

Reframing Environmental Messages to be Congruent with American Values

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Abstract

Prior research has explored the relationship between values, attitudes about environmental issues, and pro-environmental behavior. These studies have shown a consistent pattern of results — individuals who value self-transcendent life goals tend to care more about environmental problems, favor environmental protection over economic growth, and engage in more proenvironmental behavior. In contrast, individuals who value self-enhancing life goals tend to hold more egoistic concerns about environmental issues, tend to favor economic growth over environmental protection, and tend to engage in fewer environmental behaviors. Research on American values suggests that overall, people in the U.S. tend to hold strong self-enhancing values. These self-enhancing values have largely been considered incongruous with the values that lead to environmental concern and to environmental behavior. In this paper, we synthesize the past research on the relationship between values and environmental behavior. Lessons from the Biodiversity Project are used to illustrate efforts to create effective value-based environmental messages.

Keywords: *values, environmental attitudes, proenvironmental behavior, value-based messages*

Can Self-Interest Lead to Environmental Behavior?

The environmental movement has been framed as a conflict between conservation and development (Dunlap and Saad 2001). It is often presented a series of trade-offs: economic development *or* environmental protection; conve-

nience *or* sacrifice; trees *or* jobs. Yet, it is helpful to remember that an individual's lifestyle choices with respect to environmental issues are based on his or her values. What are my life goals? Do I want personal wealth, achievement, success, prestige, and recognition? Perhaps a meaningful life, wisdom, equality, or honesty? In this article, we examine the disconnect between traditional environmental appeals and American values. We begin with an overview of the psychological research on human values and the values that characterize American culture. We then examine the relationship between values, environmental attitudes, and environmental behavior. Finally, we examine the relevance of these findings to recent efforts by some environmental organizations, like the Biodiversity Project, to develop environmental appeals that are compatible with a range of values, including self interest.

Let's begin with an examination of human values. Values are important life goals — they are standards which serve as guiding principles in a person's life (Schwartz 1992; Schwartz and Bilsky 1987). Early research on values dates back more than 60 years, with seminal work by Rokeach (1968, 1971, 1973), among others. Values serve as an organizing structure, although there are often inconsistencies in a person's life goals. For example, Rokeach undertook considerable research highlighting the inconsistencies between two values, or between values and behavior. Since the groundbreaking studies by Rokeach, research on values has moved in several directions. The first is an assessment of the types of values found in different cultures. The second is an empirical approach aimed at identifying the dimensions along which values and cultures vary. Our focus in this article is on the values found in the United States, although many of these values are shared among other Western countries (e.g., Canada, Western Europe). While we use the term

Biodiversity as a topic that needs public awareness and action

In the mid-1990s, a group of concerned scientists, policy leaders, and grant makers, working under the auspices of the Consultative Group on Biological Diversity (CGBD), began to lay the groundwork for addressing a lack of awareness by the American public of the Earth's rapid loss of biological diversity. A series of focus groups, followed by a nationwide survey, confirmed that people cared a great deal about a healthy and functioning environment, but they had little notion of what the term biodiversity meant until it was explained. The Biodiversity Project was launched to assess public opinion and develop strategies for increasing public awareness and involvement.

The public opinion research showed widespread public concern about the loss of habitats and species, but also found that the concern was shallow, and easily eroded by other concerns, such as jobs, property rights, and convenience. It also noted that concern does not necessarily translate into action.

The Biodiversity Project then looked at the impact of values-based communications, and the ability of values to cut across the complexity of issues. We developed a set of messages and communications recommendations based on American values that closely linked to concerns about biodiversity and related issues. Using good research and modern communications theory, we have worked to build the communications capacity of America's primary biodiversity messengers, and to help them develop public messages that will connect with people on multiple levels.

Our research has shown that science may be for the experts, but ethics — choosing how to protect and safeguard life for future generations — can speak to personal conviction and conscience. Our new communications handbook, *Ethics for A Small Planet*, was designed to help biodiversity advocates develop greater skills and confidence in communicating through this framework.

To engage more people in shaping their future and the future of biodiversity, we must speak to both the heart and the mind. We need to frame messages that address people's values, concerns, and the very basic human need to respond. On the latter, as a movement we've been very good at illustrating the frightening depths of problems, and much less effective at identifying and promoting solutions. It isn't surprising that so many people think of environmentalists in terms of guilt and gloom. We don't need an informed and depressed public; we need an informed public that believes it can be part of effective solutions.

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"American" to describe people from the United States, we recognize that the term is often used more broadly.

American Values

Interestingly, the notion of a common set of values sharply contradicts a strongly held American value — the belief that every individual is unique. Therefore, devising a list of common values that generalize to "most" Americans may be construed as futile (Kohls 1984). Nevertheless, although we acknowledge that there is no definitive list of values that reliably generalizes to every American, we sum-

marize the main findings of the applied work by Kohls (1984) of the Washington International Center, and empirical research by Triandis and his colleagues (1990, 1996). Both sets of findings show evidence for a strong orientation toward self interest in the United States. At first glance, these values of self interest appear incongruous with proenvironmental concern and behavior. However, upon deeper analysis, common themes emerge that may inform the development of effective environmental appeals.

What are the common values that Americans live by? Kohls (1984), in his work introducing international visitors to American values for more than 30 years, devised a list of 13 commonly shared American values, which, compared to the values held by people of many other countries, are distinct. According to Kohls' writings on intercultural awareness, Americans view the following values, shown in Table 1, as positive. Interestingly, almost all of the values identified by

Table 1. American values (from Kohls 1984).

Personal control over the environment — Individuals in the U.S. believe that first and foremost, each individual should look out for his or her self interests by controlling nature and one's environment.

Change — In the U.S., change is associated with personal progress, improvement, and growth.

Time and its control — Time is one of the most valued resources in the U.S.; time is to be used wisely on productive tasks to improve one's personal achievement, status, and esteem.

Equality/egalitarianism — Americans believe that "all people are created equally," and tend to disregard hierarchies in class and power.

Individualism and privacy — Individuality and uniqueness are valued above group cohesion. Moreover, privacy is desirable and not associated with isolation and loneliness.

Self-help concept — Sacrifice and hard work are highly valued in the U.S. to attain personal success as exemplified in the "self-made man/woman" ideal.

Competition and free enterprise — Americans are driven by competition rather than cooperation to achieve one's personal best.

Future orientation — Americans believe that they are in control of their future and work hard to better it.

Action/work orientation — Americans view action as superior to inaction, and value hard work versus leisure because it produces greater personal success, material wealth, and status.

Informality — Americans are comparatively casual in dress and speech.

Directness, openness, and honesty — One's personal opinions and feelings are more valued than others, and should be expressed with confidence and assertiveness in order to gain the respect of others.

Practicality and efficiency — Americans are philosophically pragmatic and industrious.

Materialism/acquisitiveness — Material possessions are valued as outward products of hard work and success.

Kohls (1984) are related to personal gain, power, or achievement.

While many of the values listed in Table 1 seem reasonable at face value, limited information is provided by Kohls about the methodology used to identify these values, and it seems that they were the cumulative result of years of first-hand experience with international sojourners. Yet many of these same values also emerged from empirical research by Triandis and his colleagues. For example, Triandis, Bontempo, Leung, and Hui (1990) identified a set of widely held values (see Table 2). Using an innovative technique which measured how rapidly triads of individuals agreed that a specific value was important, values were ranked based on percentage of agreement and time required to reach agreement. Participants in the initial (1990) studies were students at the University of Illinois and at the University of Hong Kong. Students were tested in small groups, and responded to a list of 35 values drawn from previous studies. A higher percentage of agreement and faster agreement time (less than 60 seconds) was used to indicate a higher level of consensus and priority. In the U.S. sample, agreement was reached for 26 of the value statements, and 6 were shared by 100% of the triads. These 6 value statements are shown in Table 2.

Schwartz's Model of Human Values

The research summarized above provides a starting point for identifying some of the values that characterize American culture. However, these are cultural-level analyses and do not reflect individual level life goals. In addition, they are descriptive and don't provide a clear theoretical structure for the dimensions along which values vary. We turn now to an examination of a broad theoretical framework for understanding human values at the level of the individual.

Following the earlier work by Rokeach, Schwartz (1992, 1994a) has proposed an organizational structure for human values. The structure is argued to be universal and applicable

across cultures. At the broadest level in Schwartz's model, values are classified along two core dimensions: from self-transcendence to self-enhancement and from openness to change to conservatism. Each of these dimensions has an underlying set of motivational types, each comprised of specific life goals (Schwartz 1994b). *Self-transcendence* is comprised of 18 life goals, including such goals as being broad-minded, helpful, honest, forgiving, and loyal. Such goals transcend the individual, and instead promote "the interests of other persons and the natural world" (101). In contrast, *self-enhancement* is comprised of goals like social power, authority, wealth, success, ambition, and influence. Such goals "promote own interests regardless of others' interests" (101). The second value type orients around social change and tradition (Schwartz 1994b). *Openness* is comprised of life goals like creativity, curiosity, daring, living an exciting life, and pleasure. Such values emphasize a desire for new ideas, and new experiences. Finally, *conservatism* is comprised of life goals like devoutness, respect for tradition, humility, politeness, and honoring parents and elders. Such values focus squarely on social stability and tradition.

A sizeable amount of research has demonstrated the usefulness of Schwartz's organizational scheme for understanding values across many different cultures (Oishi, Schimmack, Diener and Suh 1998; Schwartz 1992, 1994a, 1994b; Spini 2003). Schwartz (1994b) has summarized data from 86 independent samples obtain in 38 countries, with approximately 44,000 participants (see also Schwartz 1994a). Measures of values were obtained by asking respondents to rate 56 values "as a guiding principle in my life" and analyses reduced these ratings to their core underlying dimensions. The 56-item measure has since been referred to as the Schwartz Values Measure.

By aggregating the specific values, Schwartz's data allows for comparisons across countries. Three findings from these analyses are particularly relevant, and in many ways they corroborate the work of Kohls and Triandis. First, the findings with respect to the United States show a high degree of endorsement for values within the self-enhancement dimension — particularly those that focus on mastery (e.g., successful, capable, independent, choosing own goals). The U.S. samples were 8th in these values among the 38 countries included in Schwartz's study. According to Schwartz (1994b), "This supports a view of the United States as having an entrepreneurial culture in which mastering and controlling the environment are central goals" (111). Second, the United States scored relatively low on values of self-transcendence (30th among the 38 samples). Some of the values within this dimension included social justice, responsible, and loyal. Finally, the U.S. samples were moderate in their level of conservatism (25th among the 38 sam-

Table 2. Top six american values, ranked in order of importance (from Triandis et al. 1990).

Rank	Value
1	To be well adjusted, in harmony with my environment, in good relationships with others
2	To be content, happy, feel enjoyment, joy, feel I have good fortune
3	To be able to take advantage of opportunities
4	To have intimacy, be close to others, know a lot about others who know a lot about me
5	To be able to properly balance action, enjoyment, reflection, behavior, feeling, and thought
6	To be self-reliant, independent, stand on my own two feet

ples) and high in their level of openness (11th among the 38). Interestingly, Schwartz notes that these data do not suggest that the United States is an individualist nation, but rather that the U.S. is focused instead on competition and mastery.

Before examining the relationship between values and environmental behaviors, three caveats are in order. First, the Schwartz model provides separate measures for each of the four value continua (self-transcendence, self-enhancement, openness, and conservatism). It is not the case that individuals (or collectives) are self-transcendent, but rather, they have varying degrees of self-transcendence. Second, the measures are not necessarily mutually exclusive ends of a continuum, and individuals can hold inconsistent values. That is, scoring high on self-transcendence does not necessitate a low score on self-enhancement. Third, there is often considerable variability in the distribution of responses from within a single country. While there may be a high degree of self-enhancement in the United States, we do not interpret this to mean that everyone in the U.S. endorses self-enhancing values. Because Schwartz's approach to measuring values is at the level of the individual, it allows for studies both within and across countries.

Values, Environmental Attitudes, and Behavior

Several recent lines of research have applied the concept of values to environmental attitudes and behavior (Eagly and Kulesa 1997). Some notable examples include:

- Studies of post-materialist values (Göksen et al. 2002; Kimmelmeier et al. 2002; Inglehart 1990; 1995)
- Utilitarian values (Papadakis 2000; Zinn and Pierce 2002),
- Ecocentric and anthropocentric environmental values (Thompson and Barton 1994; Eckersley 1992; Grendstad and Wollebaek 1998)
- Social value orientation (Joireman et al. 2001a; 2001b; Cameron et al. 1998),
- Cultural values (Leung and Rice 2002; Gouveia 2002)
- Schwartz's model of human values, and related models (Grunert and Juhl 1995; Schultz and Zelezny 1999; Stern et al. 1999; Nordlund and Garvill 2002)

Our focus here is on findings from studies using Schwartz's framework for human values. Given the conceptual and operational definitions provided by Schwartz, it seems evident that self-transcendent values are those that are most closely related to environmental concerns and action. Indeed, Schwartz has included "protecting the environment" and "unity with nature" as core items within this value dimension, and in his writing has emphasized that transcending self-interest involves more than a focus on the interest of other people. Self-transcendent values can also include animals, plants, and broadly "environment." The research indi-

cates that this is the case. Studies using broad measures of environmental concern (most notably the New Environmental Paradigm scale) have reported positive correlations with self-transcendence and negative correlations with self-enhancement (Schultz and Zelezny 1999; Stern et al. 1999). Similarly, studies of self-reported proenvironmental behavior have found positive correlations with self-transcendence (Karp 1996; Nordlund and Garvill 2002; Schultz and Zelezny 1998).

Findings with respect to values of openness and conservatism (also referred to as tradition in the literature) are less clear, but suggest a negative relationship between measures of general environmental concern and values of conservatism. Evidence for a negative relationship between environmental concern (measured with the NEP) and values of conservatism have been reported in several studies (Schultz and Zelezny 1999; Stern et al. 1999).

The findings from the studies on values, environmental attitudes, and environmental behaviors provide some insight into why people care about environmental issues. More recent research has moved beyond the broad question of whether or not people are concerned, and has begun to ask why they care. In our own past work, we began with a qualitative assessment of the types of concerns people have about environmental issues. Respondents were asked (in an open-ended question) to identify the environmental issue that concerned them the most (Schultz and Zelezny 1998; Schultz 2000). The participants in these studies were college students from countries in Central and South America, which although not representative of the countries as a whole, provide for a diversity of perspectives. Across respondents, this approach generated a long list of environmental issues, which tended to center primarily around pollution. We then asked respondents why they cared about this problem. These responses were coded into different value-based attitudes, which formed three clusters:

- *Egoistic* concerns focused on self, and self-oriented goals (e.g., health, quality of life, prosperity, convenience)
- *Social-altruistic* concerns focused on other people (e.g., children, family, community, humanity)
- *Biospheric* concerns focused on the well-being of living things (e.g., plants, animals, trees)

So, for example, many respondents listed water pollution as their most serious environmental problem. But when asked why they cared, different sets of value-based concerns emerged. Some people were concerned about water pollution because of the dangers to self ("I don't want to drink polluted water"). Others were concerned about their children or their communities ("I don't want my children to drink polluted water"). Finally, others were concerned about the effects

of polluted water on plants and animals (and in many cases, they mentioned specific animals). A similar tripartite classification scheme has been discussed by other authors (cf. Merchant 1992; Stern and Dietz 1994).

In subsequent research, we examined the relationship between egoistic, altruistic, and biospheric environmental concerns and Schwartz's value dimensions. Following the open-ended data analyses, we proceeded to create and test a closed-ended scale designed to measure the three value-based concerns. We collected numerous samples from the United States and internationally (both student samples and samples of the general public), we have examined the factor structure using both exploratory and confirmatory factor analytic techniques, and we have examined the reliability and validity of the items (Schultz and Zelezny 1999; Schultz 2001, 2002, in press). Our international samples included many Latin American countries (e.g., Mexico, Peru, Brazil), European countries (Czech Republic, Germany, Spain, England), and several other countries (New Zealand, India, Canada, and Russia). Two findings from these data are relevant to our discussion here. First, without exception, social-altruistic concerns are the most highly rated. That is, respondents tend to identify "children," "future generations," "people in my community," and "humanity" as the primary source of their concern for environmental problems. The priority of egoistic over biospheric concerns tends to vary considerably across sample, with U.S. samples (as well as Canadian, English, German, and Russian) scoring higher on egoistic concerns than biospheric; Latin American countries tend to show the reverse pattern, higher biospheric than egoistic concerns (Schultz 2002; Schultz et al. unpublished paper).

The second relevant finding from this research is the relationship between values and environmental concerns (Schultz 2001, 2002). As predicted, respondents who score higher on self-transcendent values tend to hold more biospheric concerns: self-transcendence correlated positively with biospheric concerns ($r=.29$) and negatively with egoistic concerns ($r=-.06$). In contrast, self-enhancement correlated positively with egoistic concerns ($r=.18$) and negatively with biospheric concerns ($r=-.28$). These findings have been found consistently across our diverse set of international samples, as well as within the United States. Similar results have been found for environmental behavior: self-transcendence is positively correlated with a range of different environmental actions, while the correlation between behavior and self-enhancement is zero or negative.

In spite of the evidence, we have argued that it is not the case that self-enhancing values are unrelated to environmental attitudes and behaviors, nor that self-enhancement leads to less environmental concern or action. Rather, we have argued that self-enhancement might lead to egoistic attitudes

and to rational-choice decision-making. That is, our prediction would be that a person who scores high on self-enhancement will care about environmental problems when the problem affects them directly, and he or she will be motivated to act when the rewards to self associated with the action outweigh the costs. However, it is important to note that there is currently little evidence to support an egoistic basis for environmental action. Although theoretically meaningful and hypothesized, no published study to date has demonstrated a positive link between self-enhancement values and environmental behavior. In fact, the evidence to date is quite the contrary — all available studies have reported a negative relationship (or no relationship) between values of self-enhancement and environmental behaviors (Amerigo and Gonzalez 2001; Schultz 2001; Corraliza and Berenguer 2000; Stern et al. 1995, 1999).

One article, published by Stern et al. (1993), has shown a positive relationship between egoistic environmental concerns and intentions to engage in political activism or pay higher taxes. The study measured awareness of harmful consequences to self, other people, and the biosphere, with respect to environmental problems. Results showed that awareness of harmful consequences to self (ACego) was positively related to willingness to take political action, pay higher income taxes, and pay for gasoline. We will return to the link between values, attitudes, and behaviors later in this paper.

American Values and Environmental Appeals

We have seen that the most predominant American values identified by Kohls and by Triandis and his colleagues fall squarely in the self-enhancing side of Schwartz's framework. As Americans, we value personal success, material wealth, personal accomplishment, and independence. Studies using Schwartz's values instrument have consistently found U.S. samples to score high on self-enhancement and openness, and lower on self-transcendence and conservatism (Schwartz 1994b). In our own work, we have found samples obtained in the U.S. to score particularly high on the values of achievement (one of the core elements of self-enhancement) and lower on universalism (one of the core elements of self-transcendence). In addition, U.S. samples tend to score high on hedonism and self-direction (values within the openness dimension), and lower on tradition and conformity (dimensions of conservatism).

So why do self-enhancement values correlate negatively with environmental behavior? One possible answer is the way in which environmental behaviors have been marketed. The environmental movement in the United States has largely been a backlash against the mainstream American lifestyle (materialism, pursuit of personal wealth, self-interest). To

date, the environmental movement in the United States has framed environmental problems and actions in a manner congruent with self-transcendent values. In part, these messages may have originally targeted people who endorsed the emerging new environmental paradigm discussed by Dunlap and Van Liere (1978). Protecting the environment is framed as requiring sacrifice — conservation requires using less, simpler living, giving up some of the comforts that are available, and incurring greater inconvenience — for the sake of a broader goal. Such messages would appeal to people who endorsed the new environmental paradigm — people who rejected the life goals of materialism, personal wealth, and success. However, for people who did not endorse this emerging perspective, such messages would not be persuasive.

Consistent with the appeals to self-transcendent values, much of the research on environmental behavior has adopted models of altruism to explain environmental behavior. Altruism is defined as a motivation to act in ways that benefit another, at some net cost to self (Jencks 1990). These are situations in which individuals act in ways that are contrary to their self interest (Mansbridge 1990). Environmental behaviors are typically viewed as altruistic (DeYoung 1990), and appeals to individuals to engage in environmentally significant behavior often appeal to an altruistic motive (Kaplan 2000). Environmental messages and advertisements are replete with references to “saving,” “helping,” or “protecting,” actions that are done for the benefit of another. In addition, calls for action are often framed as “things you can do,” all of which involve a personal cost. Given that environmental messages have appealed to self-transcendent values, adopting models of altruism to explain environmental behavior seems reasonable.

This framing offers a possible explanation for the relationship between values and environmental behaviors reported earlier. We noted that most of the existing research to date has found values of self-enhancement to correlate negatively with environmental behavior, while values of self-transcendence correlate positively. This pattern of relationships is consistent with a self-sacrifice framing of environmental messages. If we appeal to people to sacrifice for the environment, who is most likely to do it? It is the person with the broader set of values — the person who values life goals that transcend the self. In contrast, the person who values self-enhancement (which, we have argued is a large portion of the American public) will not be motivated by appeals to altruism. Given that many environmental behaviors (e.g., energy conservation, using public transportation, green buying) are framed as “doing with less,” it follows that individuals with self-enhancing values would not engage in these actions.

Creating Value-Based Messages

In the preceding section, we have argued that environmental messages have tended to appeal to altruism (which is more consistent with self-transcendent values), whereas the predominant American values tend to be self-enhancing. This seems a tough sell. While there is considerable evidence that people in the United States are aware of many environmental problems, that they express concern about these problems, and that they believe that something should be done, they are largely unwilling to give up personal convenience or comfort in order to address the problem.

For example, a 2001 nationwide public opinion poll conducted by the Gallup Organization asked a series of questions about environmental issues (Dunlap and Saad 2001). One of the items pertained to the seriousness of environmental problems. The environmental problems about which respondents were most worried included: pollution of drinking water, pollution of rivers, lakes, and reservoirs, contamination of soil and water by toxic waste, and contamination of soil and water by radioactivity from nuclear reactors. The items of least concern were extinction of plant and animal species, urban sprawl and loss of open spaces, the greenhouse effect or global warming, and acid rain. Also included in the 2001 Gallup survey was an item asking about reactions to a range of different environmental proposals. In essence, what should we do to address environmental problems? The top rated items included “Setting higher emissions and pollution standards for business and industry,” “spending more government money on developing solar and wind power,” and “more strongly enforced federal environmental regulations.” The lowest rated solution was “setting legal limits on the amount of energy that average consumers can use.”

Taken together, these two items illustrate the types of concerns commonly found in the United States, and the types of actions that people are willing to take. The environmental problems that attract the most interest and concern are those that can directly affect the individual or people to whom the individual has a direct connection — pollution and contamination of water and soil. Those problems that are the least concerning are the broadest problems with the least direct personal effects, like acid rain and global warming. When it comes to action, the public generally thinks that something should be done. Indeed, 27% stated that “drastic action” was needed, and another 56% stated that “some additional actions” were needed. But when pressed about specific actions, the public believes that the changes should be made by government and business, and not the average citizen (me). Such a pattern of responses seems consistent with the general finding regarding self-enhancing values outlined above.

So how do we motivate individuals with self-enhancing values? Kaplan (2000) has argued that it is possible to frame environmental appeals in such a way that they are not inconsistent with self-interest. "A central failing of the altruistic position is that it attempts to put aside the issue of gain, of self interest, in human behavior" (496). Kaplan provides three suggestions for framing environmental messages: 1) work within the motivations and inclinations characteristic of this species, 2) treat the human cognitive capacity as a resource, and 3) engage motivations other than altruism (he proposes motivations for competence, being needed, making a difference, and forging a better life).

Effective examples of messages that are congruous with American values can be found in the work of the Biodiversity Project. Founded in 1995, the Biodiversity Project develops, tests, and implements audience-oriented messages (see sidebar). One of their primary activities is the creation of messages that promote concern and action related to biodiversity issues. "Our task is to engage and empower people to act by making the connection between biodiversity and people's daily lives and basic values" (2003). Over the past eight years, the biodiversity project has researched and developed a number of value-based environmental messages. Following are several examples of these communications. More examples, along with guidelines and suggestions for developing other messages, can be found on their website.

Initiative to Buy Critical Lands. The goal of this campaign was the protection of endangered species, threatened habitat, and open space. The target audience was the voting public in California. In their background research, the project staff identified several reasons why people would care about this issue, along with several core values related to issues of land preservation. Foremost among the values were "our children's future" and quality of life (for our family and future generations). In Schwartz's values scheme, we would label these as a combination of self-enhancement and conservatism. In line with these values, a set of overarching messages, images, and anecdotes was created. "If we protect these hills, fields and open spaces, our children will have room to run, freedom to explore... Our California will always have promise." A variation on the message was "Save California's quality of life for our children and our families, for the future. Unless we protect natural lands, open vistas and recreation areas, we will forever lose our California heritage, healthy communities, and property values."

Protection of Native Forests in the Southeast. The target audience for this outreach program was outdoorsmen. Key values that were identified among this group included tradition, family, right to use public lands, and patriotism. Again,

we would label these values as a combination of conservatism and self-enhancement. Consistent with these values, the overarching message developed for the outreach program was: "Everyday wildlife habitat is being destroyed due to clear cutting and development in our forests. We all know there's more critters (game) in a native forest. It's our responsibility to treat these forests with respect, just like we respect our rifles/rods."

Changing Attitudes Toward Housing. The target audience for this program was property owners in the mid-Atlantic region. The goal of the outreach was to promote density as an ideal for communities, and less car-dependent development. The core values that were identified with this issue included a safe home for children, community, security, and ownership. The overarching message was: "You can choose a way of life that gives you freedom to enjoy nature without driving, the security to raise your kids in a safe, family-friendly community, the chance to spend more time with your family, and small town values."

Some Possible Consequences of Reframing Environmental Messages

The key element across these, and the many other messages developed by the Biodiversity Project, is the link between values and the issue. Rather than appealing to a self-sacrificing value (i.e., self-transcendence), the messages appeal to self-enhancing values along with values of conservatism. For example, living in smaller, higher density housing can foster a sense of community, require less driving, and cost less. Protecting native forests can lead to better hunting, fishing, and outdoor recreation. It is important to protect critical habitat areas so that our children can enjoy them. It's interesting to note that conservatism was targeted as a key value associated with environmental actions. This is consistent with the research showing that concern for environmental problems tends to focus on the harmful consequences that could affect future generations. Yet this is apparently inconsistent with the research findings showing a *negative* relationship between values of conservatism and environmental attitudes and behavior. Furthermore, it is inconsistent with research using Schwartz's model which shows that people in the U.S. tend to value openness more than conservatism.

Despite the intuitive promise of such value-based environmental appeals, there is little research that has directly examined their effectiveness. Does framing the message in a manner consistent with self-enhancing values (or egoistic concerns) lead to greater caring and action? And if so, for whom? It might be the case that a self-enhancing message would appeal to people with egoistic concerns but not to those people with altruistic or biospheric concerns. That is,

it would produce a reverse pattern of correlations from those typically found in studies of values and environmental behavior. Consider the case of residential energy conservation — using less electricity in one's home means sacrifice. Using the air conditioning (or heat) less often makes the home temperature less comfortable; using the dishwasher less means more labor; taking shorter showers is less satisfying. A typical conservation message might appeal to “social responsibility” or “environmental protection.” Under these conditions, we would expect to find a negative relationship between self-enhancing values and conservation behavior.

However, what if the appeal was changed to emphasize personal gain — using less energy saves money? For the sake of argument, let's say a lot of money. While we believe that such a situation would yield a higher rate of conservation behavior in general, we would not predict any relationship between values and behavior. Instead, we would predict that people high in self-transcendence would continue to conserve, and in addition, people high in self-enhancement would now also conserve. This prediction is based on two arguments. First, the broader life goals that motivated conservation among people high in self-transcendence still exist; we have simply engaged another potential motive by decreasing the cost/benefit ratio.

A second reason for our prediction is that self-transcendence values (and the corresponding biospheric environmental concerns) do not mean lack of concern for self. In our work on environmental concern, we have argued that egoistic, social-altruistic, and biospheric concerns are *progressively inclusive* (Schultz 2001, 2002). A person who is concerned for the harmful consequences of environmental damage to all living organisms also cares for the effects on people, future generations, and even self. People are part of the biosphere, and the individual is a person. Thus, an appeal to self interest is an appeal to the lowest common denominator — it will motivate action among people with egoistic, altruistic, and biospheric concerns.

In our more recent work, we have elaborated on the construct of *inclusion* (Schultz 2002, Schultz et al. in press). Following work by Susan Opatow and her colleagues (1994, 2000) regarding a person's scope of justice, work in social psychology on close relationships (Aron et al. 1991, 1992, 1999), and research on culture and self construal (Markus 1977; Markus and Kitayama 1991), we have suggested that egoistic, social-altruistic, and biospheric concerns reflect the extent to which an individual includes others within their concept of self. This argument also applies to values, wherein self-enhancement reflects a narrow construal of self, and self-transcendence reflects a broader, more inclusive, construal of self. A narrowly defined self leads to life goals that focus on personal achievements and

skills, and when applied to the study of environmental issues, to egoistic concerns. In contrast, a person with a broad, inclusive notion of self will tend to hold values that involve others and transcendent of self gain; and when applied to environmental issues, to biospheric concerns. In essence, we do not believe that framing a message in a manner consistent with self-enhancing values will lead to less action by people with self-transcendent values.

There is another aspect to the reframing of environmental appeals that we need to consider, and that is *can* environmental actions be reframed? We have presented a number of examples from the Biodiversity Project of messages that appeal to pro-self or conservative values, but are these persuasive? It may be that some environmental issues are fundamentally about self-sacrifice. The tragedy of the commons, and more broadly social dilemmas, suggest that environmental problems occur when the interests of the individual conflicts with the interests of the group (Dawes 1980; Dawes and Messick 2000; Hardin 1968; Samuelson 1990). Driving a car to work every day benefits the individual in that it takes less time, but it is detrimental to the group in the form of air pollution, resource consumption, traffic congestion, and suburban sprawl. Asking the person to take public transportation means asking him or her to sacrifice personal convenience for the sake of the group. While we can appeal to feelings of competence, being needed, belonging, or a better life, many environmental behaviors still require sacrifice. By using a fan instead of the air conditioner on a hot summer day, I can feel a sense of personal satisfaction, but it still means being uncomfortable. In these instances, it would seem that reframing the message would have little effect, and the messages would be unlikely to convince many people with self-enhancing values to engage in the action. The question that remains to be tested empirically is whether reframing the issue away from self-sacrifice will lead to an increase in action, and if so, for whom?

The reframing of the appeal is only one of several approaches that can make use of the research findings with respect to values, environmental concern, and pro-environmental behavior. A second approach involves structural changes — if the behavior cannot be reframed in a manner consistent with self-interest, then an alternative approach is to alter the cost/benefit ratio of the behavior (Joireman et al. 2001a). If we want people to take public transportation instead of driving, creating a system that is faster and less expensive than driving will produce the desired result. Rather than building more roads, which promotes automobile use, build a more efficient public transportation system. If we want to reduce suburban sprawl, create high quality, safe communities with access to parks and natural spaces in urban areas. If reframing the behavior is ineffective, then altering

the pay-off ratio to benefit the individual offers a structural solution (cf. Norton 1991).

A third approach involves changing the values. The approach we have outlined in this paper — tailoring the message to solicit the broadest appeal — might be interpreted as pandering. Indeed, many staunch environmentalists would argue that rather than change the message, we need to change the values to be more self-transcendent and less self-enhancing. Ray and Anderson (2000) have suggested that a substantial portion of the American public (they estimate 50 million people) have rejected the traditional self-enhancing values and adopted alternative, more environmentally sound and self-transcendent lifestyles. In the U.S., self-enhancing values have led to overuse of natural resources, rampant pollution, a reliance on technology to solve our problems, and in general a lifestyle that is not sustainable (Cock 2002). Changing values provides a possible path to long-term changes in behavior and lifestyle (cf. Gouveia 2002). Indeed, changing values may be the *only* path to achieving long-term sustainable lifestyles.

We don't disagree with this argument — it is pandering. However, it is also pragmatic, and in our opinion, more likely to succeed (at least in the short term). While we agree that changing values could result in long-term changes in a variety of environmentally-related behaviors, we are unwilling to impose these values onto others. Environmental issues are relevant to self-enhancing values, and a well-crafted environmental message can help to make this relevance apparent. Reframing the message is more about highlighting the importance of environmental behaviors than it is about persuading people to act for the “right” reasons. Given the current focus of environmental messages on specific actions (recycling, energy conservation, proper disposal of household hazardous waste, support for a ballot initiative) rather than lifestyle, we believe that making use of research findings regarding American values can increase the effectiveness of these appeals. While we agree that changing values may be the only effective long-term solution, this change will be gradual and brought about by experiences that confront the veracity of our existing beliefs and values. To be clear, we are not advocating messages that appeal only to self-enhancing values, but rather the use of a diversity of messages that will appeal to people with a range of different value orientations.

In conclusion, we believe that understanding the link between values, environmental attitudes, and behaviors, is an important element in developing an effective environmental message. If we want people to care, and to be motivated to act, then creating the message in such a way that it resonates with the values of the recipient will increase its potency. One group of people who have been unmotivated by prior environmental appeals are those with self-enhancing values, and

we have suggested that a sizeable percentage of the U.S. population holds these values. In order to increase the overall efficacy of environmental messages, we suggest framing the appeal in a way that is consistent with self-enhancing values. Examples of such messages created by the Biodiversity Project are illustrative of such an approach. However, it remains to be seen whether such a reframing is credible, and whether it will lead to action on the part of people with self-enhancing values.

Endnotes

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