline{p} < .01$; the significant others produced the smallest preference [$\underline{M}_{target}$ = 8.98; $\underline{M}_{foils}$ = 7.02], $\underline{F}(1, 20) = 17.52$, $\underline{p} < .01$; and the participants fell in the middle [$\underline{M}_{target}$ = 8.83; $\underline{M}_{foils}$ = 5.70], $\underline{F}(1, 20) = 42.51$, $\underline{p} < .01$. The significant differences between target and foil ratings provide evidence of discriminant validity, and the clear agreement across rater groups, in terms of significance and direction of effect, provides evidence of convergent validity. Therefore, it can be concluded with reasonable certainty that the individual environmental values of the participants have been adequately captured by the summaries.

Another way of making the comparison of targets and foils is to compare the mean rating of the target summaries to the mean rating of the highest-rated foils from each foil set. This approach avoids the possibility that low-rated foils might bring down the mean foil ratings and disguise real problems with the summaries. Using this conservative approach, the target summaries were still rated significantly higher than the foil summaries by the independent raters, [$\underline{M}_{target}$ = 8.93; $\underline{M}_{foilmax}$ = 5.62], $\underline{F}(1, 20) = 42.50$, $\underline{p} < .01$, and by the participants, [$\underline{M}_{target}$ = 8.83; $\underline{M}_{foilmax}$ = 6.98], $\underline{F}(1, 20) = 14.70$, $\underline{p} < .01$. For the significant others, there was only a marginally-significant difference between the targets and the highest-rated foils [$\underline{M}_{target}$ = 8.98; $\underline{M}_{foilmax}$ = 8.14], $\underline{F}(1, 20) = 3.37$, $.05 < \underline{p} < .10$.

CHAPTER 6

QUALITATIVE RESULTS

6.1 Summaries

Using phenomenological analysis, the summarizers constructed summaries of environmental value systems for each of the 21 participants (see Appendix E). Three of the summarizers produced five summaries each, and one summarizer produced six summaries. The summaries contained no specific information that would reveal the identities of the participants, and all summaries contained less than 250 words. To make the summary content more accessible for the remaining qualitative analyses, all of the essential values were carefully sorted and transferred to a spreadsheet (see Appendix F).

6.2 Comprehensive Picture of Environmental Living

An inclusive description of environmental living was generated using all of the values contained in the 21 summaries. Overlapping values were grouped together whenever possible, and opacities were clarified by referring back to the original interview transcripts. To maximize the utility of this text, references to specific participants were included. Appendix G contains the final version of this comprehensive picture of environmental living.

6.3 General Summary

Using the same basic steps employed by the summarizers, it was possible to construct a single general summary, which included only those values that could clearly be applied to all 21 participants. This process utilized the summaries (see Appendix E) and the spreadsheet of essential values (see Appendix F) as a starting point, but a majority of the work involved returning to the interview transcripts and looking for subtle or secondary values that did not appear in the summaries. Ten values emerged as being applicable to all 21 environmentalists and conservationists. Specific examples of these ten values, taken from the original interview transcripts, can found in Appendix H. The final version of the general summary is as follows:

> This person values *awareness* of environmental realities and current *destructive* trends, which affect all life, including humans. He/she believes that the importance of environmental protection stems, at least partially, from the inherent *connectedness* of the land, the ecosystem, and the people. This person values *commitment* to purpose and active personal *involvement* as critical components for promoting awareness and lifestyle change. She/he appreciates *lifestyles* that are simple, balanced, and responsible, because current patterns in human *consumption* are having a huge negative impact. *Respectfulness*, at some level, is also very important. This person believes that *education* approaches are critical. He/she also values direct *experience* as a powerful and perhaps essential tool.

The construction of the general summary made it clear that, while there is substantial diversity among participants, the overlap in their values is more noticeable than the discrepancies. Thus, it was not possible to create clearly delineated participant clusters. Participants appeared to be linked together by the

common values presented in the general summary, and differences emerged primarily in the specific applications of those values. For example, all of the participants value respectfulness, but they differ in their applications of respect. Some participants advocate respect for the current human victims of environmental manipulation and destruction, while others advocate for future generations. Some participants focus on respecting all life as valuable, while others take this notion a step further and focus on respecting all life as equal and independently valuable. At one level, these perspectives seem very similar, because they all promote respect for the voiceless victims of our modern world. However, the subtle differences in focus may be enough to make these perspectives completely incompatible in the applied world, where groups are forced to compete for media attention and for scarce financial and human resources.

Similar conflicts are likely to arise from other subtle differences. Participants seem to agree that promoting awareness is important, and they even seem to agree that education and experience are two essential tools for accomplishing this goal. However, they do not agree on the kinds of awareness that are important (e.g., self, environmental, spiritual), on the best topics for education (e.g., current realities, rational thought, emotional perspectives), or on the most critical types of experiences (e.g., with nature, with destruction, with alternative lifestyles). Participants also seem to agree that connectedness is

important, but as with awareness, they do not always agree on the kinds of connections that are important.

All 21 participants believe that human consumption and current destructive trends are serious problems, but they do not always agree on the most significant victims (e.g., humans, ecosystems, species, individual creatures). They also all seem to appreciate "lifestyles that are simple, balanced, and responsible," but even this specific value leaves room for disagreement. How simple should a lifestyle be? What kind of balance is desirable? Responsible to who? Different individuals, even those within the same cause or organization, may provide different answers.

Beyond the common values of the general summary, there are even more sources of disagreement. The use of direct action and civil disobedience is a prime example. Some participants see such activities as essential, while others see them as having a negative impact on the more mainstream legal and political efforts. Willingness to compromise is another example. Some participants believe that compromise is an unfortunate necessity within our current political context, while others steadfastly refuse to give where so much has already been taken.

In terms of priorities, some participants prefer to help individuals change their own lives, while others focus on the larger scale of community, regional, or global issues. Some participants focus solely on problems impacting the natural world, while others try to tie environmental and conservation efforts into social justice issues such as racism, sexism, and other human rights violations.

Finally, there are varying perspectives on the nature and role of humanity. Some participants see human beings as violent, selfish, and dominating, while others believe that we are basically good. Some see humans as merely illogical, myopic, and uninformed. Some believe that humans are passive victims of their own cultural values and systemic dependencies, which foster fear, avoidance, and complacency. Ultimately, these perspectives on humanity affect the problems and the change strategies that are identified as most important. They may also be a source of great tension, because the most critical strategies from one perspective may seem absolutely foolish and naive from another perspective.

6.4 Emergent Model of Value Structure

Five dimensions emerged as essential for understanding the diverse environmental values of the participants. They are reverence, positivity, clarity, scope, and foundation. These dimensions were identified through a careful exploration of both common and controversial participant values. Attention was also paid to the implication of these emerging dimensions for more traditional values. As a result, none of the dimensions are exclusively applicable to the values of environmentalists and conservationists.

Because most of the identified participant values revolved around the issues of current reality, ideal reality, and change, these issues were used as a guide for exploration and as a basis for identifying relevant examples. These three issues represent a natural simplification of the interview topics and the

focus questions given to the summarizers (see Appendix D). The examples that are used to clarify the five dimensions come directly from the lives of the participant, and in most cases, the spreadsheet of essential values can be used to trace these examples back to specific participants (see Appendix F).

6.4.1 Reverence

Reverence is a dimension that describes the degree to which individual values reflect mainstream cultural values. Some participants maintain values that are faithful to the basic building blocks of Western civilization, while others openly condemn these same elements as being part of the problem. Reverence can be seen most clearly in perspectives on change. Political, legal, and scientific approaches to environmental reform are very reverent, because they operate within the established channels of the current system. These approaches can still generate enormous conflict, but the arena for these conflicts is highly structured and well understood by all parties involved. Outreach and protesting approaches are not as structured, but they still operate within the basic rules of acceptable and legal conduct. Less acceptable are the more aggressive direct action approaches, which can range from simple acts of civil disobedience (e.g., tree sits, blockades) to the intentional destruction of property (e.g., spiking trees, damaging equipment, sinking ships).

Reverence can also be seen in perspectives on current and ideal realities. Some participants see the world in terms that are very compatible with

mainstream cultural values. They are human oriented. They endorse basic Western conceptions of lifestyle and career. They may even see nature as a resource intended for human use. The only difference is in their acknowledgement of the current and future consequences of some irresponsible and unsustainable human behaviors. For these individuals, the ideal future looks very similar to the current reality, with some key changes toward responsibility and sustainability (e.g., recycling, conservation, moderation).

Other participants have more irreverent perceptions of our current reality. They see human beings as inherently fearful, dependent, irrational, selfish, or violent. They criticize our cultural addiction to growth and consumption. They condemn corporations, and they see our social and political systems as being corrupt and ineffective. These individuals do not see the ideal future as being close at hand. Rather, they endorse more extreme changes in our lifestyles, social and political organizations, and basic understandings of the world.

It seems that either extreme on the reverence dimension can be unproductive. Extreme reverence does not allow change to occur, even when change is clearly needed. Extreme irreverence can also be problematic, because it blatantly disregards social norms and rules of propriety. It may even violate rules of law. As a result, the irreverent individual becomes an immediate target for criticism and condemnation, both by those who support the status quo and by those who prefer to promote change from within the existing system. Some of this criticism is clearly justified, because norms, rules, and laws exist for a reason.

They protect the interests, rights, and safety of a community. Nevertheless, there may be situations where extreme irreverence is both appropriate and essential, such as when protections are denied to certain members of the community. The civil rights and women's suffrage movements provide two obvious historical examples. Perhaps the environmental movement will provide a third. Unfortunately, without the benefit of 20-20 hindsight, it can be difficult to discriminate appropriate irreverence from criminal mischief.

6.4.2 Positivity

Positivity is a rather uncomplicated dimension that relates to the optimistic or pessimistic qualities of values. It can be seen quite clearly in values related to human nature and the current and ideal states of the world. Some participants identify humans as inherently good or as naive victims of manipulation, while others identify us as willing accomplices to the violent destruction of nature. Some participants see the world as being in recoverable condition, while others see irreversible and catastrophic destruction.

Positivity can also be seen in beliefs about change. Some participants emphasize helping people reconnect with nature and offering compassion and support for the struggles that accompany change. Others emphasize forcefully confronting people with the harsh realities and the consequences that result from human lack of awareness.

Pessimism is not necessarily a detriment to the environment, but optimism seems to hold a stronger potential for motivation. Either quality, taken to an extreme, can be unproductive and harmful to the environment. Extreme optimism may blind a person to the real problems and consequences facing humanity, while extreme pessimism may lead to hopelessness and passivity. Somewhere in the middle lies a range of positivity that is realistic, hopeful, and productive.

6.4.3 Clarity

Clarity is a dimension that taps into the vividness, intensity, and boldness of values. All of the participants have clear values in at least one area, but most of them also have some values that are not so clear. For example, some of the more academic participants have developed very intense beliefs about how things are and how things should be, but they have only vague notions about how to promote change.

This dimension affects every value in a value system, because it identifies the kind of presence and impact each value has on the individual. Values that are very clear may even become amplified or more central. For example, if the clearest value in a person's life is the importance of personal involvement, then that individual is not likely to stop at writing letters or donating money to good causes. Rather, involvement is likely to become the cornerstone of that person's existence. In this way, clarity may be directly related to the magnitude of other

value dimensions, such as reverence and positivity. As clarity increases, so too may reverence, irreverence, optimism, or pessimism.

Obviously, clarity is an important dimension for understanding and promoting environmental values. However, it can also be a substantial barrier to change, because non-environmental values can also be very clear. Perhaps the leaders on all sides are those individuals with the clearest visions for the future, and perhaps these leaders are actually engaged in a subtle competition to win the allegiance of those who long for clarity.

6.4.4 Scope

Scope is a dimension that relates to the depth or breadth of perception that underlies values. This scope may be stated directly or merely implied, but it exists for every value in a system. For example, a value that blames humanity for the destruction of nature implies a scope that is broader than mere human concerns. If that same person also reveals a value for treating other creatures as equals, then the scope must be broader still. Whether consciously or unconsciously held, scope is an essential underlying dimension that affects all values.

Scope can be seen in perspectives on current and ideal realities. It identifies perceived victims, which can be as narrow as a single creature or as broad as the Earth itself. It also identifies perceived perpetrators, which may include corporations, governments, cultures, humans, or self. Scope identifies

who or what is valued and who or what is genuinely respected. Scope also identifies the level of perceived connectedness with the world. At its most basic level, scope identifies the depth and breadth of personal awareness.

Scope can also be seen in perspectives on change. It describes the relevant issues to be addressed, whether they are the protection of individual species, the conservation of wild places, or the ending of all exploitation. Scope also describes the most relevant and effective target for change efforts, which might include individuals, regional communities, or the entire global community.

Obviously scope is not just one value on a single linear continuum. It encompasses the depth and breadth of all perceptions. Unfortunately, humans have difficulty seeing the limitations of their own perceptions. We do not see our own blind spots, and so we often fail to address them. Generally speaking, deeper and broader perspectives seem to have a much more positive impact on the environment. However, as with the scope of perpetrators and the scope of change strategies, there may be instances where a narrow scope is more practical and effective. Then again, perhaps there is a difference between scope and focus. Perhaps depth and breadth are always ideal for awareness, while a narrow focus is sometimes more appropriate in application.

6.4.5 Foundation

Foundation is a dimension that describes the preferred basis or language of a value system, and it might use labels such as reason, justice, emotion, or

spirit. Like scope, foundation is an essential underlying dimension for values, even in cases where it is not consciously identified or realized.

Foundation can be clearly seen in perceptions of current reality. For example, many of the participants believe that Western lifestyles are inappropriate, but they come to this conclusion through a variety of channels. Some take a logical approach by examining the imbalances of perpetual growth within a finite world. Some take an emotional approach by becoming aware of the suffering that accompanies our consumption. Others take a justice approach by realizing the exploitation that is occurring. Still others take a spiritual approach by coming to understand the deep connectedness of all life. Similar channels are used to draw conclusions about human nature, ideal awareness, ideal lifestyle, and appropriate strategies for change.

Unlike the other dimensions, foundation seems to have little direct impact on whether or not the environment is damaged. With a broad enough scope, any foundation can support the environment, and with a narrow enough scope, any foundation can harm the environment. Nevertheless, several participants did suggest that some channels tend to work better than others. For example, reason was identified as having limitations, because it doesn't foster involvement as effectively as emotion or spirit. On the other hand, emotion was also identified as having limitations, because it can lead to blind extremism. Perhaps each foundation has specific assets and deficits that can be understood and utilized to promote environmental reform. At the very least, it seems that foundation is a

very important dimension to consider when communicating with individuals about the environment. Without some common language, even the most ingenious intervention is not likely to be effective.

6.5 Evaluation of the Theoretical Model of Value Structure

Comparing the theoretical and emergent models of value structure revealed some striking similarities. The entity and time priority dimensions of the theoretical model seem to be encompassed by the scope of perceived victims and the scope of genuine respect, while the vividness dimension of the theoretical model seems to be a direct parallel to clarity. Even motivation, which was set aside in the theoretical model, corresponds to an element of the emergent model, specifically the foundation dimension. The emergent model goes well beyond the theoretical model, but both clearly tap into similar notions of value structure. Some of this similarity is likely due to the fact that both models were formulated within the same researcher's mind. However, every effort was made to set aside existing theories and allow the data alone to suggest relevant dimensions for the emergent model.

With the overlap between models clearly established, the theoretical model was reexamined for any depth it might offer the emergent model. For example, the entity priority dimension of the theoretical model provides a reminder that scope, especially of perceived victims and genuine respect, is an important dimension for understanding the differences between individualism,

anthropocentrism, and biocentrism. The time priority dimension provides a further reminder that the scope dimension can reach into the past and future. This time element may be useful in understanding several aspects of consumer behavior. After all, without respect for the future, there is little reason to conserve resources, limit growth, or act on anything other than desire and personal convenience.

The motivation dimension of the theoretical model reveals that the reason, justice, emotion, and spirit labels all lie on a continuum from practical to mystical. The motivation dimension also offers the notion of an internal/external continuum, which adds another layer to each label. For example, not only may a value system be identified as having a spiritual foundation, but it may also be identified as soul-driven (internal) or God-driven (external). Similarly, a justice foundation may be further identified as ethics-driven (internal) or law-driven (external).

The one aspect of the motivation dimension that will not be carried into the emergent model is the idea that foundation is of little concern in environmental reform. While it is true that foundation may not be readily changeable, it is still an absolutely essential consideration for promoting change. Furthermore, merely allowing for diversity of foundation is not enough. Diversity must be explored and understood, so that interventions can be personalized and adapted to different value systems. Without this element,

interventions are doomed to be either inefficient or ineffective, depending on whether they are over-applied or under-salient.

Finally, the vividness dimension of the theoretical model reinforces the impact that clarity can have on confidence and the application of values. When clarity is high, confidence may grow and stimulate action, but when clarity is low, even the best values may lead only to uncertainty and passiveness. The vividness dimension also reinforces the potential usefulness of clarity for understanding the avoidance, detachment, and paralysis that seem to infect so many humans.

What the emergent model adds to the theoretical model are some important new angles and possibilities. Rather than seeing naive individual decision-makers only as having limited scope or low clarity, it is also possible to see them as unrealistically positive, hopelessly negative, overly conventional, or disrespectfully irreverent. Similarly, the ideal value system is expanded to include not only clarity and broad scope, but also balanced levels of positivity and reverence. Finally, the emergent model reveals new considerations for effective spokespersons or interventions. In addition to presenting values that are similar in foundation and slightly broader in scope than those of the target audience, it may also be important to present values that are similar in reverence, clear enough to be attractive, and positive enough to foster motivation. Above all, the emergent model reinforces the incredible diversity of value systems and the need to truly understand the target audience of any intervention.

6.6 Emergent Model of Value Change

The general summary reveals the importance of awareness, respectfulness, commitment, and involvement. It reveals connectedness, destruction, and consumption as important topics for awareness, and it reveals education, experience, and lifestyle as important themes for involvement. Based on this general framework, and utilizing all previous qualitative results, an exploration of value change was conducted. At the very least, it was hoped that a few essential change strategies would be revealed, but what actually emerged was a broader model for understanding the process of environmental value change.

6.6.1 Basic Model

The emergent model can initially be divided into two halves, both of which describe paths from passive ignorance to active awareness of environmental values. The first path of the emergent model is primarily an internal one, and it begins with the idea that basic self-awareness can help a person observe, to some degree, the connectedness of self to the rest of the world. As awareness deepens, observation becomes understanding, and understanding eventually stimulates an emotional reaction of respect or care for the other members of that connectedness. To the extent that the other members are also victims of environmental manipulation and destruction, that emotional reaction

can trigger commitment, and as commitment grows, involvement becomes possible.

The second path is more external. It begins with the idea that basic environmental awareness can help a person observe, to some degree, the problems of consumption and destruction. As awareness broadens, observation becomes understanding, and understanding eventually stimulates an emotional reaction of anger or guilt about the victims of these problems. Over time, commitment grows from this emotional reaction and creates the possibility of involvement.

In both of these path scenarios, awareness grows until a threshold is reached and understanding is transformed first into commitment and then into involvement. In the stories told by participants, this awareness threshold often seems to be marked by a strong emotional reaction, which may be essential for overcoming personal inertia and stimulating a significant level of active involvement. At the individual level, active involvement may mean adopting a lifestyle that feels simple, balanced, and responsible. At the social level, it may mean working to spread awareness through various educational and experiential approaches. Regardless of where these paths lead or which path is chosen, the most important thing is that a deep or broad level of awareness is developed.

6.6.2 Expanded Model

At some point on either of the basic paths, awareness of the other path may be triggered. For example, when awareness of connectedness begins to include clear victims of exploitation, human or otherwise, a basic environmental awareness may be stimulated. Conversely, when awareness of environmental problems begins to suggest personal accountability, some level of self-awareness may be stimulated. In this way, an individual's personal journey of awareness can take many routes. It can stay primarily on one path, it can switch over at some point, or it can include both paths from the very beginning.

It seems unlikely that active involvement can be reached without some degree of both internal and external awareness. External awareness makes the problems real, while internal awareness makes them personally relevant. Therefore, it may be useful to picture each path as moving away from and then back toward a balance point between internal and external issues. In other words, the journey of self-awareness might begin with movement toward more internal issues, but as that awareness deepens, it naturally begins to include external issues as well. Similarly, the journey of environmental awareness might begin with a strong emphasis on external issues, but as that awareness broadens, it eventually bends back to include internal issues. Figure 4 provides a visual representation of this path model of value change.

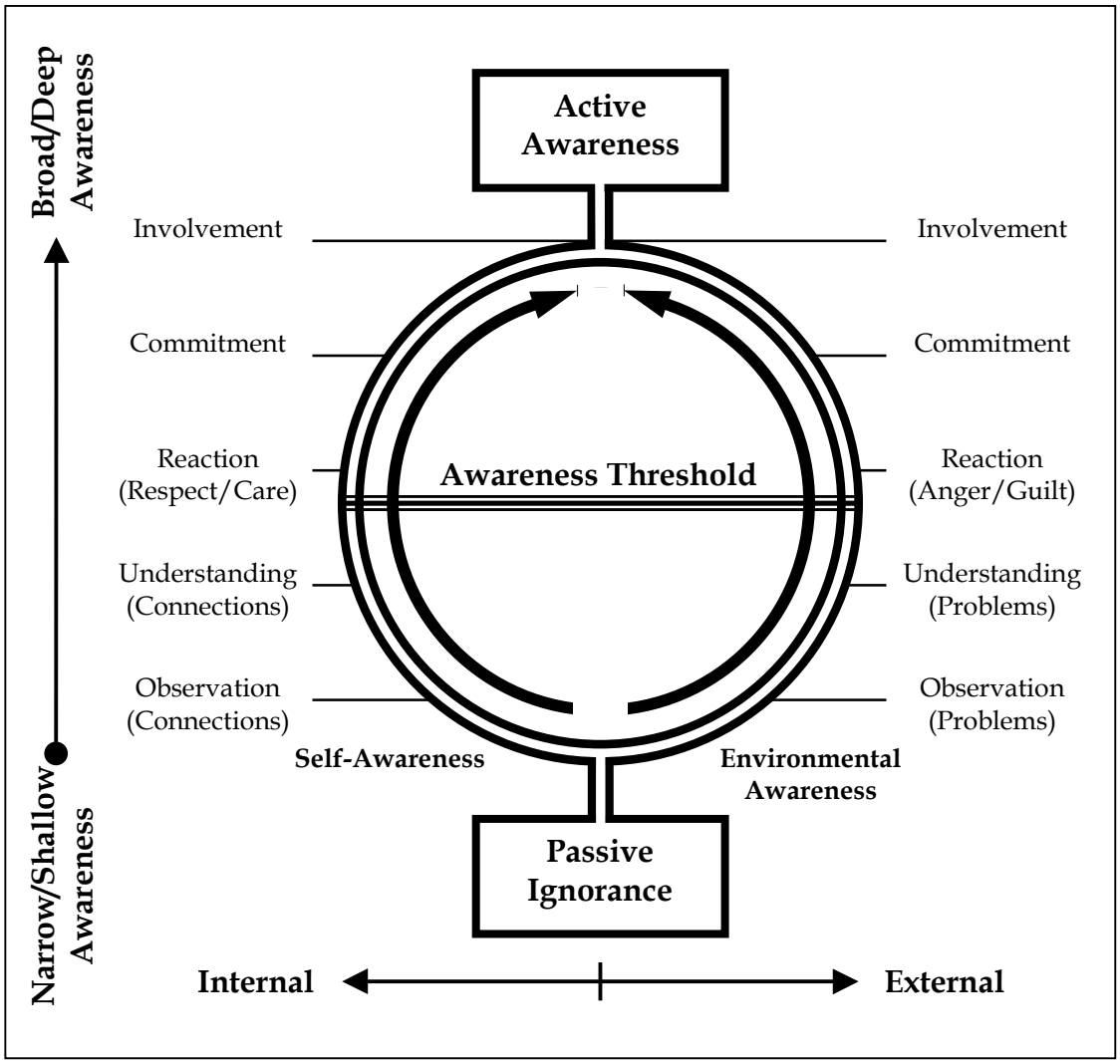

FIGURE 4. Emergent path model for value change.

6.6.3 Implications

Realistically, this path model can have infinite variations, because each person brings a different value structure to the journey. Each person also walks that journey in a very personal way, and while the ideal destination may have

some specific qualities, it is far from being rigidly defined. All that really matters is that awareness grows into commitment and involvement.

The basic concepts of awareness, commitment, and involvement are neither uncommon nor controversial. In fact, these are highly valued and respected qualities within Western cultures. So, what is the controversy or barrier to reform? Why is it so difficult to transform passive ignorance into active awareness? Perhaps the problem lies in the specific topics of awareness being proposed. Connectedness, consumption, and destruction are all topics that lie outside the mainstream of Western cultures. Then again, perhaps the problem lies in the transition to emotional awareness that precedes commitment. After all, Western cultures often discourage emotional approaches to decision-making, especially where business interests or legal matters are involved. Perhaps the problem is all of these things, or perhaps it is something altogether different. A model can only generate possibilities, and ultimately, the value of this model will be determined by the utility of the possibilities it generates.

6.7 Evaluation of the Theoretical Model of Value Change

The theoretical model of value change presented five stages, which seem to have direct applications to the emergent model. The precontemplation stage applies to those individuals who have not yet begun the journey to active awareness. The contemplation stage applies to those who have begun the journey but have not yet reached the awareness threshold that is needed to

produce commitment and involvement. The preparation stage applies to those who have reached the awareness threshold but are still building commitment. Finally, the action and maintenance stages apply to those individuals who have reached active awareness.

Using the details of the theoretical model of value change, it is possible to fill in some important aspects of the emergent model, including change strategies. For example, the theoretical model reveals that individuals who have not yet begun the journey to environmental awareness may actively resist self-reevaluation and new information. Therefore, the only effective intervention for these individuals is to offer exposure through real examples and experiences. Once the journey is begun, direct education and support can be offered to help raise awareness. As the awareness threshold is reached, some behavioral processes can also be introduced to ease the transition to full involvement. However, full involvement will only happen when awareness, commitment, and confidence reach high enough levels. Once individuals become actively aware, they should be able to take advantage of the existing environmental groups, programs, and opportunities, although continued encouragement and support may still be needed until these individuals establish new habits, patterns, and support networks.

CHAPTER 7

DISCUSSION

7.1 A Methodological Study

This research project has successfully replicated the empirically-supported phenomenological methodology developed by Howard and Fischer (1990). The three rater groups were able to consistently discriminate targets from foils, which adds evidence of construct validity to the face and content validity already associated with phenomenological analyses. Significant other ratings helped verify that the results do not merely reflect recognition of interview content, while independent rater ratings helped verify that the results do not merely reflect recognition of personal or superficial information in the summaries.

As in the most recent study by Fischer (1995), the independent raters once again discriminated target from foils better than the participants. This result most likely reflects the fact that independent raters are most similar to the summarizers in terms of available information. They work only from the interview transcripts, and they have no additional awareness of the participants' lives. In contrast, the participants and significant others both have access to participant life information that may overlap multiple summaries in subtle ways. It must be acknowledged that this life information may include both irrelevant

aspects of the participants' lives and relevant aspects that were not captured by the research process.

Significant others were expected to be least effective at discriminating targets from foils, but they still managed to discriminate at a significant level when comparing targets to mean foil ratings. This is an improvement over the previous study (Fischer, 1995). While this outcome may reflect improvements in summary focus and quality, it may also reflect the fact that the current study uses participants and significant others from an adult population, as opposed to a college student population. Participants and significant others from an adult population are believed to have deeper or longer-term connections than those from a student population. Thus, the significant others in the present study may simply be more significant than in previous studies. Regardless of the exact cause of improvement in the present study, it is absolutely critical to this methodology that significant others be recruited carefully. Otherwise, valid summaries may be unnecessarily challenged by a failure to find significance in significant other ratings.

The successful implementation of the validation procedure in the current study reinforces the idea that quantitative and qualitative approaches are not incompatible. Traditionally, researchers in both camps have relied on assumptions about certain aspects of validity, but this new methodology minimizes the need for such assumptions by combining the precision of quantitative approaches with the richness and relevance of qualitative

approaches. The result is a clear example of the kind of research that is possible when assumptions and underlying biases are actively challenged. As Fischer (1995) said, "we do not have to suck the life out of something, and dismember it, in order to talk about it or study it scientifically" (p. 93). We also do not have to reject all traditional research principles in order to maintain a genuine connection with the subject matter. As this research project verifies, a middle ground can exist.

Whether we acknowledge it or not, all genuine scientific innovation and progress is, at some level, creative, personal, and even artistic. First comes the idea, and then comes the research to test the idea. The tragedy is that the idea phase is often rushed in the quest for testable hypotheses, and for lack of a solid foundation, the resulting research never reaches its full potential.

The methodology used in the present study may not be ideal for drawing hard conclusions about participant clusters or factor models, but it is ideal for creating new research questions and hypotheses that are grounded in the living world. In this sense, the methodology could serve as a vital first stage in larger research projects, because it adds face and content validity to the ideas being tested. It also avoids imposing assumptions at the very beginning of a research project, which enhances the real-world value of any subsequent quantitative analyses. Unfortunately, in a publication-oriented environment, few researchers are likely to take the time for such seemingly philosophical explorations.

The present study could lead to a wide range of future research efforts, each grounded in living environmental value systems. For example, a more precise measure of specific value endorsements could be created, using the essential values listed in the spreadsheet (see Appendix F). This measure could be used to collect value ratings from a range of environmental and non-environmental populations, which might lead to new models of value structure and a better understanding of the factions involved in the environmental struggle. Another area for future research might involve the creation of a measure for evaluating an individual's stage of value change, so that interventions could be targeted more appropriately.

While this methodology seems to have a great potential for enriching traditional research methods, it must be implemented with great care in order to be useful. Summarizers must be thoroughly trained and raters must be carefully selected. It must also be realized that lives are amazingly complex things, and a phenomenological summary is just too short to capture an entire life or value system. Thus, it is important to approach the process with a very clear notion of what realm is intended to be tapped. A focus must be created, so that the summaries will actually reveal something meaningful. In the present study, this focus was created by incorporating a set of focus questions and guidelines (see Appendix D). Without this specific focus, it is doubtful whether the summaries would have revealed anything useful about environmental values.

7.2 A Values Study

In addition to being a methodological study, this research project is also a study of diverse environmental values. From this perspective, the original project goals were to formulate a model of value structure, a model of value change, and a comprehensive picture of environmental living, all of which were intended to improve the efficiency and effectiveness of change strategies by providing a better understanding of human value systems. These elements were also intended to provide a more tangible understanding of where we are as a species, where we want to be, and how we might get there.

The recruitment phase of the project yielded a rather amazing group of participants, most of whom have dedicated their lives to environmental or conservation issues. It is clear that these individuals do not represent every possible environmental perspective, especially when one considers the possible selection bias, but the participants did provide a wealth of diversity and experience from which new insights and conclusions could be drawn. As a foundation for environmental values research, the participant group could not have been better.

The real work of the values study began after the interview summaries were created and validated. At this point, a comprehensive picture of environmental living was successfully assembled using all of the values represented in the 21 summaries, and a general summary was creating using only those values that were expressed by every participant. The purpose of these

steps was to give some form to the interview and summary content. Realistically, any activity requiring a similar level of immersion in the raw data would have sufficed as a starting point for further qualitative explorations, but the comprehensive picture and general summary seemed to have the most potential for later applications. For example, the comprehensive picture of environmental living could easily provide the outline for a future book about diverse environmental perspectives. Interestingly, the comprehensive picture of environmental living revealed a much wider range of values than was expected, while the general summary revealed much greater overlap in participant values than was expected.

After the comprehensive picture and general summary were created, the search for emergent models of value structure and value change was begun. This process resulted in two clear models, which successfully expand upon the theoretical models developed prior to data collection. The final model of value structure reinforces that there may be several dimensions that can help explain why human decision-making so often neglects to consider environmental impacts. These dimensions include the depth and breadth of perception, the clarity of values, the degree of optimism, and the degree of reverence for existing social structures. In terms of change strategies, the model of value structure also reinforces the idea that people must be reached on their own terms. At the very least, interventions should be similar to the target audience in foundation, scope, and reverence.

The final model of value change clearly reinforces the idea that awareness is the cornerstone of change. However, it also reveals several factors that complicate the process of promoting such awareness. First, the necessary topics of awareness for environmental reform are not acknowledged by mainstream Western culture. Consumption is actually supported by Western culture, destruction is actively hidden, and connectedness is seen as an idealistic notion not fit for practical or legal discussions. Second, the development of awareness may require an emotional element that makes many people uncomfortable, especially within those same practical and legal discussions. Put simply, when it comes to the environment, there seems to be no room for heart in the most critical decision-making processes. From the theoretical model of value change, there is a third possibility that much of the human population is actively resisting environmental awareness, because they do not see environmental problems as personally relevant or important. These three factors are not insurmountable, but they do seem to necessitate the development of very specific strategies for promoting awareness.

It is notable that at no point during the qualitative exploration did the participants fall into clear groups or clusters. Groups could have been created using any one of the dimensions that emerged during the exploration, but consistent groupings were not found across these dimensions. Even participants fighting for the same cause could not be shown to share common sets of values that would distinguish them from other participants. Other overlapping values

always clouded the picture. This result was surprising, because the various environmental camps often seem so far apart in what they believe.

It appears that the values held by individual environmentalists and conservationists exist as extremely personal configurations, even within populations of seemingly like-minded individuals. This pattern, or lack thereof, may have something to do with the fact that environmental values are not culturally supported. Each person must reach active involvement in his or her own way, and as a result, even people in the same movement may have completely different reasons for being there. This would help explain the never-ending conflicts that seem to arise between and within different aspects of environmentalism and conservation.

7.3 Bridging the Gap

Ultimately, this entire research project is about building bridges between opposing sides of an issue. It's about identifying the narrowest point between two or more perspectives and finding the best way to establish a connection. In the case of research methodologies, the identified gap lies between quantitative and qualitative approaches. Advocates of both of these approaches often fail to acknowledge what the other approach has to offer. Rather than taking sides, it seems that the strongest bridge between these approaches will come from revealing hybrid methodologies that combine the precision of quantitative analysis with the richness and relevance of qualitative analysis. Some hybrids,

like the current study, will combine these assets within a single study. Others may simply combine them within a larger research project. Either way, unnecessary assumptions will be minimized, and the strength of resulting conclusions will be enhanced.

Large gaps also exist within the environmental and conservation communities, which result in endless bickering and a dramatic reduction in the effectiveness of these movements. These gaps not only exist between specific organizations and approaches, but also within them. Thus, there is a desperate need for bridges. The general summary offers one set of values that might be useful in establishing a common ground for mutual tolerance and respect. Each individual and group should remain focused on their own specific priorities, but the addition of tolerance and respect for other values would allow all groups to work within a more supportive environment. One of the participants stated this position quite clearly:

> I think the strength of the environmental and conservation movement lies in diversity of approaches. I support all of those different approaches, just as long as they're truthful. I have no problem with that. I just wish they would leave us alone and let us get along with our approach. (Paul Watson)

There is room within and among these movements for all kinds of values and approaches, but there is not room for internal battles, which waste valuable time and send a very confused message to the public. The challenge is convincing environmentalists and conservationists that building these internal bridges is not a further waste of their time.

The final gap to be addressed is the one that lies between the public and the environmental and conservation movements. People have been trying to build this bridge for over thirty years, and yet the gap is still immense. This lack of success raises questions about existing strategies. Perhaps the insights offered by the theoretical model of value change are accurate. Perhaps part of the problem is a lack of fit between existing strategies and public readiness. If so, new strategies could be introduced to reach people within their comfort zones. Initially, such strategies would have to focus on exposing without applying pressure and on offering real examples and experiences rather than arguments. This may seem like a slow and frustrating approach, but it may also be a necessary one. After all, the more aggressive education and confrontation approaches have clearly not accomplished enough.

One possible strategy would be to introduce people to the life stories of real individuals who have chosen an environmental perspective. These stories could convey environmental values without posing a direct challenge to the values of the public. For example, the participant interviews from this research project could be assembled into a book that would be both interesting and non-threatening. Granted, a book is not directly experiential, but if the stories remain very personal, it may be still be an effective contribution.

Regardless of the specific strategies that are developed, it will remain important to be as efficient and effective as possible. There is already an overwhelming amount of clutter in the public domain, and any additions to that

clutter must be carefully crafted. Perhaps the model for value change can be used as a guide. Perhaps the model for value structure can be used to customize approaches to specific populations. Whether these or other models are used, new efforts must have a strong focus. The bridges must be sturdy, both in appearance and in form, and the gaps must be made to seem insignificant.

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APPENDIX A

PARTICIPANT BIOGRAPHIES

Darryl Cherney (DC) - Redway, California

Darryl has been a direct activist with Earth First! since 1986, with a primary focus on preserving the ancient Redwood groves of northern California. He is an organizer, public spokesperson, and musician. He got his start in New York as an organizer for political campaigns and the anti-nuclear movement.

Herman Daly (HD) - College Park, Maryland

Herman Daly has been teaching courses in ecological economics at the University of Maryland School of Public Affairs since 1994. Before that, he was Senior Economist in the World Bank's Environment Department, where he helped develop policy guidelines related to sustainable development and was engaged in environmental operations work in Latin America. Before 1988, he was Alumni Professor of Economics at Louisiana State University, where he taught for 20 years. He is co-founder and associate editor of the journal, Ecological Economics. His books include Steady-State Economics (1977), For the Common Good (with John Cobb, 1989), and Valuing the Earth: Economics, Ecology, Ethics (edited with Kenneth Townsend, 1993).

Alan Thein Durning (AD) - Seattle, Washington

Alan was a senior researcher at Worldwatch Institute in Washington, D.C., where he studied the human dimensions of sustainability. He wrote the award-winning book How Much Is Enough? The Consumer Society and the Future of the Earth (1992), along with chapters in seven State of the World reports and articles in hundreds of other publications. A sought-after speaker, he has lectured on five continents. After 1992, Alan returned home to Seattle to help found Northwest Environment Watch (NEW), an independent, not-for-profit research and publishing organization. At NEW, Alan has written Green-Collar Jobs (1999), Tax Shift (1998), Misplaced Blame: The Real Roots of Population Growth (1997), This Place on Earth (1996), The Car and the City (1996), and co-authored Stuff: The Secret Lives of Everyday Things (1997).

Tom Goldtooth (TG) - Bemidji, Minnesota

Tom is the National Coordinator for the Indigenous Environmental Network in Bemidji, Minnesota. The Indigenous Environmental Network is an alliance of grassroots indigenous peoples whose mission is to protect the sacredness of Mother Earth from contamination and exploitation by strengthening, maintaining, and respecting the traditional teachings and the natural laws.

Garrett Hardin (GH) - Santa Barbara, California

Trained as an ecologist and a microbiologist at the University of Chicago and Stanford University, Garrett is best known for his 1968 essay, "The Tragedy of the Commons," now reprinted in over 100 anthologies. As a Professor of Human Ecology at the University of California for more than thirty years, Garrett Hardin publicly debates the issues of abortion, population control, foreign aid, nuclear power, and immigration. Since his retirement in 1978, he has devoted himself to writing and speaking. His books include Living Within Limits: Ecology, Economics and Population Taboos (1993), The Immigration Dilemma: Avoiding the Tragedy of the Commons (1995), Stalking the Wild Taboo (1997), and The Ostrich Factor: Our Population Myopia (1999).

Julia Butterfly Hill (JH) - Arcata, California

After recovering from a devastating car wreck, Julia began a journey to find some meaning in life. She got as far as northern California. On December 10th, 1997, 23 year old Julia climbed 180 feet up an ancient coastal redwood she calls Luna and did not come down for 738 days. Her civil disobedience was to preserve Luna and to protest the logging of the remaining 3% of our old growth forests. She has written a book about her experiences, The Legacy of Luna: The Story of a Tree, a Woman, and the Struggle to Save the Redwoods (2000).

George Howard (GX) - South Bend, Indiana

George is a professor in the Department of Psychology at the University of Notre Dame. His research has focused upon theoretical, methodological, and philosophical problems in applied areas of psychological research, including ecological psychology. Winner of Notre Dame's 1998 Faculty Award for outstanding teaching and scholarship, he is author of seven books, including Ecological Psychology: Creating a More Earth-Friendly Human Nature (1997) and over one hundred and fifty book chapters and articles in professional journals.

Allen Kanner (AK) - Berkeley, California

Allen lives in the Mount Shasta Bioregion in the town of Berkeley, where he practices child, family, and adult psychology. He is an associate faculty member at the Wright Institute, in Berkeley, where he teaches multi-cultural psychology and ecopsychology. He is co-editor or Ecopsychology: Restoring the Earth, Healing the Mind (1995). Allen received his Ph.D. in Clinical Psychology from the University of California, Berkeley.

Marti Kheel (MK) - El Cerrito, California

Marti found her way to ecofeminism and the environmental movement through the animal liberation movement. While attending a sociology graduate school in Montreal, she developed a reputation for rescuing animals. During that time, she also became very active with the Animal Liberation Collective, which

dealt with animal abuse issues. In this way, she learned to balance individual and large-scale animal rights work. In 1982, she founded Feminists for Animal Rights, which has grown into several chapters across the country. She gives talks and has published several articles on ecofeminism. She has also recently completed a doctorate in religious studies. Marti has been a Vegan since 1978.

Winona LaDuke (WL) - White Earth Reservation, Minnesota

Winona is an enrolled member of the Mississippi Band of Anishinaabeg. She is the Project Director of the Honor the Earth Fund and serves as Founding Director of the White Earth Land Recovery Project. Winona has worked extensively organizing in environmental and Native rights campaigns for over 20 years. She is a former board member of Greenpeace USA and serves as co-chair of the Indigenous Women's Network (IWN). In the 1996 presidential campaign, she served as Ralph Nader's running mate for the Green Party. Her books include The New Resource Wars : Native and Environmental Struggles Against Multinational Corporations (with Al Gedicks, 1993) and All Our Relations: Native Struggles for Land and Life (1999).

Cecelia Lanman (CL) - Redway, California

Cecelia began her career as an activist and organizer in 1968 with the United Farm Workers. She became part of the "back to the land" movement in the 1970's, but she eventually felt drawn back into activism. Not having enough time to do both, she gave up the farm to become a forest activist in Northern

California. Since 1982, she has been working with EPIC, an organization dedicated to using the legal system for forest protection and enforcement of existing laws.

Karen Pickett (KP) - Berkeley, California

Karen was involved in the early recycling efforts of the 1970's. During that time, she developed skills in organizing and public education. However, she did not consider herself to be an activist until 1983, when she became involved with her first Earth First! campaign. Karen has dedicated her life to biocentrism and direct action, and over the years, she has witnessed the evolution of activism and civil disobedience.

Tom Regan (TR) - Raleigh, North Carolina

Tom is a University Alumni Distinguished Professor of Philosophy at North Carolina State University. He has published numerous books, including The Case for Animal Rights (1985) and The Thee Generation (1991). The Case for Animal Rights is generally recognized as providing the most thoroughly developed philosophical defense of attributing basic moral rights to animals.

Dick Roy (DR) - Portland, Oregon

Dick is the Founder and of the Northwest Earth Institute (NWEI), an organization with a mission of training and motivating individuals to examine and transform personal values and habits, to accept responsibility for the Earth,

and to act on that commitment. He is the architect of the Northwest Outreach Project, a pioneering effort to use mainstream workplaces as a site for Earth-centered training and education. Prior to 1993, Dick was a prominent corporate lawyer in Portland, but he resigned to found the NWEI. Dick has a B.S. in engineering from Oregon State University, an M.S. in Engineering from Stanford University, and his J.D. from Harvard Law School.

Stephen Scharper (SS) - Toronto, Ontario

Stephen is currently an Assistant Professor in the Department for the Study of Religion at the University of Toronto, where he teaches religion and social ethics. He holds a Ph.D. in religious studies from McGill University, and is author of Redeeming the Time: A Political Theology of the Environment (1997). He also co-authored The Green Bible (1993) with his wife, Hilary Cunningham. Formerly the President of the Religious Education Association of the U.S. and Canada, he has taught in the area of religious ethics and the environment at McGill, St. Michael's College, Prescott College, St. Jerome's University, and the University of Notre Dame.

Allan Schnaiberg (AS) - Chicago, Illinois

Allan Schnaiberg is Professor of Sociology and Urban Affairs Policy Research at Northwestern University. He has been involved in studying distributive conflicts in environmental problems and environmental protection policies in the U.S. for almost thirty years, and he is author, co-author, and co-

editor of four previous books, and numerous articles. His recent analysis of American recycling policies is forthcoming in a Princeton University book he has co-authored with Adam Weinberg and David Pellow. Allan received his Ph.D. from the University of Michigan in 1968.

George Sessions (GS) - Foresthill, California

George Sessions is former chair of the philosophy department at Sierra College in Rocklin, CA. He is co-author of Deep Ecology (with Bill Devall, 1985), editor of Deep Ecology for the 21st Century (1995), an editor of Environmental Philosophy: From Animal Rights to Radical Ecology (2nd ed.,1998), and series consultant for the 13-part public radio series Deep Ecology for the 21st Century (1998). Although he retired in June of 1998, he continues to teach part-time. Writing and lecturing in the area of "deep ecology" for the past twenty years, he feels that our environmental problems are fundamentally linked to certain presuppositions of the Western value system.

Dinah Shelton (DS) - South Bend, Indiana

Dinah joined the faculty of the Notre Dame Law School in 1995, after almost 20 years teaching at Santa Clara University. Her areas of academic interest include federal courts, European community law, international environmental law, international human rights, and various other aspects of international law. She has been a consultant to the United Nations, the European Community, the Council of Europe, and various governments. Her publications

include Protecting Human Rights in the Americas (with T. Buerganthal, 1982), Manual of European Environmental Law (with A. Kiss, 1993), International Environmental Law (with A. Kiss, 1991), and La Proteccion Internacional de los Derechos Humanos en las Americas (with T. Buergenthal and R. Norris, 1984). She earned her B.A. and J.D. degrees from the University of California at Berkeley in 1967 and 1970, respectively.

James Sterba (JS) - South Bend, Indiana

James Sterba (Ph.D., Pittsburgh) is a Professor of the Philosophy Department at the University of Notre Dame. His areas of interest include ethics, political philosophy, environmental ethics, and philosophy of peace and justice. His books include How to Make People Just (1988); Contemporary Ethics (1989); Contemporary Social and Political Philosophy (1994); Morality in Practice (5th ed., 1996); Social and Political Philosophy: Classical Western Texts in Feminist and Multicultural Perspectives (2nd ed., 1997); Feminist Philosophies (2nd ed., 1998); Justice: Alternative Political Perspectives (3rd ed., 1998); Justice for Here and Now, (1998); Earth Ethics (2nd ed., 1999); and Three Challenges to Ethics (1999).

Karen Warren (KW) - St. Paul, Minnesota

Karen J. Warren is a Professor of the Philosophy Department at Macalester College in St. Paul, Minnesota. Her main scholarly interests are in feminist philosophy, environmental philosophy, and critical thinking. She has published

over 45 refereed or invited articles, edited or co-edited five books, and produced an award winning video, Thinking Out Loud. Her ten-year book project, Ecofeminist Philosophy: A Western Perspective On What It Is and Why It Matters, is forthcoming from Rowman & Littlefield Publishers.

Captain Paul Watson (PW) - Friday Harbor, Washington

Paul's career as a Master Mariner began in 1968 as a seaman in the Norwegian merchant marine. In 1971, he helped organize a voyage to protest nuclear weapons testing in the Aleutians, and in 1972, the members of that expedition founded Greenpeace. He left Greenpeace in 1977 and founded the Sea Shepherd Conservation Society (SSCS), an organization dedicated to research, investigation, and enforcement of regulations established to protect marine wildlife worldwide. He is the author of several books, including Ocean Warrior (1994), and he teaches courses in ecology at Pasadena College of Design and at UCLA. He is a highly sought-after public speaker.

APPENDIX B

GUIDE TO PHENOMENOLOGICAL DESCRIPTION

In many ways, good phenomenal description is like good counseling. The principles and concepts of each are only fully appreciated after they have been put to use. Not surprisingly, Fred Wertz (1982, 1984) derived these principles in hindsight, by asking what must have occurred in the attitudes and activities of the researchers whose phenomenological work he studies.

Preparation and General Attitude

Empathic Presence to the Situation Described

This is an attitude of immersing oneself in the material, of reading the text over and over until feeling comfortable and familiar with the person and language. It means being *really empathic* and *completely absorbed*.

Slowing Down and Patiently Dwelling

Slowing down involves avoiding premature notions (e.g., "I already understand this stuff. Let's move on.") and dealing with any anxiety that would dispose one to look past the data for something *more important*. Patiently dwelling involves giving the text time to *speak* to you.

Magnifying and Amplifying the Situation

In magnifying and amplifying moments within the text, *little things* become *big deals* (e.g., a participant's use of the word "he" instead of "we"). The meaning of the text is enriched by amplifying details or aspects that may seem mundane or trivial at first.

Suspending Belief and Employing Intense Interest

Rather than engaging in "naive" empathy or absorption, the phenomenologist *suspends belief* in the real world validity of the participant's statements. Rather than clinging to early theories, prejudices, and hypotheses, the phenomenologist tries to let them go and refrains from judging the truth or falsity of the text relative to a priori meanings. The phenomenologist employs *intense interest* to reflect upon the manner in which statements gain their truth and meaning for the participant. The researcher looks at the implicit projects and intentions underlying the participant's naive description. In this sense, the researcher tries to distance himself or herself from the participant's straightforward orientation in order to grasp the genesis of a particular thing, the interrelations among things (dynamics, hierarchies, meaning systems, etc.), and the overall structure of things (e.g., temporal ordering, meaningful ordering, the way meanings alternate or perhaps "fit inside" each other).

Turning from Objects to Meanings

In descriptive research, the phenomenologist is interested in neither the reality/unreality nor the reasonableness of the experienced situation. Questions are asked about the situation *as meant* by the participant. Though all descriptive statements are rigorously based in the data, the *experiencing person* is the object of study. The text is properly seen as the necessary point of access to the psychological (and environmental) life of the individual.

Reflective Procedures

Recognizing an Existential Baseline

One aspect of a phenomenon's structure is the way it emerges from an existential or experiential baseline where the phenomenon is not present. Experiences within a narrative are what they are because of how they stand out from such a baseline. For example, we look at what happened before a particular meaning emerged for a participant, how an event *became* meaningful, and how the event was perceived to have ended. We consider a period in a person's life for the way it stands out from the rest of his or her life. Further, we contrast a person's environmental themes from a background of others' themes, from our own life projects, and from those of people we know in our own experience, to capture ways in which an overarching environmental value theme is singular and unique.

Distinguishing Constituents

To look at the whole requires looking at the parts in relation to it and in relation to each other. One goal of phenomenal description is "to differentiate aspects of the psychological life under study" (Wertz, 1982, p. 8). We look for the constituents which compose the complex structure of meanings implicit in the participant's life.

Thinking Through Relations Among Constituents

Constituents are always considered *in relation* rather than *in isolation*. Ideally, each aspect of the situation under consideration is questioned as to its relations with the other aspects, and for its place in and contribution to the whole. Phenomenologists think about coherence, structure, and relations of parts. Constituents are *structurally* related to each other and to the overarching theme in various ways. Concrete examples of structural relationships include, but are not limited to, temporal relationships (following each other in time), alternative relationships (belonging to a set of related possibilities), meaning dependence, priority (some constituents may be more important), and categorical relationships (belonging to the same category).

Reflecting on One's Own Judgment

The researcher asks "How did I come to judge this fact or meaning as relevant, and how did I judge this aspect as revelatory of the overarching

environmental value theme?" In this case, "What was I already understanding about environmentalism, value themes, psychology, value-systems, development, stereotypes, or this particular interview that this fact bears upon and reveals another aspect of my understanding?" Reflecting on our preconceptions and prejudices about the situation adds flexibility and clarity to our understanding. Ultimately, this enables us to be more in touch with the participant's unique experience, rather than allowing our own theories to have prominence and to contaminate the meanings intended by the participant. (See also "Conceptually Guided Reflection" below.)

Grasping Implicit Meaning

Once familiar with the network of meanings in a narrative description, one may discover "matters not mentioned in the description but nonetheless demonstrably present, even if highly implicit, in the subject's living" (Wertz, 1982, p.9). The interview narrative serves as the "point of access to the lived reality under study," but our ultimate goal is to gain some understanding of the ambiguity and depth in that reality. We are not summarizing narratives per se! We are trying to summarize environmental lives or experiences.

Thematization of Recurrence

Recognizing recurrent themes among diverse meanings helps us to reach the *essential* aspects of a narrative. Additionally, this process helps us to reach generality in our assertions about a participant.

Interrogation of Opacity

According to Wertz (1982), "descriptive data always contains opaque areas. These invite the researcher to understand psychological structure more fully. The context of the opacity often sheds light on its meaning" (p. 12). An initially confusing fact can become meaningful when seen in relationship. Rather than being a mere "defect" or "omission" from the description, such facts often reflect an *implicit awareness or concealment* on the part of the participant. Subtle deception or concealment, for instance, can be revealing of a person's worldview. Remember also that narratives are created for particular audiences, and how they are so created affects their meaning.

Imaginative Variation and Seeing the Essence of the Case

After discovering the relevant constituents, themes, and relations, one varies each aspect in the imagination to ascertain *how their being changed or being absent would change the psychological meaning* of the case in question. One asks "What is essential to make this person's experience what it is?" and "What is superfluous or non-essential?" (In our case, we ask "Is this particular meaning necessary to the person's environmental values, such that varying it would cause me to no longer be adequately describing this person's environmental values?" or "Could this event have happened somewhat differently and retain the same essential lived meaning for the participant?") We need not retain unnecessary specificities to describe *essential* themes, yet we seek to avoid "over-abstraction."

Conceptually Guided Reflection

We all use preformulated concepts to guide our understanding, and our preexisting descriptive concepts (related to interpersonal processes, figure-ground descriptions, phenomenological psychology, etc.) can be helpful and desirable in descriptive psychological reflection. However, it is important to be aware of what concepts are guiding one's descriptive statements, and how they are doing so. For instance, explanatory concepts (id, superego, cognitive constructs, casual language, etc.) can impose meanings foreign to the original experience. Ideally, the tendency to use *explanatory* concepts is to be acknowledged and avoided in *descriptive* reflection. We try to "weed out" the participant's use of such language as well, *attempting to understand and make explicit what the participant's use of an explanatory concept reveals about the original experience.*

Superficial or inappropriately-biased reflection occurs when a researcher sees in a narrative only that which a personal preconception leads him or her to notice. By contrast, concepts in descriptive research are intended to bring one *closer* in contact with the meaning intended by the participant.

Languaging

In psychological description, the naive and everyday language of the participant is transformed to psychologically-relevant and thematic language to make clear the implicit meanings of the original experience from a psychological

perspective. Language will vary with the individual researcher. One may use everyday language, analogies, and metaphors, provided that they are relevant to the environmental values of the individual and chosen to be precisely descriptive. The use of "jargon" is risky, however, as it renders a description unclear to those not acquainted with it.

Verification, Modification, and Reformulation

In describing lives in terms of value structures, there is a danger of losing contact with the situation under analysis, to the extent one becomes detached from the original everyday descriptions and observations of the participant. Therefore, phenomenological researchers return again and again to the naive description (the original narrative) in order to verify, modify, and negate their own descriptive assertions, seeking as tight as fit as possible. One asks if all one's contentions are supported by the original description, and if all of the original content was considered.

Seeking Generality

Descriptive psychological researchers often desire insights which are applicable to the person in general, as opposed to merely being a state of the person's mind at the time of the interview. They seek meanings which apply to more situations than the specific ones described in the original narrative. As with explanatory (e.g., experimental) psychological research, we employ our best judgment to avoid making claims beyond appropriate levels of generality.

APPENDIX C

METHOD FOR PSYCHOLOGICAL-PHENOMENOLOGICAL

ANALYSIS OF BIOGRAPHICAL TEXTS

1. *The researcher reads the interview narrative as many times as necessary to get a general sense of the whole and understand the language of the participant.* The goal is to make empathic contact and to comprehend the experience as one that might actually be lived through. This initial reading is done in an open-ended manner, that is, trying not to take into account the specific purpose of the research project. "Open-ended" means that the investigator abstains from judging the truth of falsity of statements within the text, and also abstains from taking for granted (as correct) his or her own theoretical hypotheses regarding the text. This process is called *bracketing*. Bracketing is an attempt to set aside (bracket) one's preconceptions about the subject matter being investigated (i.e., environmental values), for the purpose of *describing* the themes as lived by the participant. Researchers attempt to be "data driven" in this sense, always seeking to make the implicit explicit. Bracketing is necessary for the other steps of the analysis as well, in that it is part of the general attitude of the researcher.

2. *The researcher reads the text again, discriminating "units" in the text which contain themes related to environmental living, especially in terms of values.* In discriminating units of meaning, the researcher looks for the perceptions and intentions of the author, rather than the "facts" about the objective world. These context-laden units may flow along with the order of the text (as with paragraphic units), but this is not necessary if the common sense of the researcher (in light of the text) suggests otherwise. Units in the text should seem to "suggest themselves" or emerge, rather than be imposed by the researcher. The benefit of this step is that the text is broken down into more manageable units for analysis, based on the aspect of the larger reality that is being emphasized. In this study, we will discriminate units with a focus on the essential attitudes, beliefs, assumptions, and values that define the participant's relationship with the environment.

3. *The investigator, while remaining faithfully close to the participant's own words, condenses the unit into a descriptive term or more representing the theme of that unit.* In choosing terms, the thematic unit is considered in relation to the whole, rather than in isolation from it. Descriptors are chosen so to make explicit every demonstrably implicit environmental meaning. Again, the investigator tries to discover the implicit meanings and allow them to unfold from the reading of the text, rather than imposing his or her own a priori meanings. Researchers use patience and empathy to avoid choosing the first term(s) that comes to mind,

"dwelling" in the text until themes seem to emerge on their own.

4. Guided by a holistic understanding of the text, the researcher *studies the environmental themes* to get a sense of each in relation to the whole. He or she then *groups the subthemes together into larger groups* which share the common thread of an *environmental value theme*.

5. *Based upon the themes in each grouping, the researcher connects the sub-themes together into a brief narrative,* one for each grouping. The everyday language of the participant is here transformed into psychological language relevant to values, and more explicitly thematic of the person's environmental life or experience.

6. *The investigator searches for the "essential" content and structure of the environmental value themes*, being sure to ground his or her understanding in the original text. The technique of *imaginative variation* is used in this step to arrive at the essential constituents of a person's environmental values, those without which the environmental values would lose their meaning or cease to be that value system. In other words, the essential aspects of an environmental value system are *those without which it would be impossible to describe the person's environmental values, and which taken as a whole are sufficient to make that person's environmental purposes what they are in all their richness.*

Imaginative variation involves a "thought experiment" in which one varies in one's mind a particular aspect of an environmental value theme and

notices any changes in the meaning of that environmental value theme. Those aspects which can be varied without losing the essential meaning are discarded as particulars and are expressed more generally, or simply discarded if irrelevant to a psychological study of value themes. Those aspects which cannot be varied without destroying the essential meaning of a theme are retained. The process of imaginative variation is applied to every recognizable aspect of the thematic descriptions until all the essential meanings are captured.

7. Finally, *the researcher synthesizes the essential thematic content into a consistent statement describing the participant's environmental relation to self, others and world.* The researcher returns again and again, as necessary, to the original text to make sure that the whole sense of the narrative is retained and that each meaning in the summary can be traced back to the original text.

Imaginative variation should be employed until no facts remain which would be applicable only to the accidental context of the particular interview. That is, the researcher seeks to arrive at themes which are "sanitized" of inadvertent cues (general enough to be applicable across accidental contexts). Each summary should be of 200 words or less, written in non-technical language, and expressed in such a way that the theme could conceivably apply to people other than the participant.

APPENDIX D

FOCUS QUESTIONS AND GUIDELINES

(1) What does this person CARE ABOUT, especially with regard to conservation and environmental issues?

(2) What does this person VALUE and BELIEVE about people, the planet, critical issues, their work, ecosystems, the potential for change, and the process of change?

(3) What does this person THINK and FEEL about people, nature, and the relationship of people to nature?

REMEMBER: We are NOT summarizing their lives or their personalities. We are ONLY summarizing the values, beliefs, perspectives, assumptions, thoughts, and feelings (that are demonstrated by their lives and that underlie their personalities).

VALUE = anything of personal importance; a goal, a memory, a preference, a bodily sensation, a dominating emotion or thought, an ideology, a wish.

ENVIRONMENTAL VALUE = any value that plays an important role in the person's understanding of their work, of conservation and environmental issues, of change processes, of effective strategy, or of people and the Earth.

ADDITIONAL GUIDELINES:

(1) We must DESCRIBE the person's values and beliefs, not explain them.

(2) We must describe the person's values and beliefs IN GENERAL, not just in the moment of the interview.

(3) We must describe the PATTERNS, STRUCTURES, and RELATIONSHIPS among the values we identify, not just list them.

(4) We must VERIFY, MODIFY, and/or NEGATE our descriptive statements by returning to the interview again and again.

REMEMBER: Extracting subtleties and making inferences is GREAT, as long as it is clearly supported by the interview. In other words, we must be careful not to lose touch with the interview text. As we get into greater subtlety, we must also be extra careful about how much of our own stuff is getting in.

APPENDIX E

SUMMARIES

Darryl Cherney (DC)

This person values active involvement in an environmental revolution, and he/she believes music is the most powerful tool for bringing revolutionary values and ideals to the people. She/he loves being an outspoken participant in drawing public attention to important issues. He/she also feels that actively protesting is a powerful tool for creating social and political changes that permit healing of the environment. This person is not afraid of being extreme, because she/he believes that if you start with low demands you have no room to negotiate. This person believes that social/political decisions are based on financial gain, and people and the environment are only valued for the income they can produce. He/she also believes societal institutions disempower people. This person thinks individuals need to be reminded that all living things are equal and deserve respect, not domination. She/he feels a strong spiritual commitment to life, as reflected in his/her deep respect and compassion for other living things and her/his true enjoyment of life. He/she values loyalty and is disgusted by the way people often fight against each other instead of working hard to bring out the best in each other. This person believes the most effective way of working together to reach people is through their hearts, not their heads. Environmentalism must communicate a heart-felt message that change is possible, awakening people's connection to the earth.

Herman Daly (HD)

What motivates this person in all areas of endeavor is a fundamental sense of purpose and a commitment to something greater than self. What follows from this sense of purpose is a valuing of our natural resources and a responsibility to use them in

a wise manner. This person values honest dialogue and seeks to provide consistent and integrated responses to the dilemma of economic growth versus the cost of that growth. There is a strong commitment to community within this person, and from that emanates a desire to be collaborative in combating economic globalization. In pursuing this goal, he/she proposes two seemingly incompatible directives: exploration of basic human needs while seeking spiritual values. This person is not afraid of conflict and typically finds a creative way to move persistently toward the goal of strengthening the local community. In achieving this goal, she/he feels it is important to achieve the appropriate level of tension and balance. This allows movement to be achieved while fostering respectful, honest dialogue. This philosophy of tension and balance is also evident in his/her view of environmental issues. An important question for this person is "At what point does the growth of our communities exact a detrimental impact on our environment?" In finding the answer, she/he sees value in viewing this dilemma from both systemic and individualistic perspectives.

Alan Durning (AD)

This person values purposeful living and living up to one's social responsibility. He/she believes in the importance of historical connections and recognizes how those connections intersect and influence current behavior. She/he feels that, in order to impact the globe, individuals must first be connected to the places they live. It is this connection to place that provides a purpose to pursue the environmental cause, while enhancing one's personal responsibility to the cause. Although this person believes that people and nature are working in opposition to each other, he/she also possesses the hope and faith that we can one day achieve a peaceful coexistence on our planet. For her/him, a necessary component of this peace is the idea of personal balance, economic balance, and global balance. Finally, this person believes that, in addition to working toward resolving our environmental issues, people need to pursue personal awareness. He/she views personal awareness as vital, because it allows individuals to operate within the scope of their gifts and talents, which in turn leads to a balance between personal effort and community undertaking.

Tom Goldtooth (TG)

A major theme for this person is our dependence on nature. For him/her, the land and the people who occupy the land are practically synonymous. Therefore, it is the responsibility of humans to humbly respect and protect the earth, not dominate it. Being disconnected from the land permits people to oppress others. When it comes to environmental issues, this person's fundamental premise is that all roads lead to how people relate to the land. If there is respect for the land, then decisions will be made that preserve a positive legacy for our families, future generations, and our planet. This person also places a high premium on the spiritual dimension of our existence and the role it plays in linking people to the environment. Given her/his perspective that people and the land are closely connected, this person believes that environmental issues can best be addressed when people reestablish their historical connections to the land. He/she believes that reconnecting to the environment will not only protect the earth, but will also improve human relations in the areas of racism, economic justice, and community accountability. She/he also believes that an improved relationship with the land will reduce over-consumption and the current levels of personal and environmental abuse. This person places much hope in providing information and educating people about themselves and others.

Garrett Hardin (GH)

This person values quality teaching and pushing people's awareness through controversial topics, broad perspectives, and rational thought. He/she prefers to be as spontaneous and interactive as possible, but she/he acknowledges that shocking people can be unproductive. Therefore, when needed, he/she will take careful steps not to scare people away from a topic. This person believes in doing what is right according to ecological principles, not according to what is convenient or profitable. Central among these principles is the need to conserve the resources of our finite world. She/he believes that humans are doing irreparable damage to our world by ignoring this principle, and because our resources are relatively fixed, he/she believes balance can only be restored by controlling and changing our level of demand, which depends largely on human population. This person observes that humans often resist facing the need for change

until they experience a personally relevant crisis, and she/he believes that selfishness and ignorance of ecological principles contribute to this resistance. While he/she believes that humans will eventually make the necessary changes, she/he is afraid that we will do so only after most of the world (as we know it) has been devastated.

Julia Butterfly Hill (JH)

This person is compelled by a deep emotional and spiritual connection to all forms of life. His/her basic values are true love and respect for all living things, and she/he believes the destruction of any aspect of life is a destruction of part of the life source from which everything stems. Although people are becoming aware of the destruction, this person thinks that many positively motivated environmental efforts actually result in further destruction, because people have become too focused on short-term personal gain. He/she believes that greed and the desire for domination of other life forms are the ways people attempt to fill the void created by loss of connection to the source of life. For this person, it is important not to blame others for their destructive acts, but to put forth love to resurrect (within everyone) the awareness of connection to all forms of life. Although she/he believes in the goodness of all people, he/she recognizes that people are fearful of engaging in the difficult and complex process of change. This fear keeps people captive in destructive patterns. She/he believes that "fighting" to protect the environment focuses on the destruction, but focusing positive efforts on people's natural instinct to preserve life leads to true caring and environmental awareness. For this person, environmental awareness is an undeniable result of a spiritual emancipation from the confines of false beliefs. He/she believes that only through the teaching of love and respect is a positive future possible.

George Howard (GX)

This person values the quality of human life above all else, and he/she believes practices that over-stress the ecosystem threaten the viability of this value. She/he believes that people tend to focus excessively on current pleasures and rewards, ignoring the effects they might have on the future. He/she views this tendency in

human nature as a primary reason for such ecologically harmful practices as maximization and unbridled over-consumption. With this in mind, she/he seeks to change people's views by educating them about their tendencies to be shortsighted and about ecologically sound attitudes that will insure a fulfilling future for their children. This person thinks that his/her energy is best spent focusing on changing overall attitudes and life approaches, rather than focusing on particular issues. However, she/he personally values simple, non-consumerist living, in which one takes what is needed but also gives willingly to those who are in need. Change can occur when people, aware of their tendencies to live unwisely, begin to intentionally adjust their lives with long-term benefits in mind. This discipline/habit of living the present with the future in mind will lead people to make more ecologically wise choices. He/she believes her/his role in helping this change come about is to teach people how to think differently.

Allen Kanner (AK)

This person takes an individual approach toward addressing environmental issues. He/she believes improvements in the environment will happen when people make intimate, meaningful changes that heighten self-awareness while fostering a lifestyle consistent with environmental justice. An individual's increased self-awareness will help to develop a connection with the land, as well as a sense of living in balance. This sense of balance mandates that we treat the earth and all of its inhabitants as alive and worthy of respect. It also provides for the holistic combining of the individual's spiritual, social, and personal components as he or she pursues political activity while remaining true to one's sense of spirit. This person believes that it is part of our responsibility to be effective in promoting environmental issues while not adopting a hostile attitude toward others. For her/him, being effective is directly related to having a sense of inner peace and of connection, to the earth and other people. It is this mindset that enables him/her to a) avoid exploiting the earth, b) stay connected with others in spite of differing views, and c) feel good about self throughout this challenging process. This person also values the realization that many of our social issues are inextricably intertwined with our environmental struggles. She/he believes that exploitation of a people usually brings with it the exploitation of the land, and vice versa.

Marti Kheel (MK)

This person values holistic ethical behavior, toward both individual species and larger ecosystems, above all else. Compassion and respect for all animals lies at the heart of his/her life philosophy. She/he believes that people often behave inappropriately towards animals and the environment because of a lack of information. He/she thinks that change will occur as people expose what is actually happening to animals and the environment, lobby for political changes, educate the public about harmful practices, and model alternative ways of living. This person thinks the current cultural mores are oppositional to nature and destructive toward deep connections between people and animals and between people and other people. She/he hopes to restore connections by replacing this current view with a holistic ethic that embraces all beings with compassion and respect. The first step toward change may involve making people uncomfortable, so that they feel the need to act differently. Heightened awareness of current practices may bring on this discomfort and then lead people to make informed, compassionate choices. If this shift to a more compassionate view of connections within the ecosystem takes place, we will move closer to his/her ideal philosophy of life: living and working daily to build connections so that crisis situations do not occur.

Winona LaDuke (WL)

This person stays true to his/her vision through strong guidance from a spiritual connection to the land and its people. For this person, living close to nature in daily life is the way it was meant to be. Although she/he believes education is important, his/her value of life comes through experience with the land and the people. Her/his basic belief is that, through an experiential connection to family and a sense of place, people instinctually know the value of living in harmony with the earth and environment. However, he/she believes that too many people have become removed from this spiritual connection, allowing themselves to become complacent about the use of technology and about decisions which take advantage of the land or its people. This person believes it is a basic human right to be well informed about decisions being made that impact others. She/he values the power of speaking out for what is right, to remind people of the value of a spiritual connection to the environment. He/she thinks that change can only

happen if someone has the courage to say or do what is right by nature. For her/him, all people need to be willing to face their fear of change and use their natural skills to play an active role in recovering human destiny.

Cecelia Lanman (CL)

This person values an intimate connectedness to the land and allowing the land to teach us lessons about human interactions. He/she values giving back to the environment and adopting a lifestyle that achieves a balance between the resources used and the resources available. This idea of balance is an important theme in her/his attempt to defend the environment: nature for nature's sake is balanced with the scientific implications of depleting our natural resources; love of the earth is balanced with the necessity to organize politically; and so forth. This person has a fundamental belief that nature is a complex, interrelated, and interdependent system that only time will completely restore. In preserving nature, he/she prefers the balanced approach of education, legal action, and science. She/he is diametrically opposed to making compromises in advancing environmental issues, but recognizes that this is necessary due to the corruption in both politics and law enforcement. Although this person appreciates the goals that have been achieved through the legal system, there is a high amount of frustration with that system. In spite of this high level of frustration with the process of restoring the environment, he/she cares deeply about this endeavor and is hopeful that progress can be made.

Karen Pickett (KP)

This person values living simply and believes that environmental and world population issues are best pursued using multiple levels - personal, political, and legal. He/she finds that purposeful living emanates from being effective and that being effective entails both personal action and large-scale activism, which may include direct and sometimes dramatic action. This action is founded on a connection to the earth, a desire to support all life (not just human life), and a propensity towards personal involvement. For this person, direct action brings with it a sense of power, spiritual connection, and social collaboration. These three components are vital if the individual is to remain motivated and achieve longevity

in the work. This person believes in belonging to something bigger than self and in pursuing the larger agenda persistently. As one who is committed to long-term outcomes, she/he recognizes that final outcomes are not always observable within one's lifetime. In addition to being effective, the idea of purpose for this person is closely connected to the belief that change is possible, albeit difficult. It is this sense of purpose that keeps him/her grounded in (connected to) the natural world. She/he also finds purpose and motivation in the incredible regenerative powers of the earth. He/she believes that when people are disconnected from the natural world, environmental change is much more difficult.

Tom Regan (TR)

This person is governed by a deep, ethical commitment to peace and compassion for all living things, but he/she believes that people have generally become complacent about violence committed against human and non-human life forms. For this person, change must occur on an individual level, by increasing awareness that we have permitted and benefited from violent acts against other living things. She/he is a firm believer that change is possible, but it must occur one step at a time. He/she thinks that putting forth information that increases people's awareness of the harmful impacts of simple day-to-day decisions is central to motivating people to change. She/he believes that challenging people's actions on an individual level is the most powerful tool for change, but people must also be given opportunities to take the first steps. This person sees that people become paralyzed by feeling ineffective at making idealistic changes. However, he/she puts forth that each decision we make should be a conscious decision that moves us closer to or further from the negative core of exploiting other living things. This person also believes that the ultimate goal is not to find a more humane way to devalue life, but an absolute commitment to peaceful coexistence with all forms of life. She/he believes that commitment to valuing the worth and dignity of life is a continual process of individuals taking steps toward the ultimate goal of making life better for all creation.

Dick Roy (DR)

This person feels that life gains meaning and communities are built around a sense of purpose. Society today has lost any sense of real purpose, mostly due to economic cultural norms that promote habits and values that are destructive, amoral, and will ultimately destroy the earth. He/she cares very deeply about helping people regain meaning in their lives, particularly through appreciating and protecting the environment. This person thinks that it will be extremely difficult to change society as a whole. Therefore, she/he focuses on an individual's responsibility and hopes to effect change through offering people the tools necessary to help them become as environmentally-aware as possible. This person values discipline and intellect, combined with experience and spirituality, as the tools needed to maintain focus on changing the culture. He/she feels that psychological health and healthy relationships are essential for successful goal attainment. Structurally, this person believes that those who have should help those who do not. She/he is motivated to live this creed in his/her own life by utilizing her/his skills, time, and other resources to educate others about the environment locally. He/she believes broader change may occur when local work is exported to other communities, which can grow up around the ideas of ecocentricity, simplicity, and an obligation to change society.

Stephen Scharper (SS)

This person believes nature has a very real spiritual component, and spiritual awareness can help us understand our emotional reactions to environmental manipulation and destruction. He/she values childhood experiences in nature, because they foster a sense of connectedness to the land, its history, and its sacredness. Unfortunately, our culture discourages staying near those places that have shaped us, and it teaches us that development is inevitable. This person believes we don't have to accept these messages, and she/he values actively preserving the natural landscape, especially in places to which we feel personally connected. This person clearly values academic efforts, but he/she believes activism is most effective when people are physically present to take a stand together. This person believes environmental and social justice issues are inseparable, because environmental damage disproportionately affects the poor. She/he

also believes spirituality and religion must guide and support these movements, because science-oriented philosophies are insufficient for fully-understanding these problems. This person believes our world and history are actively shaped by both human and natural forces, but we must still take responsibility for our role. The issues are daunting, but this person believes positive steps are already being made, especially in spreading ecological and spiritual awareness. He/she believes rapid changes, good or bad, are now more possible than ever, and she/he is excited to see a future that promotes goodness by rekindling our spiritual connection to the Earth.

Allan Schnaiberg (AS)

This person values heroic efforts to work toward social and environmental ideals, but he/she believes passion must be tempered with insight, to avoid the blind destructiveness of extremism. Therefore, this person values investigation, learning, and the broad, balanced perspectives that lead to truth, clarity, and wisdom. To promote such perspectives, this person values long-term working relationships within and across diverse fields. She/he also prefers working environments that allow the flexibility, freedom, and creativity needed to do quality work. Unfortunately, widespread systemic pressures and constraints, along with individual specialization and ambivalence, have made productive multi-disciplinary partnerships very difficult to establish and maintain. This person believes people get co-opted and blinded by our competitive, growth-oriented global economy. As a result, we allow social inequality and environmental damage to thrive and expand. People may feel vague desires for change, but any new ideas or initiatives simply get co-opted and corrupted as well, and few people have the perspective to understand the mechanisms at work or our dependence on the current system. Because this system won't adequately self-correct, this person believes active resistance and political reform are essential. He/she sees human and environmental atrocities as equally critical, because they are interdependent human-based issues. While major disasters are already happening, she/he fears that reforms will not happen until these disasters have a tangible impact on the elite.

George Sessions (GS)

This person holds simplicity in life as one of the highest values. He/she believes consumerist impulses and technological advances sever mankind's connection with self and with nature, while a simple life that is unencumbered by material possessions provides an opportunity to reconnect with self and nature. Above all else, this person values the interconnectedness of all aspects of nature - wildlife, plant life, humans, and so forth. She/he believes people need to turn aside from an artificial and immature focus on status and possessions and examine their lives more deeply. Deep self-examination can be fueled by questioning one's philosophical outlook on life and striving for meaningful spiritual growth. The result of such self-examination is often an ecocentric and mature worldview. This person believes change can occur when people reidentify with nature, understand the earnestness of potential ecological disasters, and strive for more meaningful and self-reflective lives. In order for this change to occur, he/she believes people must turn away from numbing habits and pursuits that distance them from nature. They must also intentionally engage in more direct experiences with nature and humanity. She/he believes that this shift from distraction-based living to self-awareness will lay the groundwork for deep interpersonal and environmental change.

Dinah Shelton (DS)

This person sees the world as a complex system where everything is interconnected and interdependent. He/she also sees humans as stewards or guardians, which limits our rights to abuse this world. Therefore, we have a responsibility to avoid excesses, conserve resources, and make decisions as if everything matters. This person sees a strong connection between human rights abuses and environmental damage, and she/he attributes much of this abuse and damage to the irresponsible conduct of large corporations. This person believes that legal actions are an essential tool for forcing corporate responsibility, and he/she prefers working at the international level where such critical issues for the future can be addressed. However, she/he also appreciates a local focus for addressing more community-specific issues. This person values intellectual contributions, along with effective communication through consulting, teaching, and speaking out. He/she believes

the impact of such efforts can be enhanced by exposure (especially in childhood) to nature, to environmental ideas, and to the real effects of unlimited development on a limited world. Such exposure pushes people to question environmental realities and develop community awareness. However, even fully aware individuals may act on human fears and desires rather than environment concerns.

Jim Sterba (JS)

This person sees all life as equally and independently valuable. He/she finds no reasonable argument for elevating humans above other life forms. She/he acknowledges that humans have a basic right to survive, but believes our right to thrive has limits when it imposes on the survival of other humans or other life forms. Therefore, this person values a single standard of living that is simple, need-focused, non-luxurious, and minimally aggressive. When humans exceed this standard, as most humans currently do, he/she believes we must take full responsibility, through lifestyle change and sacrifice if necessary. Unfortunately, she/he sees humans as lacking or avoiding awareness and failing to make adequate changes. He/she worries that these may be inherent human weaknesses. If we do not willingly face these difficult challenges, she/he also worries that a crisis may eventually impose a violent and regretful change upon us. This person clearly prefers justifying actions and promoting change through moral reasoning, and he/she strives to eliminate biased assumptions. But she/he recognizes that rationality may be insufficient without some emotional connection to nature. Direct access to nature, especially during childhood, may provide a foundation for understanding and commitment that will never arise from logic alone.

Karen Warren (KW)

This person values living his/her life in a genuine and caring relationship with the environment. She/he recognizes the complexity of making environmentally responsible decisions and the tradeoffs that arise from competing value systems. He/she believes that people cannot make choices that promote the environment without understanding their relationship with the environment. From this person's perspective, the traditional,

neutral, objective language used to make social and political decisions does not support the accurate expression of personal experiences. In fact, this language serves to suppress critical aspects of experience as a person in relationship to a variety of contexts. This person believes that our society overemphasizes individualism and domination over the environment and other human beings. She/he feels a sense of meaningful contribution in putting forth a worldview that provides the opportunity to experience one's environmental self. Although this person values academic training, the knowledge that comes through experience is more valuable to him/her. She/he is not afraid to challenge traditional academic perspectives that interfere with understanding, or even experiencing, the relationship we have with different aspects of who we are. This person believes that, when it really matters, we should not try to be neutral and objective, because beneficial actions are the product of caring connections. He/she believes that truly caring decisions promote the growth of what we value, or at least do not, unwittingly, result in substantial harm. In this way, she/he believes situational decisions are more appropriate than universal explanations for our convictions.

Captain Paul Watson (PW)

This person believes that life should be lived from the perspective of benefit to all species. Larger ecological issues, which affect all creatures, are more important than smaller problems that only affect one species or one group within a species. Following from this perspective, he/she believes humans have a responsibility to protect all species. This person thinks that, in general, people do not act logically and do not respect all other creatures. These human-centered perspectives lead to intellectual bondage and the eventual destruction of life on this planet. Personally, she/he values conservation of wildlife. In following his/her convictions, this person believes that one has an obligation to do what is right, no matter what the outcome or the cost. She/he thinks that one must be proactive in order to do what is right, and he/she values action over extended deliberation. This person believes that change can occur when people maintain focus on the important issues and are empowered to go out and work for positive changes. Life will improve when people return to a biocentric perspective and focus on respecting and protecting all the species, not simply humans and their interests.

APPENDIX F

SPREADSHEET OF ESSENTIAL VALUES

Current Reality - World	DC	HD	AD	TG	GH	JH	GX	AK	MK	WL	CL	KP	TR	DR	SS	AS	GS	DS	JS	KW	PW
Damage to land, life, environment	x			x	x	x				x			x		x	x		x			
Damage to people (human rights)				x						x						x		x			
Population					x							x									
Finite World																		x			
Social AND Environmental Problems				x				x							x	x		x		x	
Interconnectedness, Interdependency				x		x					x				x		x	x			x
Dauntingly Big and Complex Problems						x							x	x	x	x				x	
Volatile Time															x						

Current Reality - People																					
Are Basically Good						x															
Have Instincts						x				x											
Have Gifts and Talents			x							x											
Have a Destiny										x											
Are Dependent on System	x															x					x
Get Paralyzed by Daunting Goals						x							x		x			x			
Fear Change						x				x								x			
Are Avoidant (of awareness)																			x		
Are Complacent and Passive										x		x	x	x	x	x					
Are Illogical																		x			x
Have a Short-Term Perspective						x	x														
Are Disrespectful (of other life)													x								x
Are Dominating	x			x		x														x	
Are Selfish					x	x												x			
Are Violent				x		x	x		x		x		x						x		
Are Disconnected from spirit				x		x				x					x						
Are Disconnected from nature/land	x		x	x				x	x		x	x		x	x		x	x			
Are Disconnected from our history			x												x						
Are Disconnected from other people								x	x							x					
Are Disconnected from self																	x			x	
Lack Awareness of issues/problems						x				x				x	x	x			x		
Lack Awareness of ecological principles	x				x		x											x	x		
Lack Awareness of personal responsibility									x				x								
Lack Awareness of self		x						x									x			x	
Are Having a Crisis of Meaning														x		x					

Current Reality - Culture	DC	HD	AD	TG	GH	JH	GX	AK	MK	WL	CL	KP	TR	DR	SS	AS	GS	DS	JS	KW	PW
Maximization	x	x	x		x		x							x	x	x			x		
Consumerism				x			x										x				
Globalization		x																			
Violent Mores									x												
Individualism																x				x	
Anthropocentrism																					x
Corrupt											x					x					
Current Reality - Other																					
Corporations (human created)																		x			
Technology (human created)										x							x				
Change Strategies																					
Conservation	x			x	x						x			x	x						x
Legal Action Approach (sue)											x	x						x			
Political Approach (lobby, organize)	x							x	x		x	x				x					
Political Approach (compromise, trade-off)	x										x									x	0
Direct Action Approach (protest, intervene)	x									x		x			x	x					x
Awareness Approach (spiritual)		x				x									x		x				
Awareness Approach (environment)	x				x	x	x		x	x			x	x	x	x	x	x	x	x	
Awareness Approach (self)	x	x	x			x	x	x	x				x	x	x		x			x	
Education Approach (teach, consult)				x	x	x	x		x	x	x		x	x				x		x	
Speaking Out (expose, challenge)	x				x				x	x			x					x		x	
Experiential Approach (modeled lifestyles)								x	x												
Experiential Approach (with nature/land)										x	x			x	x		x	x	x	x	
Experiential Approach (with people)										x							x			x	
Reconnecting Approach (spirit)				x		x				x		x			x						
Reconnecting Approach (nature, land)	x		x	x		x		x	x	x	x	x		x	x		x	x		x	
Reconnecting Approach (place, history)			x	x						x					x						
Reconnecting Approach (people)								x	x	x						x					
Reconnecting Approach (self)																	x			x	
Emotional Approach (music, heart-felt)	x					x					x			x		x			x	x	
Creative Approach		x			x											x					
Rational Approach		x			x									x		x			x		x
Academic/Science Approach		x									x				x			x		x	
Individual Focus (in self, in others)		x	x				x	x		x		x	x	x							
Small Steps (balanced, not forced)		x			x			x		x		x	x							x	
Stay Positive (empower, support)						x							x								x
Local Focus (community, region)		x	x									x		x				x			
Multidimensional Approach (collaboration)	x	x									x	x				x					
Global Focus (bigger issues)		x	x						x			x						x			x
Spiritual Guide		x						x		x				x	x						

Key Values	DC	HD	AD	TG	GH	JH	GX	AK	MK	WL	CL	KP	TR	DR	SS	AS	GS	DS	JS	KW	PW
Questioning	x	x			x		x						x			x	x	x			
Awareness (spiritual)		x				x									x		x				
Awareness (environmental, current reality)	x	x			x	x	x		x	x			x	x	x	x	x	x	x	x	
Awareness (broad perspective)	x	x			x	x	x					x				x					
Awareness (self, human)	x	x	x			x	x	x	x				x	x	x		x			x	
Connectedness (to spirit)				x		x				x		x			x						
Connectedness (to nature, Earth, life, land)	x		x	x		x		x	x	x	x	x		x	x		x	x		x	
Connectedness (place, history)			x	x						x					x						
Connectedness (people)								x	x	x				x		x					
Connectedness (self)														x			x			x	
Biocentrism (all equal, independent value)	x			x							x			x			x		x		x
Respect All Life	x		x			x		x	x	x	x	x	x								
Respect Humans (now, future generations)	x						x	x		x											
Care (show love, compassion, peace)	x					x			x		x		x								
Sense of Responsibility		x	x															x			
Commitment to Purpose		x	x				x			x		x	x	x		x	x		x		x
Personal Involvement	x	x	x		x		x	x	x	x		x	x	x	x	x	x	x		x	x
Lifestyle (simple)							x					x		x			x		x		
Lifestyle (ecocentric)					x			x		x				x					x		
Lifestyle (generous)							x							x							
Lifestyle (balanced, sustainable)		x	x		x			x		x	x										
Lifestyle (meaningful)														x			x				
Lifestyle (enjoyable)	x																				
Emotional Perspective/Language	x					x					x								x	x	
Spirituality	x	x	x	x		x		x		x		x	x	x	x		x				

Why Bother?																					
Obligation		x	x	x				x						x	x			x	x		x
No Self-Correction														x		x	x				x
Destiny										x											
Future Generations							x														
Gratitude to Nature											x										

Change Possible?																					
Yes/Maybe	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x		x
Later					x											x					
Inevitable																			x		

APPENDIX G

COMPREHENSIVE PICTURE OF ENVIRONMENTAL LIVING

Current Reality

In looking at our current reality, human beings are clearly a central focus of most environmental value systems, and within that focus, human awareness seems to be the most fundamental problem. Most people, especially in the Western world, simply lack awareness of environmental issues (DR, JS). They don't realize the destruction of life that is taking place (JH, WL), and they certainly don't understand the underlying mechanisms at work in our social and political systems (AS). People also seem to lack awareness of basic ecological principles (GH). We do not appreciate that all living things, including humans, are interconnected and interdependent (DS), and we fail to see the long-term impacts of our actions (GX). As a result, we fail to treat other living things with respect (DC). Perhaps this blindness is an inherent human weakness (JS), or perhaps our Western, science-oriented philosophies are somehow insufficient (SS, KW). Perhaps a lack of information is the problem (MK), or perhaps we simply do not understand ourselves (HD, AK, GS, KW) or the impacts of our day-to-day decisions (MK, TR). The most frightening possibility is that human beings may actually avoid awareness (JS).

Many environmentalists believe that the lack of human awareness stems from some form of disconnectedness. They believe that many people have lost their connection to the natural world (DC, AD, TG, AK, MK, CL, KP, DR, DS, GS, SS), to the places that shaped them (AD, SS), to other humans (AK, MK, AS), and even to themselves (GS, KW). Some environmentalists believe that humans have lost a spiritual connection to the land (TG, WL, SS) and to the source of all life (JH). These losses are blamed on our culture (MK, AS, GS, SS), our objectivity (KW), our individualism (AS), our reliance on technology (GS), and our lack of childhood experiences in nature (SS).

As a result of human disconnectedness and lack of awareness, many people have lost any sense of meaning or purpose in life (DR). They feel only vague notions that change is necessary or desirable (AS). Even when these notions are stimulated, people often remain inactive, as if paralyzed by the daunting prospect of change (JH, WL, TR, DS, SS). Some environmentalists believe this inactivity reflects a general disempowerment (KP) or a dependency on our social and cultural institutions (DC, AS, PW). Others believe that humans are too focused on short-term personal gains, which can interfere with both awareness and personal effectiveness (GX, JH).

Some environmentalists believe that humans have simply become complacent or ambivalent (DR, AS) about violence (TR), about decisions that take advantage of the land and its people (WL), and about the effects of development (SS) and technology (WL). After all, humans do benefit from these

events and phenomena, which creates a motive for not changing (TR). This ambivalence may be directly related to other destructive attitudes such as selfishness (GH, JH, DS), disrespect of life (TR, PW), and the desire for domination of people and planet (DC, TG, JH, KW). The end result is continued human violence against animals (MK, TR), nature (JH, MK, CL, JS, GX), and other humans (TG, TR).

Despite all these problems, some environmentalists feel that there is still a basic goodness in all people (JH). They believe that people have natural instincts for preserving life and for living in harmony with the Earth (JH, WL). Some environmentalists also believe that people have unique talents, gifts, and natural skills (AD, WL) that must be identified and developed in order for us to be personally effective. Perhaps such efforts will eventually lead to a recovery of humanity's relationship with the larger web of life (WL).

Closely related to human issues are issues of culture, and Western culture is often criticized for contributing to environmental destruction. Many environmentalists identify maximization and rampant consumerism as being ecologically harmful cultural themes (TG, GX, DR), because they promote excessive demand and unsustainable resource use and development (GH, SS). By fostering an artificial focus on status and possessions, they also lead to disconnectedness (GS) and promote lifestyles that exceed a simple, need-focused standard of living (JS). Under these competitive cultural themes, decisions are based primarily on financial gain and economic growth (AS), and people and the

environment are only valued as sources of revenue (DC). The costs to human and non-human life rarely enter the equation (AD, HD). The real danger of these cultural themes is that they may never adequately self-correct in response to real environmental catastrophes (AS). After all, our competitive, growth-oriented global economy has the frightening ability to co-opt and corrupt ideas, people, and movements (AS). Some environmentalists believe that the political and legal systems have already been corrupted (CL).

Other cultural themes that may be harmful include individualism (AS, KW), anthropocentrism (PW), and a warfare mentality toward nature, animals, and people (MK). Some environmentalists point out that all these problems have fostered a certain degree of volatility, which might be used to rapidly promote positive changes as well as negative ones (SS).

Along with the cultural and human issues, our current reality is burdened with many specific and tangible problems. Direct harm is being done to humanity (TG, WL, DS), other living things (JH, TR), and the environment (DC, TG, WL, DS, SS). Some environmentalists believe that this damage is irreparable (GH) and that major disasters are already happening (AS). Some also emphasize the link between ecological and social issues (AK, SS, KW), between environmental destruction and abuses of human rights (DS). Both are human-based issues, possibly stemming from human disconnectedness (TG), and some environmentalists believe that the solutions are as linked as the causes (AS).

Interconnectedness is a common theme among environmentalists. Many of them see the natural world as a complex, interconnected, and interdependent system (DC, JH, CL, GS). As a result, larger ecological issues are believed to affect all creatures (PW). Humans are also part of this system (TG), which means that our health is partially dependent on the health of the natural world (TG, SS). The complexity of these interdependencies can make addressing social and environmental issues seem all the more daunting (TR, SS), especially when it involves changing society as a whole (DR). Making even the most basic environmentally responsible decisions can be complex and difficult (KW), because people generally do not have the perspective to understand the mechanisms at work (AS).

There are still more tangible problems within our current reality. Corporations are human creations that damage the environment and abuse human rights, especially in third world and native communities (DS). Technology, another human creation, can have negative effects by severing our connection to nature and self (WL, GS). Human population growth is harmful (KP), because it conflicts with the finite nature of our world (DS) and is directly linked to our excessive demand (GH).

Change Strategies

Turning to the topic of change strategies, it becomes apparent that most environmentalists endorse human-focused approaches to change, especially

those approaches that promote awareness and understanding (GH, JS). Awareness of the environment (JH, DR, DS, SS), of ecological principles (DC, GX, KW), and of our current reality (GH, MK, WL, TR, AS, DS, GS) are seen as critical elements in fostering individual responsibility (DR) and compassion (MK). Another critical element is self-awareness (GS) of our natural connection to the environment (DC, HD, JH, AK, SS, KW), of our personal impacts on the environment (GX, DR), of our role in permitting and benefiting from environmental harm (MK, TR), and of our potential role in contributing to positive and effective change (AD). Some environmentalists also emphasize the importance of promoting and pursuing spiritual awareness (HD, JH, GS, SS).

Since lack of human awareness is often linked to some form of disconnectedness, it is not surprising that reconnecting is considered to be an important strategy. Many environmentalists believe that reconnecting to nature will promote positive changes (DC, AD, TG, JH, AK, MK, CL, WL, KP, DR, DS, GS, SS, KW), and some believe this connection should be a spiritual one (TG, JH, WL, KP, SS). Some environmentalists also emphasize the importance of reestablishing historical connections to the places that have shaped us (AD, TG, WL, SS). Reconnecting to other people through family (WL), community (AK, MK), and collaborations (AS) is also seen as important, along with reconnecting to self (GS, KW). The value of these reconnecting strategies is that they promote health (AK, KP), goodness (SS), responsibility (AD, DS), a sense of purpose (AD, DR), ecocentric worldviews (GS), and improved human relationships (TG, GS).

They may also reconnect humans to an instinctual appreciation for living in harmony with the Earth (WL).

Some environmentalists attempt to promote awareness and connection through various forms of education, which may focus on current realities (GH, MK, TR), the local environment (DR), ecological principles (DS), love and respect for life (JH), new ways of thinking (TG, GH, GX), or broad, long-term perspectives (GH, GX). Academic education is valued (GH, WL, KW), especially when it is highly interactive (GH), but it is often seen as insufficient on its own (WL, KW). Therefore, education is also accomplished through experiential learning and speaking out.

Some environmentalists see experience as the critical element in educating people about the environment. These experiences are especially valuable during childhood, when awareness is first being developed and connections are first being realized (DS, JS, SS). Simple exposure to nature can be very important (WL, DS, GS, JS, SS), because it reveals our personal relationship to the environment and each other (CL, KW). It may also wake us up to the real effects of unlimited development on a limited world (DS). Experiences with other people may be equally valuable (AK, WL, GS), especially with those who can model alternative ways of living (AK, MK). All of these experiential lessons help us to stay focused and committed (DR, JS), because they give personal value to life (WL). They also help us to develop mature, ecocentric worldviews (GS).

Speaking out is another effective strategy for educating people about the environment (DS). Some environmentalists see speaking out about controversial topics as a powerful tool (DC, GH, MK, WL, TR), because it can wake people up (DC, GH, WL), draw public attention (DC), and challenge established beliefs and behaviors (MK, TR, KW).

While education approaches are seen as valuable, some environmentalists point out that they must always be balanced with other strategies (CL). Scientific research can bolster other approaches by providing evidence of environmental damage (CL). Legal action may be essential as a tool for addressing environmental issues (CL, KP, DS) and forcing corporate responsibility (DS). Political activity may also be essential (DC, AK, MK, CL, KP), especially if our current systems fail to self-correct (AS). However, political compromise is opposed by some environmentalists (CL, PW), even if the current level of corruption and complexity makes it necessary (CL, KW). At the very least, environmentalists must stay true to spirit (AK, CL) and be careful not to compromise too much in early negotiations (DC).

Some environmentalists prefer direct action approaches over extended deliberation (PW), because doing what is right requires proactive and courageous efforts (WL, PW). Passive acceptance is not acceptable (SS). They believe that active protesting and resistance are powerful tools for social and political change (DC, AS). They also point out that being physically present to

take a stand increases effectiveness (SS). Some environmentalists even believe that dramatic or extreme actions are sometimes necessary (DC, KP).

Some approaches to change are emotional and passionate, such as music and heart-felt messages, and these approaches can be powerful tools for awakening connections and sharing new ideas (DC, JH, CL). Some environmentalists believe that an emotional focus is essential, because reason and logic may never be enough (CL, JS). Only emotion can fully connect us to our selves and our experiences (KW). Only emotion can restore meaning and genuine appreciation (DR).

Other environmentalists believe that passion must always be tempered with insight to avoid the blindness of extremism (AS). However, this does not rule out the importance of creativity. Some environmentalists believe that creativity is an important tool for stimulating interest (GH), building strong local communities (HD), and producing quality work (GH, AS). Working environments should be flexible enough to allow such creativity (AS).

Rational approaches and intellectual contributions are still considered valuable by environmentalists (DS, SS), even if they cannot provide the sole foundation for awareness and commitment (JS). After all, reasonable arguments can be used to push awareness (GH), justify actions (JS), resolve dilemmas (HD), promote change (JS), and stay focused (DR). Investigation and learning remain valuable on the path to broad, balanced perspectives (HD, AS).

Change efforts can be focused on different levels, ranging from the individual to the global community. Some environmentalists prefer an individual approach to addressing environmental issues (AK, KP), because that is the level at which changes must ultimately occur (TR). It is also easier to foster individual responsibility than to change society as a whole (DR). By helping people make intimate, meaningful changes (AK, DR), and by helping them find the motivation to do so intentionally and willingly (GX, TR), it may be possible to foster self-awareness and environmentally just lifestyles (AK). This individual focus may also apply to environmentalists, who must take personal action if they want to be effective (AD, KP). They must be willing to face their own fears of change and use their natural skills to play an active role (AD, WL) that fits within the larger community of environmentalists (AD).

Some environmentalists emphasize that change must be allowed to happen one step at a time, and people must be given an opportunity to take those steps (TR). They believe that scaring or shocking people can be unproductive (GH). They also believe it is important to balance the drive toward change with the resistance to that change (HD), so that movement can occur effectively and willingly, without hostility, disrespect, or force (HD, AK, WL). By maintaining this delicate balance, environmentalists can promote honest dialogue and maximize connections and collaborations (HD, AK). For environmentalists, this step-by-step focus means making situational decisions

rather than universal rules (KW) and accepting the fact that final outcomes may never be observable (KP).

Some environmentalists also emphasize the importance of staying positive. They believe that efforts should focus on people's natural instincts to preserve life (JH) and on empowering people to work for positive change (TR, PW). By maintaining this focus, it may be possible to foster true caring and awareness (JH).

Change efforts can also be focused on the level of local communities (HD) and local environments (DR). Some environmentalists believe that we must act locally in order to effectively address both community-specific issues (DS) and global issues and impacts (AD, KP). Once well established, this local work can be exported to other communities as a model (DR), with the hope that broader changes toward simplicity, responsibility, and a more peaceful coexistence with nature will result (AD, DR).

For environmentalists, this community focus may take the form of increased collaboration (HD) within and across diverse fields (AS). At the very least, it should involve an increased appreciation for a wide range of strategies and approaches (CL). Some environmentalists point out that we should work to bring out the best in each other, rather than wasting time and energy in conflict (DC). By building a true environmental community, it may be possible to foster loyalty (DC); respectful, honest dialogue (HD); broad perspectives (AS); and a balanced approach to change (CL, KP). Participating in such a community may

require a careful evaluation of personal gifts and talents, so that personal efforts can make the greatest possible contribution to the whole (AD).

Change efforts can also take a global or international focus, which is especially useful for bigger issues (PW), such as the actions of multinational corporations (DS). Personal and local actions will always be necessary (AD, KP), but it is important to pursue that larger agenda persistently (KP). Big changes are needed (AD), especially at the cultural level (MK), and environmentalists must remember that they are part of something bigger, even if they can't always see it (KP).

Some environmentalists believe that there is also a spiritual level of focus. They believe that spirituality, whether it be religious (SS) or nature focused (WL), can be a strong guide for staying true to purpose (WL, DR). Spirituality can also be a source of support (SS), especially in situations where science-oriented or economic philosophies fail to provide adequate understanding (HD, SS). Other approaches and strategies must also be used, but it is important to stay true to spirit throughout the process (AK, DR).

Regardless of approach or strategy, environmentalists can often agree that conservation is the primary goal, whether it be conservation of wildlife (PW), of meaningful places (SS), of the larger environment (DC, TG, CL, DR), or of natural resources (GH).

Key Values

In looking at the key values that go into an environmental value system, several general themes seem to emerge. The most prominent theme, which might be labeled "vision," contains values associated with awareness, connectedness, and questioning. Many environmentalists clearly value awareness (GH, AS), especially of the environment (DC, JH, DR, GS, JS, SS, KW) and our current reality (HD, GX, JH, MK, WL, TR, DS, GS, SS). Many also clearly value self-awareness (DC, AD, HD, GX, JH, AK, MK, DR, TR, GS, SS) within the environmental context (KW). Some environmentalists believe that this awareness may have to be grounded at the emotional level (JS, SS), while some endorse more spiritual foundations (HD, JH, GS, SS). Regardless, it seems that awareness is associated with broader, longer-term, and more balanced perspectives (DC, HD, GH, GX, JH, KP, AS).

Connectedness is another common value among environmentalists, especially connectedness to nature (TG, MK, CL, WL, KP, DR, GS, KW), Earth (DC, AK, DS), life (JH), and land (AD, TG, AK, CL, WL, SS). For some environmentalists, it is the historical or living connections to specific places that matter most (AD, TG,WL, SS). For some, it is the spiritual connections (TG, JH, WL, KP, SS). Connectedness to other people is also important (AK, MK, WL), through family (WL), personal relationships (DR), and working relationships (AS), along with connectedness to the diverse and conflicting aspects of self (DR,

GS, KW). For some environmentalists, connectedness even applies to diverse social issues, such as racism, sexism, and environmental harm (KW).

To facilitate awareness and connectedness, some environmentalists point out the value of questioning. Through investigation and learning, the treasures of truth, clarity, and wisdom may be found (AS). Thus, it is important to question our own perspectives (DC, GX, GS), environmental realities (DS), and what it means to live as a human being (HD). It is also important to search for personal meaning (GS), to develop a framework for conscious decision-making (TR), and to help others do the same (GH).

Another prominent theme that emerges is "involvement." Some environmentalists insist that personal effort and investment are a cornerstone for effective change at any level (AD, WL, KP, DR). Involvement may take the form of heroic efforts toward idealistic goals (AS), being present to take a stand (DC, SS), voicing alternative perspectives (GH, MK, DS), or simple changes in personal lifestyle (AK, GX). What matters is that our involvement be proactive (PW), intentional (TR, GS), persistent (HD), and meaningful (KW).

The third theme might be labeled "honor," because it includes values associated with respect, commitment, caring, and a sense of responsibility. Some environmentalists emphasize the importance of respecting all life (JH, AK, MK, WL, KP, TR), including human beings (AK, WL) and future generations (GX). We must respect people and the environment as more than a source of income (DC), and we must show this respect through our choices and actions (DC). With

people, this means being loyal, supportive (DC), and cooperative (AD). With nature, it means preservation (CL) and practicing holistic ethical behavior toward individual species and larger ecosystems (MK). With all parties, it means avoiding exploitation (AK) and domination (DC, TG).

Some environmentalists value a biocentric perspective, which means humbly respecting the equal and independent value of all life (DC, TG, CL, DR, GS, JS, PW). This perspective suggests that environmental and human communities are interconnected (GS) and practically synonymous (TG). All species deserve to survive, and humans must not thrive at the expense of others (JS, PW). Thus, a single standard of right living is seen as appropriate, one that is simple, need-driven, and minimally aggressive (JS). It is also appropriate for humans to actively protect life on Earth (TG, PW), so that we might create a positive legacy (TG, PW) that benefits all species (PW). For some environmentalists, biocentrism is the only logical perspective (PW).

Commitment is a value held by many environmentalists (HD, TR, JS), along with having a sense of purpose (AD, HD, WL, KP, DR). Both are very personal (TR), and both produce individual motivation (HD) and willingness to face conflict and tension (HD). Some environmentalists believe that commitment must be grounded in something greater that self, such as community (HD), direct access to nature (JS), or life itself (TR). Regardless, this value is about following our convictions and being empowered to do what is right (KP, PW), which may result in meaningful lives and enriched communities (DR). It is about discipline

and a clear focus on change (DR, GS, PW). It is about genuine intent to engage in experience (GS), work toward ideals (AS), and change our lifestyles (GX). It is about passion, tempered with insight (AS).

Some environmentalists value a sense of responsibility, because they see humans as stewards or guardians of the Earth (DS) and its resources (HD). This role limits the rights of humanity to abuse or dominate other forms of life (DS) or to waste natural resources (HD, DS), because we must make decisions as if everything matters (DS). Some environmentalists emphasize personal responsibility to the land, communities, and causes that sustain and affect our lives (AD, TG, AK). Others emphasize responsibility for our role in shaping history (SS) and for insuring a fulfilling future for our children (GX). For some environmentalists, obligation is a better word, because they believe we have a duty to do what is right, no matter what the cost (DR, JS, PW).

Caring is a value that encourages an emotional response. Some environmentalists believe that we must show gratitude to nature (CL) and embrace all life with love and compassion (DC, JH, MK, TR). They believe that, if we are going to establish a peaceful coexistence on Earth, we must care openly (AD, TR).

The final theme that seems to emerge from environmental value systems is "groundedness," which can be achieved through spirituality, lifestyle, or an emotional perspective. Some environmentalists believe that spirituality links us to other people (WL), the environment (TG, JH, WL, SS), and the source of all life

(JH). It may also provide understanding (SS), guidance (WL, SS), and support in maintaining our focus on change (DR, SS). For these reasons, some environmentalists believe it is important to stay true to spirit (DC, JH, AK) and to appreciate the sacredness of life (TR). We must also pursue spiritual connection and growth (HD, KP, GS), and have a little faith in our own potential (AD).

Lifestyle may also have a lot to do with groundedness. Some environmentalists believe that lifestyles should be balanced and sustainable (AD, GH, AK). We should live in harmony with the Earth (WL) by balancing our level of demand with the environmental impact of that demand (HD, GH, CL) and by staying aware, connected, and respectful (AD, AK). Some environmentalists specifically promote a simple lifestyle (KP, DR, JS), free of the burden of excessive possessions and consumption (GX, GS). Some promote an ecocentric lifestyle (WL, DR) that is sustainable and just for all species (AK, JS). Some environmentalists point out that a lifestyle should be meaningful (DR, GS) and generous (GX, DR). Lifestyles should also be enjoyable (DC).

Some environmentalists believe that groundedness can be further stimulated by maintaining an emotional perspective. They believe that emotion, not logic alone, connects us to nature (JS) and provides us with a foundation for action (JS). Therefore, we must not stifle our emotional experiences with practices and language that are biased toward reason and objectivity (KW). We must realize that people are more about heart than head (DC), and we must allow our love for the Earth to be expressed (JH, CL).

The Future

When looking into the future, many environmentalists believe that change may truly be possible (DC, AD, TG, GH, JH, AK, MK, CL, WL, KP, DR, PW). Some even think the future in bright (SS). However, some environmentalists believe that this change may come too late, after much more of the Earth has been devastated and the human elite have begun to feel the effects (GH, AS). If change does happen, some believe it will be a difficult, gradual process (JH, KP, TR) grounded in intentional choices (GX, AK, MK, PW). After all, individual change is much easier than changing an entire culture (DR, GS). If we do not find a way to change, some environmentalists fear that nature may eventually impose change upon us in a violent and regretful way (JS).

APPENDIX H

EXAMPLES OF GENERAL SUMMARY VALUES

To help clarify the ten values contained in the general summary, each value is presented below with a couple relevant quotes from the original interview transcripts. Attempts were made to use as many of the transcripts as possible, but clarity and appropriateness were are also prioritized.

Awareness

> Underneath, I am still that same person that has always loved life, but it has been a growing awareness of taking full responsibility for everything in my life. I can't ever achieve positive outcome through negative actions. (Julia Butterfly Hill)

> The only solution I can see is to educate people and make the issues clear to them. People need to realize that sometimes so-called "political correctness" and social justice concerns are going to run headlong into taking the kind of ecological stands that have to be taken, and people have to be made aware that sometimes there are going to be conflicts. (George Sessions)

Commitment

> It isn't important to dwell on whether you're going to win or lose. What's important is that you do the right thing and fight for the right cause. (Paul Watson)

> We have to solve the problem together, and so therefore, we have to keep working until we reach people who aren't thinking about it. (Cecelia Lanman)

Connectedness

> Everything is so interdependent and interconnected that everything matters. (Dinah Shelton)

> Where before you were seeing the stream, now you're seeing the light on the rocks and the eddies and the lichen and seventeen little ecosystems all next to each other. And there's a sense of peace and of connection, all the things people talk about. I was having those experiences, and then suddenly finding myself reassessing where I am in my life and making decision to do things differently. (Allen Kanner)

Consumption Problem

> It's an endless cycle of shopping displays and hype from one holiday to the next, designed to stimulate constant consumption. I wonder how many people stop and think about all the waste that is involved in this. (George Sessions)

> All the messages that we have are that to have good relationships in life requires consumption, which is just totally inconsistent with what, in fact, is true. To maintain your sense of purpose in that, it's a difficult thing. People find themselves wandering through malls, not even knowing why they're there. (Dick Roy)

Destruction Problem

> I think we've created a very effective and destructive economic system, . . a kind of institutionalized monster. (Allan Schnaiberg)

> Any environmental project that underestimates our role in destroying nature is flawed, but one that does not acknowledge the dynamics of non-human nature in shaping history is also flawed. (Stephen Scharper)

Education

> Some things that look like a straight road to happiness are, in fact, traps. What I'm trying to do is to point out these traps to people. (George Howard)

> I'm not trying to preach, but this is definitely something that a lot of my spiritual elders have told me. "Continue to do what you're doing," and that means educating people out there, not only our own native people, but also the non-native people as well, re-teaching them who they are and their relationship to the creative principles, which are sacred. A lot of people haven't been told these things. (Tom Goldtooth)

Experience

> When nature became active subject, when I began paying attention to what nature had to say, listening to it, I learned and grew. So, that's informed what I want to write about. These breakthroughs have always come from experiences with nature. Always. (Karen Warren)

> There are people who are not born compassionate, but instead have a transforming experience. Like when Saul became Paul, something happens and that's it! Their life is changed forever. (Tom Regan)

Involvement

> We have a philosophy that basically is based on biocentrism, no compromise, and action. That's it. You do those three things and you're an Earth First!er, if you want to say so. (Darryl Cherney)

> If there's something wrong, you should say that it was wrong. You should stand up for it. (Winona LaDuke)

Lifestyle

> We live in a time when, because our consumption patterns destroy cultures, take habitats, and so forth, we should take only for vital needs, and that is most easily understood in the practice of simplicity. (Dick Roy)

> What morality requires of us is that we live a decent life, use the resources for a decent life but not much more than that. And that's true for everyone. So, that limits the kind of aggression that we can justifiably direct against non-human nature. (Jim Sterba)

Respectfulness

> I believe that there's a tremendous overpopulation of people on this planet, and that is a very large part of the problems we face. It's our lifestyle, it's our lack of connection with the Earth, and it's our lack of respect for other species. All of that has to do with the way we live. (Karen Pickett)

> I try to have respect for whatever point people are at. At the same time, another important value of mine is to speak my truth, to have the strength of my own convictions, and to convey that to other people. (Marti Kheel)