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Abstract

Many recent environmental politics and environmental behavior studies have attempted to explain the variation in individuals' environmental attitudes by means of their personal values. This piece enters into the recent debate that has developed around the dichotomous ideologies of cosmopolitanism and patriotism and their relationship to environmentalism, arguing that individuals with cosmopolitan values are more likely to exhibit concern for environmental issues than those with patriotic values. Through an analysis of regression models for seven Western industrialized nations, this study confirms a positive correlation between cosmopolitan values and environmentalism. The explanatory power of cosmopolitanism was greater than that of social demographic variables and political ideology, as well two other popularly examined ideologies, postmaterialism and egalitarianism.

THE INFLUENCE OF COSMOPOLITAN VALUES ON ENVIRONMENTAL ATTITUDES: AN INTERNATIONAL COMPARISON

Lauren Contorno

***Abstract:** Many recent environmental politics and environmental behavior studies have attempted to explain the variation in individuals' environmental attitudes by means of their personal values. This piece enters into the recent debate that has developed around the dichotomous ideologies of cosmopolitanism and patriotism and their relationship to environmentalism, arguing that individuals with cosmopolitan values are more likely to exhibit concern for environmental issues than those with patriotic values. Through an analysis of regression models for seven Western industrialized nations, this study confirms a positive correlation between cosmopolitan values and environmentalism. The explanatory power of cosmopolitanism was greater than that of social demographic variables and political ideology, as well two other popularly examined ideologies, postmaterialism and egalitarianism.*

INTRODUCTION

One of the central questions guiding recent research in environmental politics is: "What factors help shape an individual's opinions on environmental issues?" Studies concerning environmental public opinion have attempted to explain the variance in individuals' environmental attitudes from several different approaches. Though many have explored the influence of various social demographic variables, as well as political ideology and party identification, results have varied and none of these variables have had sufficient explanatory power to adequately explain the variance in individuals' environmental attitudes. Consequently, recent research has shifted its focus to exploring how personal values and cultural worldviews may influence environmental consciousness.

In this new line of research, social scientists have frequently studied the influence of egalitarian and postmaterialist values. While these values are logical choices to explore in explaining environmentalism, results from such studies have been equivocal or have lacked strong explanatory power. Therefore, this research will introduce a new explanatory personal value by entering the recent debate that has emerged concerning the question of whether a cosmopolitan conception of citizenship leads to a higher degree of environmental concern than a patriotic conception of citizenship. Cosmopolitanism may be defined as an ideology which holds that one's primary allegiance should be to humanity as a whole and not necessarily to those with whom one shares a national identity. A cosmopolitan favors intensity of needs over

proximity of needs. Conversely, patriotism may be defined as an ideology which holds that one's primary allegiance should be to one's country and its citizens' needs. A patriot favors proximity of needs over intensity. While patriots primarily see themselves as citizens of their own locality/nation, cosmopolitans see themselves (in addition to their national citizenship) as citizens of the world.¹ Though many studies have explored the influence of egalitarian and postmaterialist values on environmental consciousness, very few have empirically researched the possible influence of cosmopolitan values, and none have directly tested all three of these value theories against each other. This research takes on this task. Specifically, this study will attempt to answer the following questions: Do individuals with cosmopolitan values or those with patriotic values exhibit more concern for environmental degradation? Do cosmopolitan or patriotic values have more explanatory power than egalitarian or postmaterialist values? Does the influence of these values differ across nations? Because environmental degradation is an international phenomenon with transnational externalities, I argue that individuals with cosmopolitan values are likely to show a greater concern for environmental issues than those with patriotic values.

LITERATURE REVIEW

Defining Values and Environmentalism

Several recent studies have examined the relationship between values and environmental concern, and the correlation between the two seems well established.² Values may be defined as "relatively stable principles that help us make decisions when our preferences are in conflict and thus convey some sense of what we consider good."³ The values-beliefs-norms (VBN) theory, as it relates to environmentalism, states that "values influence our worldview about the environment (general beliefs), which in turn influences our beliefs about the consequences of environmental change on things we value, which in turn influence our perceptions of our ability to reduce threats to things we value."⁴ Previous research addressing the relationship between values and environmentalism has included, but is not limited to, the

¹ Nussbaum 1996.

² Dietz, Fitzgerald and Shwom 2005.

³ Ibid, 335.

⁴ Ibid, 356.

following value clusters: self-interest vs. altruism, traditionalism vs. openness to change, postmaterialism vs. materialism, and egalitarianism vs. individualism.⁵

While “environmental concern” or “environmental consciousness” can be defined in a variety of ways, for the purposes of this research, environmental concern will be indicated not only by an individual’s assertion that he or she is concerned about environmental degradation, but also by his or her willingness to sacrifice economic income (by means of higher taxes, etc.) in order to eradicate environmental problems.

Postmaterialist vs. Materialist Values

The theorized relationship between postmaterialist values and environmentalism stems primarily from Ronald Inglehart’s sociological theory of postmaterialism. Inglehart posited that the industrialization of a nation leads its citizens to undergo a fundamental value shift, resulting in several attitudinal changes, including acquisition of pro-environmental attitudes. This value shift refers to the transition from a materialist to a postmaterialist mindset. While materialist values emphasize economic growth and consumption, postmaterialist values emphasize quality of life (e.g. a clean and healthy environment). Inglehart also believed mass support for environmental protection would be found in countries with severe, objective environmental problems, even in the absence of postmaterialist values. Following this reasoning, Inglehart hypothesized that the greatest support for environmental protection could be found in countries that have relatively severe environmental problems and in countries whose populace holds postmaterialist values. His study using data from the World Values Survey confirmed this hypothesis.⁶ Alexander Grob’s study of Swiss citizens concluded that out of all of the variables tested (including environmental awareness, perceived control over environmental issues, and emotions), the most important predictors of environmental behaviors were open/creative thinking and postmaterialistic value orientations, also confirming Inglehart’s hypothesis.⁷

However, many social scientists have successfully challenged this theory, disproving the suspected correlation between postmaterialist values and environmental concern. Brechin and Kempton (1994) found no statistically significant difference in perceived seriousness of

⁵ Carlisle and Smith 2005; Ellis and Thompson 1997; Franzen 2003; Grob 1995.

⁶ Inglehart 1995.

⁷ Grob 1995.

environmental problems between low income and industrialized countries, suggesting that environmental concern is a global phenomenon, independent of postmaterialist values.⁸ Studies by Grendstad and Selle and Kemmelmeir *et al.* also found no relationship between postmaterialism and environmentalism, casting doubt on whether there is a true correlation between postmaterialist values and environmental concern.⁹

As one can see, overall, cross-national research has found inconclusive evidence for a link between postmaterialist values and environmental concern. This opens the door to new research exploring alternative values which may influence environmentalism, as well as research that directly compares competing value theories.

Egalitarian vs. Individualistic Values

The literature concerning egalitarian values and environmentalism is less extensive than that concerning the postmaterialism vs. materialism debate, yet significant research contributions have been made. Mary Douglas and Aaron Wildavsky's cultural theory divides cultures into four types of societies: egalitarian, individualist, hierarchical, and fatalist. Egalitarian societies are "communities in which members interact with one another frequently, and treat one another with equality, [and] have egalitarian worldviews."¹⁰ Individualist societies, by contrast "are characterized by infrequent, but relatively equal, interactions. Individualists believe that people should be on their own and not rely on others for material assistance."¹¹ Egalitarians see competition as harmful to society and favor measures which seek to give citizens equal opportunities to succeed, whereas individualists favor competition and inequalities as means of incentives for success.

According to Douglas and Wildavsky, these two groups have characteristic responses to hazards and threats. "Individualists tend to see lower risks than others see, and individualists are far more likely than others to accept risks in exchange for economic returns. Egalitarians are especially concerned with risks caused by what they see as inequalitarian institutions –

⁸ Dietz, Fitzgerald and Shwom 2005 (citing Brechin and Kempton 1994).

⁹ Dietz, Fitzgerald and Shwom 2005.

¹⁰ Carlisle and Smith, 529.

¹¹ *Ibid.*

big government and large corporations. They are also more likely to favour policies that reduce risks at the expense of economic growth.”¹² According to the tenets of this theory, egalitarians should be more likely to show concern for the environment, and studies by Ellis and Thompson, Grendstad and Selle, and Marris *et al.* have confirmed this hypothesis.¹³ Most pertinent to this research is Carlisle and Smith’s study which directly tested the postmaterialist and egalitarian values hypotheses against each other and found that among a representative sample of Californians, individualism and egalitarianism performed better than party identification, political ideology, and postmaterialism as predictors of environmental concern.¹⁴ The correlations between egalitarianism and individualism were in the expected directions.

Unlike the postmaterialism theory, the correlation between egalitarian values and environmental concern seems to be well established. However, the strength of the correlation between egalitarian values and environmentalism remains unclear, for in previous studies, the relative strength of the relationship has differed greatly between samples. This uncertainty warrants the need for additional research concerning the relationship between personal values and environmentalism.

Cosmopolitan vs. Patriotic Values

While egalitarian and postmaterialist values are logical choices to explore in explaining eco-consciousness, cosmopolitanism is an ideology that warrants more analysis concerning its possible influence on environmental attitudes. Because externalities of environmental degradation, e.g. air pollution, often cannot be internalized, environmental problems are global issues which require a global consciousness and multilateral effort in order to eradicate. Therefore, some scholars argue that a global conception of citizenship is required in order to foster a sense of obligation to environmental issues. “A framework of citizenship based on an evolution of rights (civil to political to social) within a national context provides a categorization and typology that are too limited for contemporary realities.”¹⁵ As Gabrielson notes, “The transnational character of environmental degradation, globalization, the logic of neo-liberalism, and widespread migration are some of the most prominent factors altering the contexts of

¹² Ibid, 530.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Gabrielson 2008, 437 (quoting Gilbert and Phillips 2003).

contemporary citizenship.”¹⁶ According to this logic, it seems likely that those individuals who already see themselves as global citizens and favor intensity of need over proximity (cosmopolitans) will show greater concern for environmental issues than those whose primary allegiance is to national issues (patriots).

To elaborate, the argument in favor of a cosmopolitan conception of citizenship as a means to environmentalism is as follows: citizens who view themselves as “citizens of the world” rather than only citizens of their own nation-state are more likely to show concern for the environment, for not only do they feel an obligation to preserve the integrity of their own local environment, but also to preserve the integrity of ecosystems around the world for their fellow global citizens. While patriots are primarily concerned about citizens of their own nation, cosmopolitans have equally as strong moral obligations to citizens around the world. Therefore, while a cosmopolitan’s own immediate environment may not be suffering the consequences of climate change and environmental degradation, a cosmopolitan will feel obligated to take steps to prevent environmental damage due to its current detrimental effects in other regions around the world. For example, although there may not be a severe shortage of freshwater in the United States, cosmopolitan U.S. citizens may take steps to conserve water because they know that freshwater depletion is an environmental issue affecting citizens in other nations. Patriots may not have this same consciousness, for they are primarily concerned about issues affecting their own nation. While there is a growing body of literature promoting the idea of cosmopolitan citizenship as a means to gain support for the global environmental movement, there have been very few studies that have attempted to empirically establish a correlation between cosmopolitan values and environmental concern.

Andrew Dobson advocates for a “post-cosmopolitan” conception of citizenship in his book *Citizenship and the Environment* (2003). Post-cosmopolitan citizenship entails a transnational conception of citizenship in which political obligation stems from “the material production and reproduction of daily life in an unequal and asymmetrically globalizing world.”¹⁷ This non-contractual theory of obligation is based upon the grounds that harm reaches “beyond national boundaries and both backwards and forwards in time,” creating a duty which extends beyond the nation-state.¹⁸ Dobson advocates for post-cosmopolitan

¹⁶ Gabrielson 2008, 437.

¹⁷ Ibid, 439 (quoting Dobson).

¹⁸ Ibid.

citizenship due to the nature of climate change and its global consequences. "Some people contribute more to this phenomenon than others, and...some people suffer more from the unpredictability this brings in its train than others."¹⁹ From a cosmopolitan worldview, this situation is a violation of justice and elicits a sense of moral duty to fellow citizens around the globe who are suffering as a result of environmental degradation.²⁰ "To the extent that people in developed nations draw more than their fair share of the Earth's biological productivity, they owe a duty of equity to individuals across the globe whose share of the planet's productivity is diminished. To the extent that people in developed nations do not bear the external costs of their consumption practices, they owe a duty of compensation to individuals across the globe on whom those costs are imposed."²¹ Similarly, Aaron Maltais recognizes environmental degradation as an international collective action problem and argues that the current political conception of justice has cosmopolitan implications. Maltais advocates for new global institutional arrangements to address anthropogenic climate change.²²

In contrast to the idea of cosmopolitanism evoking environmentalism, others have argued that patriotic values would serve as an effective basis for the environmental movement. Phillip Cafaro argues that patriotism is a virtue, and "environmentalism is one of its most important manifestations."²³ Cafaro defines patriotism as "love, devotion, and a strong differential concern for one's own locality, state, region, or country, shown both in thought and action."²⁴ Instead of advocating for a cosmopolitan conception of citizenship, Cafaro charges that it is an attachment to one's own nation that leads to environmental concern. He bolsters his argument by noting how patriotism has been an important influence in several environmental conservation movements throughout U.S. history. "In the campaigns to create Yellowstone, Yosemite, Grand Canyon, and other national parks in the nineteenth and early twentieth centuries, patriotic rhetoric often figured prominently."²⁵ Convincingly, Cafaro argues that "environmentalism can only be a life-affirming and personally enriching activity if it involves connection to the land and communities around you."²⁶ In other words, it may be difficult for

¹⁹ Trachtenberg 2010, 342 (quoting Dobson).

²⁰ Ibid.

²¹ Ibid.

²² Maltais 2008.

²³ Cafaro 2010, 185.

²⁴ Ibid, 186.

²⁵ Ibid, 193.

²⁶ Ibid, 194.

the everyday citizen to form an attachment and moral obligation to ecosystems around the world, because a connection with landscapes often only materializes when one has meaningful, first-hand interactions with it. His overarching defense for patriotic values' place in the environmental movement is summarized when he says "dividing the world up into smaller units called nations is one way to facilitate real, effective citizenship in an immense world of 6.7 billion people. In the same way, knowledge and devotion to particular landscapes makes environmentalism possible."²⁷

Very few studies have attempted to definitively reconcile the debate between these two competing conceptions of green citizenship and determine whether cosmopolitan or patriotic values lead to a greater concern for environmental degradation. One project conducted in the early nineties by Swenson and Wells found a positive correlation between cosmopolitan values and pro-environmental behavior (.19 in 1992 and .25 in 1993). Work by Anderson and Cunningham (1992) and Anderson, Henion, and Cox (1974) also found positive relationships between these two variables.²⁸ However, it is debatable whether the index used in the study by Swenson and Wells truly measured cosmopolitanism effectively. Questions that were used to operationalize cosmopolitanism included "I am interested in the cultures of other countries" and "I have taken an airplane trip for personal reasons" and "I stayed at an upper-priced hotel on a personal trip."²⁹ Certainly one could be *interested* in the culture of other countries or even travel to them without extending a *moral obligation* to the citizens in those countries, and it is unclear how hotel choice can be a defensible measure of cosmopolitanism at all. In order to accurately capture and measure the concept of cosmopolitanism, one must survey an individual with questions that are directly related to the core of cosmopolitanism--having a primary allegiance to humanity as a whole and favoring intensity of need over proximity. Given this gap in empirical research, further research into the possible correlation between cosmopolitan values and environmental concern is clearly warranted; my research attempts to bridge this gap.

THEORY

While the arguments advanced for both the cosmopolitan and patriotic conceptions of citizenship have strong support, I predict that individuals with cosmopolitan values will show a

²⁷ Ibid, 201.

²⁸ Swenson and Wells 1997.

²⁹ Ibid, 104-105.

greater level of concern for environmental issues than those with patriotic values. Though both sentiments could lead to environmental concern, patriotism may only lead an individual to be eco-conscious if his or her immediate environment is currently showing signs of deterioration. Because some countries are not yet experiencing tangible effects of environmental degradation and climate change, patriotic sentiments in those countries would not necessarily lead to environmentalism. However, if one were a cosmopolitan, one would not need to witness environmental degradation in one's immediate surroundings in order to form pro-environmental attitudes, for the advanced environmental damage in other countries would illicit an obligation to be concerned about environmental issues. Given the nature of environmental problems today, where externalities cannot be internalized, it seems that a global conception of citizenship is needed in order for one to fully appreciate the effects of anthropogenic environmental damage and become concerned about environmental issues. Because environmental values are most likely somewhat independent of other cultural and personal values, I predict that the relationship between cosmopolitan values and environmental concern will be weaker in countries with a relatively greater percentage of eco-conscious citizens. In other words, some countries may simply have a more environmentally-oriented culture, resulting in a greater aggregate concern for environmental issues, independent of other cultural and personal values. In less environmentally-oriented countries, however, personal values (such as cosmopolitanism) may be a necessary condition for eco-consciousness. For example, given this reasoning, one would expect cosmopolitanism to have a stronger relationship with environmentalism in the United States, where a relatively smaller percentage of the overall population shows concern for environmental issues, as opposed to Canada, where a relatively high percentage of citizens are eco-conscious.³⁰

DESIGN AND STRATEGY

Hypotheses

Hypothesis 1: Individuals with cosmopolitan values will exhibit greater concern for environmental issues than those with patriotic values.

³⁰ This statement concerning the United States and Canada is based off of general trends in responses to survey questions concerning the environment on the 2005 World Values Survey. For example, when this description of a person was posed on the 2005 World Values Survey: "Looking after the environment is important to this person; to care for nature," 11.1% of Americans responded that this person was "very much like me," while 31.6% of Canadians answered "very much like me."

Hypothesis 2: The relationship between cosmopolitan values and environmental concern will be stronger in countries that have lower overall public concern for environmental issues than in countries that have a relatively higher amount of overall concern for environmental issues.

Research Design

The research method I employ to test these hypotheses is a large-N statistical analysis comparing survey studies from seven Western, industrialized nations: the United States, Canada, Germany, Sweden, Finland, Spain, and Switzerland. All data are drawn from the 2005 World Values Survey (WVS). The unit of analysis is the individual respondents from each of these countries. The study is limited to Western industrialized nations so as to control for large variations in other cultural values that would come into play in a comparison between nations from all over the world. These particular Western nations were chosen so as to represent a variety of combinations of the two main concepts being examined in this study. In general, citizens in the United States and Germany have a relatively low amount of environmental concern as a whole compared to other countries in this study, based on questions concerning the environment from the WVS. In general, the United States and Germany also have a lower percentage of citizens who exhibit cosmopolitan values, based on WVS questions. By contrast, Sweden and Canada both have a relatively large percentage of citizens who exhibit environmental concern as well as cosmopolitan attitudes. The other countries included in this study have combinations of these values that lie somewhere in between these two extremes.³¹

Operationalizing the Independent Variables

The primary variable being examined in this study is the dichotomy of cosmopolitan and patriotic values. In order to operationalize this ideological dichotomy, six questions were selected from the WVS and combined to create an index, measuring whether an individual holds more cosmopolitan or patriotic values. Most questions had multiple responses ranging from “strongly agree” to “strongly disagree”, and each response was coded numerically. Therefore, all questions were manipulated to have equal weight in the index and so that numerically higher responses correspond to a cosmopolitan attitude, while lower responses correspond with a patriotic attitude. Based off this index, an individual’s aggregate score for

³¹ These statements are based off of general trends in responses to survey questions concerning the environment and cosmopolitanism on the 2005 World Values Survey. They do not hold true for every survey question relating to these subjects.

cosmopolitanism may range from 6-360, with lower scores indicating patriotic values and higher scores indicating cosmopolitan values. The index questions are listed in the appendix.

In addition to cosmopolitan and patriotic values, egalitarian and postmaterialist values are also included as independent variables, so as to examine whether cosmopolitan or patriotic values have greater explanatory power than egalitarian or postmaterialist values. The WVS already included a 12-item index for measuring postmaterialist values; therefore, that pre-existing index was utilized to operationalize postmaterialist values. In order to operationalize egalitarian values, an index was created consisting of five questions from the WVS. Again, most questions had multiple responses ranging from “strongly agree” to “strongly disagree”. All questions were manipulated to have equal weight and so that numerically higher answers correspond with egalitarian values, while lower answers indicate individualistic values. Overall, an individual’s aggregate score on the egalitarian index may range from 5-50, with higher scores indicating egalitarian values and lower scores indicating individualistic values. The questions included in the index are listed in the appendix.

Operationalizing the Dependent Variable

The dependent variable of this study is environmental concern. In order to operationalize an individual’s level of concern for environmental issues, seven questions from the WVS were selected to create an index. About half of the questions simply gauge an individual’s concern for various environmental issues, while the other half of the questions gauge how willing that individual is to sacrifice economic gains for environmental problems. All questions relate to environmental problems on a global scale, for environmental problems at the local level differ greatly in severity for any given individual. Like the other indices, all questions were manipulated to have equal weight and so that numerically higher responses correspond to a greater concern for the environment, while lower responses correspond with less environmental concern. On a scale 7-168, lower aggregate scores indicate low environmental concern and higher scores indicate high environmental concern. The index questions are listed in the appendix.

In measuring all of these concepts, the social demographics of age, sex, income, and education are controlled for. Political ideology is also controlled for.

EMPIRICAL FINDINGS AND ANALYSIS

Table 1. Multiple Regression Models: Personal Values and Environmental Attitudes

Dependent Variable: Environmental Concern

	U.S.	Canada	Germany	Finland	Sweden	Spain	Switzerland
Cosmopolitanism	.104*** (.013) <i>.235</i>	.072*** (.019) <i>.198</i>	.141*** (.011) <i>.389</i>	.103*** (.014) <i>.294</i>	.094*** (.014) <i>.256</i>	.115*** (.015) <i>.357</i>	.078*** (.014) <i>.227</i>
Egalitarianism	.594*** (.136) <i>.137</i>	.336* (.157) <i>.108</i>	-.048 (.117) <i>-.012</i>	.204 (.162) <i>.048</i>	.268* (.131) <i>.090</i>	.308* (.138) <i>.098</i>	.252 (.140) <i>.068</i>
Postmaterialism	2.675*** (.712) <i>.113</i>	1.818 (.964) <i>.102</i>	2.126** (.711) <i>.086</i>	1.669* (.810) <i>.076</i>	.889 (.718) <i>.047</i>	.321 (.713) <i>.019</i>	2.758*** (.697) <i>.152</i>
Income	-.374 (.468) <i>-.023</i>	-.070 (.379) <i>-.010</i>	.921* (.431) <i>.064</i>	.059 (.360) <i>.006</i>	-.477 (.273) <i>-.062</i>	-1.503* (.606) <i>-.114</i>	.368 (.466) <i>.029</i>
Education	1.385* (.664) <i>.062</i>	1.545** (.599) <i>.140</i>	1.363*** (.367) <i>.115</i>	1.123* (.438) <i>.103</i>	.151 (.417) <i>.014</i>	.480 (.474) <i>.049</i>	.371 (.409) <i>.033</i>
Age	.238*** (.050) <i>.134</i>	.030 (.064) <i>.022</i>	.086* (.043) <i>.056</i>	.080 (.051) <i>.056</i>	.152** (.048) <i>.113</i>	-.056 (.056) <i>-.044</i>	-.013 (.048) <i>-.009</i>
Sex	2.900 (1.643) <i>.049</i>	-.515 (2.030) <i>-.012</i>	5.160*** (1.459) <i>.096</i>	4.597* (1.654) <i>.094</i>	3.205* (1.507) <i>.072</i>	3.741* (1.749) <i>.088</i>	2.773 (1.548) <i>.062</i>
Political Ideology	-3.027*** (.514) <i>-.183</i>	-1.067 (.547) <i>-.100</i>	-1.749*** (.425) <i>-.121</i>	-1.123* (.474) <i>-.090</i>	-1.525*** (.436) <i>-.152</i>	-1.270** (.487) <i>-.118</i>	-1.491*** (.453) <i>-.131</i>
Adjusted RSquare	.215	.160	.284	.167	.178	.222	.187
F-test	36.566	10.579	50.005	19.615	21.151	17.809	21.790
Model Significance	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
N	1040	403	988	741	748	470	724

Note: Standard errors in parentheses and beta weights italicized; *** $p < .001$ ** $p < .01$ * $p < .05$

Hypothesis 1

The multiple regression analyses for each of the seven countries show a positive correlation between cosmopolitan values and environmental concern. This relationship is significant at the .001 level in all seven countries. No other independent variable is statistically significant across all seven nations. Furthermore, in all seven cases, cosmopolitan values have the highest beta weight and thus have more explanatory power than all other independent variables. However, the relationship between cosmopolitanism and environmentalism is very weak; unstandardized partial regression coefficients range from .072 (Canada) to .141 (Germany) with the scale of possible environmentalism scores ranging between 7 and 168. This means that even in Germany, where cosmopolitan values have the strongest correlation with environmentalism, a one unit increase in cosmopolitanism only results in a .141 unit increase in environmentalism, which is negligible on such a large scale.

Political ideology is a statistically significant predictor of environmental attitudes in all seven nations except Canada. This variable also has the second highest beta weight, after cosmopolitanism, in four out of the seven nations: the United States, Sweden, Germany, and Spain. In all cases, conservatism is negatively correlated with environmental concern. Egalitarian and postmaterialist values are both statistically significant predictors of environmental attitudes in four out of the seven nations. In the countries where egalitarianism and postmaterialism are significant, the relationships are in the expected directions. Postmaterialist values and egalitarian values are positively correlated with environmental concern. However, their explanatory power varies greatly across the seven models. The social demographics of age, sex, income, and education are also inconsistent predictors of environmental concern. For example, age has the third highest beta weight in the United States, yet it is not even a statistically significant variable in four out of the seven nations.

Because the model explains a relatively low amount of the variance in all countries (adjusted R square values ranged between .160 and .284), a correlation matrix was created to test for multicollinearity between all independent variables. However, there was no strong correlation between any variables, eliminating the possibility of multicollinearity. Therefore, the data support hypothesis one, confirming a positive, but weak relationship between cosmopolitan values and environmental concern.

Hypothesis 2

The two countries that have a relatively lower percentage of citizens who exhibit concern for environmental degradation are the United States and Germany. Finland, Sweden, Switzerland, and Canada all have relatively higher percentages, with Spain falling somewhere in the middle. Spain has a relatively high percentage of citizens who show concern for environmental degradation, but have a relatively low percentage of citizens who are willing to sacrifice income for more environmental protection.³² Following hypothesis two, one would expect cosmopolitan values to have a stronger relationship with environmentalism in the United States, Germany, and Spain than in the other four countries. In what country did a one unit increase in cosmopolitanism result in the greatest unit increase in environmental concern?

Directly comparing the B values of cosmopolitanism across the seven regression models, the ranking of the countries in which cosmopolitanism has the greatest impact on environmental concern is as follows: 1) Germany 2) Spain 3) USA 4) Finland 5) Sweden 6) Switzerland 7) Canada. Therefore, according to the data, hypothesis two is confirmed, for the United States, Germany, and Spain are the countries in which cosmopolitanism has the greatest impact on environmental concern. However, because the correlation between cosmopolitanism and environmentalism is weak in all cases, and all of the partial regression coefficients are within a few hundredths of each other, hypothesis two is confirmed with somewhat equivocal data.

DISCUSSION

Cosmopolitanism and Environmentalism: Is there a true relationship?

There are a number of possible explanations as to why the results of this research exhibit such a weak correlation between cosmopolitan values and environmental concern. First, it is possible that cosmopolitan values have no substantive influence on an individual's likelihood to be concerned about environmental degradation. In other words, it does not matter whether an individual has patriotic values or cosmopolitan values, for environmental concern is independent of these worldviews. Second, cosmopolitanism and patriotism could be pulling almost equally in opposite directions and *both* value sets are influencing an individual to be

³² These statements are based off of general trends in responses to survey questions concerning the environment on the 2005 World Values Survey. They do not hold true for every survey question relating to this subject.

concerned about environmental issues. However, given the limited amount of studies in this area of research, it is not possible to determine which of these scenarios, if either, may be true.

A third explanation for the weak correlation between cosmopolitanism and environmentalism is a measurement flaw. Because the creation of the cosmopolitan index was limited to the pre-existing questions included on the 2005 World Values Survey, the operationalization of cosmopolitanism and patriotism was a limitation of this study. Though careful thought was given as to which questions should be included in the index, and each could be defended as measuring the dichotomy of cosmopolitanism and patriotism, further analysis reveals that the cosmopolitan index was imperfect. When bivariate correlation matrices were created and analyzed, only weak to moderate correlations existed between any two given question responses in the cosmopolitan index. Weak internal correlations may indicate one of two things: 1) the individuals surveyed answered inconsistently on questions relating to cosmopolitanism, or 2) not all of the questions in the index were precisely measuring the same concept (cosmopolitanism).

Although there is no way to avoid individuals answering inconsistently to survey questions, it would be possible to refine the operationalization of cosmopolitanism. If original survey questions were to be utilized in future studies, the cosmopolitan index could be refined in order to measure cosmopolitan and patriotic values more accurately. By introducing new survey questions, the core of cosmopolitanism--favoring intensity of need over proximity--could be captured more fully. For example, future surveys should include questions such as "Is your primary moral allegiance to humanity as a whole, or to those with whom you share a national identity?" or "Are you more likely to donate money to charities which focus on developing third-world countries or to those with a domestic focus?" More finely-tailored questions would also likely result in better internal correlation between index questions. Had cosmopolitan and patriotic values been captured more accurately in this study, with greater internal correlation between index questions, stronger relationships between cosmopolitanism and environmental concern may have emerged.

Explaining the Variance across Nations: The Naturalization of the Nation

One possible explanation for the variation in cosmopolitanism's effect upon environmental concern across nations stems from the confirmation of this study's second

hypothesis – the impact of cosmopolitanism is greatest in countries that have lower overall public concern for environmental issues than in countries that have a relatively higher amount of concern. From this result, one could theorize that some countries simply have more environmentally-oriented cultures than others, and environmental values in these countries are independent of other personal values individuals may have, such as cosmopolitanism. However, if this were the case, one would expect to find that egalitarian values and postmaterialist values also have lesser independent impacts upon environmental concern in countries such as Canada and Switzerland and a stronger impact in the United States, Spain, and Germany. The data, however, shows otherwise. The relative impact of postmaterialism and egalitarianism appears inconsistent. Therefore, the theory that stems from the confirmation of hypothesis two does not seem to be a fully supported explanation for the variance in the effect of cosmopolitan values across the seven nations, according to the data this study provides. Though it may be true that some countries have more environmentally-oriented cultures than others, it is not clear whether this eco-consciousness arises independently of other personal values. This would be an important focus point for future research.

An alternative explanation for the variance in cosmopolitanism's effect upon environmental concern is that patriotic values may lead to environmentalism in some nations, but not others, depending upon the extent to which nature is incorporated into that country's national identity. In other words, if a country's landscape is a central part of its established national identity, then strong patriotic attitudes in that nation would lead to concern towards environmental degradation, regardless of whether or not environmental problems had yet been manifested in that nation or not. The patriotic obligation to preserve and prevent deterioration of an integral part of the nation's identity (its natural landscape) would necessitate this dedication to environmental issues. Following this theory, one would expect to find that in countries where cosmopolitanism has a weaker impact on environmentalism (Canada and Switzerland), nature is a central part of national identity. By contrast, in nations where cosmopolitanism has a stronger independent effect (Germany, Spain, and the United States), nature is *not* a large part of national identity. A growing body of literature concerning the emphasis of nature in both Canadian and Swiss national identity supports this hypothesis.³³

³³ Kaufmann and Zimmer 1998; Zimmer 1998.

Social scientists have distinguished two types of geographical national identities. One, the “nationalization of nature,” portrays geographical features as manifestations of a nation’s cultural identity. “...popular historical myths, memories and supposed national virtues are projected onto a significant landscape in an attempt to lend more continuity and distinctiveness to it. In this way, an image of national authenticity is developed in which a nation’s distinctiveness is seen to be reflected in a particular landscape.”³⁴ The second type of geographical national identity is the ‘naturalization of the nation,’ “which rests upon a notion of geographical determinism that depicts specific landscapes as forces capable of determining national identity.”³⁵ While nature is seen as expressive of certain national virtues and characteristics in the nationalization of nature, nature is seen as capable of determining and shaping a nation’s culture in the naturalization of the nation. I posit that this second type of geographical nationalism, the naturalization of the nation, may likely lead citizens to show concern for environmental problems, for nature is seen as the *source* of their national identity, not simply reflective of a national identity shaped by exogenous forces. This could lead to a special appreciation or reverence towards that nation’s natural landscape. The naturalization of the nation is thought to have played a role in the formation of Swiss and Canadian national identities.

The Swiss Alps have been important in both economic and political terms throughout Switzerland’s history and thus have played a long-standing role in Switzerland’s national identity. As early as the sixteenth century, the Alps were portrayed as the manifestation of Swiss cultural characteristics. By the end of the century, “a cult-like enthusiasm was formed around the Swiss Alps.”³⁶ The popularization of the Alpine mythology was made possible by contributions from philosophers and poets such as Wordsworth, Rousseau, and Schiller.³⁷ Often, the Alps were depicted as responsible for the creation of the Swiss character. In a 1909 essay titled *Nationalite*, Swiss intellectual Ernest Bovet expressed this notion of geographical determinism:

³⁴ Kaufmann and Zimmer 1998, 486.

³⁵ *Ibid*, 483.

³⁶ *Ibid*, 489.

³⁷ *Ibid*.

“A mysterious force has kept us together for 600 years and has given to us our democratic institutions...A spirit that fills our souls, directs our actions and creates a hymn on the one ideal out of our different languages. It is the spirit that blows from the summits, the genius of the Alps and glaciers.”³⁸

The Alpine myth was incorporated into history books and other texts books utilized in secondary education throughout Switzerland, further strengthening the notion of the Alps as the source of Swiss national identity. The incorporation of the Alpine myth into folk-songs also was responsible for the widespread inculcation of geographical determinism into the hearts and minds of many Swiss.³⁹

Like Switzerland, nature and wilderness is an integral theme of Canadian culture. It is present in Canadian cinema, conservation, history, literature, music, painting, and recreation.⁴⁰ This sense of a naturalized national identity was present in Canada even during colonial times, when Canadians made use of Canada’s landscape “for the purpose of elevating Canadians to the status of superior Britons – whose contact with nature would rejuvenate the imperial blood.”⁴¹ After the formation of an official Confederation in 1867, Canadians utilized their unique landscape to distinguish themselves from their southern neighbors, the Americans. During Canada’s first inaugural address, William Alexander Foster utilized this northern imagery, saying “The old Norse mythology, with its Thor hammers...appeals to us – for we are a Northern people – a true out-crop of human nature, more manly, more real, than the weak marrow-bones superstition of an effeminate South.”⁴² In the World War I era, this determination to distinguish themselves as a unique nation continued, and a sense of nationalism, rooted in Canada’s northern nature, began to permeate popular culture through literature, art, and political movements. In 1914, famous Canadian painter A.Y. Jackson stated, “The Canadian who does not love keen bracing air, sunlight making shadows that vie with the sky, the wooden hills and the frozen lakes. Well, he must be a poor patriot.”⁴³ It was the work of these artists,

³⁸ Ibid, 500 (quoting Bovet).

³⁹ Ibid.

⁴⁰ Atkinson 2003.

⁴¹ Kaufmann and Zimmer 1998, 492.

⁴² Ibid, 493.

⁴³ Ibid, 495 (quoting Jackson).

political groups, and writers that embedded a strong northern/wilderness component in Canadian national identity, a component that is still powerful today.⁴⁴

Given the large role nature played in the formation of Canadian and Swiss national identity, it is logical to assume that Canadian and Swiss citizens with strong patriotic attitudes would feel a sense of obligation towards environmental issues. Consequently, cosmopolitanism would have a weaker relationship with environmental concern in those nations. Though one may argue that nature played a role in forming national identity in countries such as Germany and the United States (for example, an argument may be made about the American frontier myth), there does not seem to be substantial evidence that the “naturalization of the nation” narrative is embedded into the German or American consciousness in the modern era like it is in Switzerland and Canada. Therefore, patriotic values would not necessarily illicit concern for environmental degradation in Germany and the United States; as a result, cosmopolitanism would affect environmental attitudes more strongly in those countries. Crosstabs examining the proportion of patriots in Canada and Switzerland (those people who had aggregate scores on the lower half of the cosmopolitan index) who also exhibit strong concern for environmental issues (with an aggregate score on the upper half the environmental index) partially confirm this theory.

Tables 2 and 3 show a crosstab analysis for Canada, where cosmopolitanism had the smallest B value, and Germany, where cosmopolitanism had greatest B value. The data shows that of 621 Canadians who exhibit more patriotic values, 95% of them still exhibited strong concern for environmental issues. However, in Germany, only 61% of those citizens with patriotic values exhibited strong concern for environmental problems. This pattern also holds true when comparing the United States and Switzerland. In the United States, 80% of patriots exhibited strong environmentalism, whereas in Switzerland, 92% of patriots did. Admittedly, there is not as great of a contrast between the United States and Switzerland as there is between Germany and Canada. Nevertheless, this pattern may suggest that patriotic sentiments may be more likely to lead to environmentalism in some countries than others, thereby resulting in a variation in cosmopolitanism’s power across nations. The naturalization of the nation is one way to explain this phenomenon.

⁴⁴ Ibid.

**Table 2. Environmental Concern * Cosmopolitanism Crosstabulation
(Canada)**

	Patriot	Cosmopolitan	Total
Weak Environmentalism	29 4.7%	33 3.0%	62 3.6%
Strong Environmentalism	592 95.3%	1049 97.0%	1641 96.4%
Total	621 100%	1082 100%	1703 100%

**Table 3. Environmental Concern * Cosmopolitanism Crosstabulation
(Germany)**

	Patriot	Cosmopolitan	Total
Weak Environmentalism	263 38.8%	116 18.4%	379 29.0%
Strong Environmentalism	415 61.2%	513 81.6%	928 71%
Total	678 100%	629 100%	1307 100%

While the naturalization of the nation may be a partial explanation as to why cosmopolitanism had less of an impact in Canada and Switzerland, it is imperfect, for there are other countries that do not align with this theory. For example, in Spain, where nature is not an integral part of national identity, 91% of patriots still showed strong concern for environmental problems. Therefore, the theory that the naturalization of the nation may cause patriots in some countries to be eco-conscious is only a partial explanation for the variance in cosmopolitanism's relative strength across nations; it does not hold true for all cases in this study. This theory needs much more exploration and development and would be an intriguing topic for future research.

CONCLUSIONS

The results of this study contribute to the growing body of literature regarding the influence of personal values on an individual's environmental attitudes by confirming a positive correlation between cosmopolitan values and environmentalism. In all seven nations examined, the explanatory power of cosmopolitanism was greater than that of two other popularly studied personal ideologies in this research domain (egalitarianism and postmaterialism), as well as social demographic variables and political ideology. However, the relationship between cosmopolitan values and environmental concern was weak, leaving results open to various interpretations. Because solely utilizing questions included on the 2005 WVS proved to be a limitation of this study, future research examining the relationship between cosmopolitan values and environmentalism would benefit from a more carefully refined cosmopolitan index composed of original questions that capture the essence of cosmopolitanism and patriotism more fully. In addition, further research into possible explanations for the variance in the independent strength of cosmopolitanism across nations would be a significant contribution to this area of research. Though the naturalization of the nation theory holds some weight, it needs further development and fails to be a complete explanation for the variance.

This study tested the three value theories concerning egalitarianism, postmaterialism, and cosmopolitanism against each other. In the future, empirically testing a greater number of competing personal ideologies against one another would fill a significant gap in the literature concerning which personal values have the greatest impact on individuals' environmental attitudes. My findings have established that the variable of cosmopolitanism should not be neglected in future analyses in this realm. Overall, the relationship between cosmopolitanism and environmental attitudes is a promising and intriguing area for future research.

APPENDIX

Cosmopolitan Index

- 1) V178: Thinking of your own country's problems, should your country's leaders give top priority to help reducing poverty in the world or should they give top priority to solve your own country's problems?
- 2) V175: In 2003, this country's government allocated [insert percent here] of the national income to foreign aid. That is, [insert monetary amount here] per person. Do you think this amount is too low, too high, or about right?
- 3) V45: Do you agree or disagree with the following statements? When jobs are scarce, employers should give priority to [NATION] people over immigrants.
- 4) V210: People have different views about themselves and how they relate to the world. Using this card, would you tell me how strongly you agree or disagree with each of the following statements about how you see yourself? I see myself as a world citizen.
- 5) V217: In your opinion, how important should the following be as requirements for somebody seeking citizenship of your country? Having ancestors from my country:
- 6) V177: Would you be willing to pay higher taxes in order to increase your country's foreign aid to poor countries?

Egalitarian Index

- 1) V116: Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between. Incomes should be made more equal vs. We need larger income differences as incentives:
- 2) V117: Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between,

you can choose any number in between. Private ownership of business should be increased vs. Government ownership of business should be increased:

3) V118: Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between. People should take more responsibility to provide for themselves vs. The government should take more responsibility to ensure that everyone is provided for:

4) V119: Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between. Competition is good. It stimulates people to work hard and develop new ideas vs. Competition is harmful. It brings the worst in people:

5) V152: Many things may be desirable, but not all of them are essential characteristics of democracy. Please tell me for each of the following things how essential you think it is as a characteristic of democracy. Use this scale where 1 means not at all an essential characteristic of democracy and 10 means it definitely is an essential characteristic of democracy? Governments tax the rich and subsidize the poor:

Environmental Concern Index

1) V88: Now I will briefly describe some people. Using this card, would you please indicate for each description whether that person is very much like you, like you, somewhat like you, not like you, or not at all like you? Looking after the environment is important to this person; to care for nature:

2) V105: I am now going to read out some statements about the environment. For each one read out, can you tell me whether you agree strongly, agree, disagree or strongly disagree? Would give part of my income for the environment:

3) V106: I am now going to read out some statements about the environment. For each one read out, can you tell me whether you agree strongly, agree, disagree or strongly disagree?) I would agree to an increase in taxes if the extra money were used to prevent environmental pollution:

4) V104: Here are two statements people sometimes make when discussing the environment and economic growth. Which of them comes closer to your own point of view? A. Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs B. Economic growth and creating jobs should be the top priority, even if the environment suffers to some extent.

5) V111: Now let's consider environmental problems in the world as a whole. Please, tell me how serious you consider each of the following to be for the world as a whole. Is it very serious, somewhat serious, not very serious or not serious at all? Global warming or the greenhouse effect:

6) V112: Now let's consider environmental problems in the world as a whole. Please, tell me how serious you consider each of the following to be for the world as a whole. Is it very serious, somewhat serious, not very serious or not serious at all? Loss of plant or animal species or biodiversity:

7) V113: Now let's consider environmental problems in the world as a whole. Please, tell me how serious you consider each of the following to be for the world as a whole. Is it very serious, somewhat serious, not very serious or not serious at all? Pollution of rivers, lakes and oceans:

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