

The Environment and Society Reader

R. Scott Frey, Editor
University of North Florida

2001 **Allyn and Bacon**

Boston • London • Toronto • Tokyo • Sydney • Singapore

Contents

Preface v

About the Editor xii

PART I	NATURE AND CHARACTER OF ENVIRONMENTAL PROBLEMS	1
Chapter 1	Environmental Problems from the Local to the Global	3
	1: Environmental Problems <i>R. Scott Frey</i>	4
Chapter 2	Environmental Sociology: Past, Present, and Back to the Future	26
	2: Sociology as if Nature Did Not Matter: An Ecological Critique <i>Raymond Murphy</i>	27
	3: The Evolution of Environmental Sociology: A Brief History and Assessment of the American Experience <i>Riley E. Dunlap</i>	43
	4: Marx's Theory of Metabolic Rift: Classical Foundations for Environmental Sociology <i>John Bellamy Foster</i>	63
Chapter 3	Environmental Justice within and between Countries	96
	5: Anatomy of Environmental Racism and the Environmental Justice Movement <i>Robert D. Bullard</i>	97
	6: The Hazardous Waste Stream in the World-System <i>R. Scott Frey</i>	106
	7: Principles of Environmental Justice <i>The First National People of Color Environmental Leadership Summit</i>	121
Chapter 4	Driving Forces of Environmental Problems	123
	8: Rethinking the Environmental Impacts of Population, Affluence, and Technology <i>Thomas Dietz and Eugene A. Rosa</i>	124
	9: Uneven and Combined Development and Ecological Crisis: A Theoretical Introduction <i>James O'Connor</i>	151
PART II	HUMAN RESPONSES TO ENVIRONMENTAL PROBLEMS	161
Chapter 5	Environmental Beliefs and Attitudes	163
	10: The Social Bases of Environmental Concern: Have They Changed over Time? <i>Robert Emmet Jones and Riley E. Dunlap</i>	164

	11: Culture and the Environment in the Pacific Northwest <i>Richard J. Ellis and Fred Thompson</i>	180
	12: Global Concern for the Environment: Is Affluence a Prerequisite? <i>Riley E. Dunlap and Angela G. Mertig</i>	202
Chapter 6	The Environmental Movement	216
	13: <i>Environmental Discourse and Social Movement Organizations: A Historical and Rhetorical Perspective on the Development of U.S. Environmental Organizations</i> <i>Robert J. Brulle</i>	217
	14: <i>Development, Poverty and the Growth of the Green Movement in India</i> <i>Jayanta Bandyopadhyay and Vandana Shiva</i>	238
	15: <i>Science, Nature, and the Globalization of the Environment, 1870–1990</i> <i>David John Frank</i>	249
Chapter 7	Environmental Assessment and Management	271
	16: <i>Risk Assessment and Management</i> <i>Thomas Dietz, R. Scott Frey, and Eugene Rosa</i>	272
Chapter 8	Science, Democracy, and the Environment	300
	17: <i>Popular, Epidemiology and Toxic Waste Contamination: Lay and Professional Ways of Knowing</i> <i>Phil Brown</i>	301
	18: <i>Science for the Post-Normal Age</i> <i>Silvio O. Funtowicz and Jerome R. Ravetz</i>	320
PART III	ENVISIONING A SUSTAINABLE AND EQUITABLE FUTURE	337
Chapter 9	Toward a New Worldview	339
	19: <i>A New Ecological Paradigm for Post-Exuberant Sociology</i> <i>William R. Catton, Jr. and Riley E. Dunlap</i>	340
Chapter 10	From Growth to Sustainable and Equitable Development	361
	20: <i>What Does Sustainability Really Mean?: The Search for Useful Indicators</i> <i>Alex Farrell and Maureen Hart</i>	362
Chapter 11	Attaining Sustainable and Equitable Development	378
	21: <i>A Declaration of Sustainability</i> <i>Paul Hawken</i>	379

11. Culture and the Environment in the Pacific Northwest*

RICHARD J. ELLIS AND FRED THOMPSON

Empirical studies of environmental attitudes often ask what people want (Dunlap, Gallup, and Gallup 1993; Dunlap and Scarce 1991) but less frequently ask why. Perhaps it is because the answer seems straightforward, even simple. People want cleaner air and water, wilderness and species preservation, habitat protection, and a healthier, safer earth because these are so obviously desirable. Environmentalism would seem to be one preference that needs no explanation.

Attempts to explain environmental preferences and concerns in terms of standard demographic variables have generally not fared well (Jones and Dunlap 1992, Van Liere and Dunlap 1980).¹ Perhaps this is because the almost universal support that environmentalism now commands leaves little variance to be explained. Or perhaps we have been looking in the wrong places, asking the wrong questions.

In this paper, building upon the so-called cultural theory of Douglas (1970, 1982a) and Wildavsky (1987; Thompson, Ellis, and Wildavsky 1990), we investigate the cultural sources of environmental atti-

tudes and beliefs. What values and beliefs, if any, underlie environmental commitments? What sorts of people defending what sorts of social relationships tend to become environmentally active? When environmental activists urge us to conserve energy or recycle plastics, what else if anything are they trying to tell us about how we should live with one another?

The Douglas-Wildavsky theory of cultural bias posits four basic ways of organizing and justifying social and political life: egalitarian, individualistic, hierarchical, and fatalistic. Each of these cultural biases is "a point of view, with its own framing assumptions and readily available solutions for standardized problems" (Douglas 1997, 128). Adherents of each cultural bias construct their policy preferences so as to bolster their preferred pattern of social relationships. Perceptions about environmental risks and dangers, in this view, are embedded in cultural orientations, rather than being merely a fiction of the level of information about the safety of particular technologies, or a product of generalized psychological predispositions, such as risk acceptance or aversion (Dake and Wildavsky 1990, Douglas 1975, Douglas and Wildavsky 1982, Rayner 1992).

Environmental activists, according to this cultural theory, are worried about the

*This essay, which was first published in the *American Political Science Review* 91(4):885-897, is reprinted here by permission of the American Political Science Association.

greenhouse effect or deforestation, for example, not only because they are concerned about the fate of the earth but because they desire to transform how human beings live with one another in an egalitarian direction. To accept that nature is fragile and that the slightest misstep may result in cataclysmic consequences for the human species helps egalitarians to justify a politics that would dramatically curtail the activities of the restless entrepreneur in the name of the collectivity. Competitive individualists construct a view of nature as forgiving as resilient because it makes it easier for them to justify laissez-faire and to resist those who would enhance centralized, governmental control. Or, to take another example, the idea of resources as nonrenewable and rapidly depleting is hypothesized as appealing to egalitarians because it enables them to justify regulating and redistributing limited resources. In order to resist these encroachments on the process of bidding and bargaining, adherents of a competitive individualistic culture counter by focusing on the "resource-full" nature of individual entrepreneurs (Thompson, Ellis, and Wildavsky 1990, 26-7, 62). The debate about nature, in this view, is also fundamentally a contest over cultures.

This thesis has attracted widespread attention in the area of risk analysis (see Rayner 1992), understandably so since it challenges a number of settled beliefs about the perception of environmental dangers. It runs counter to the seductively simple idea that people worry about environmental harms because they are harmful. Environmental activism, in this view, has little or nothing to do with culture and everything to do with the sorry state of the environment. Alternatively, we are often told that people begin to worry about the environment when they reach a higher stage of

consciousness, either because they have at last been educated about the real harms confronting the environment, or because they have satisfied their primary subsistence and economic needs. The Douglas-Wildavsky cultural thesis, by insisting that perceptions of environmental harm are "defined, perceived, and managed" (Rayner 1992, 84) according to a cultural bias, is unsettling to many received ideas about risk perception. For the most part, however, challenges to the theory and the contestation surrounding it have remained at a theoretical level.²

Among the ideas that the Douglas-Wildavsky hypothesis challenges head-on is the widespread belief that environmentalism transcends conventional political ideology. The view that environmentalism is "inherently neither left nor right" has been cogently argued in Paehlke's important book, *Environmentalism and the Future of Progressive Politics* (1989, 177). Paehlke suggests that we need to draw "a distinction between the 'distributive' politics of the traditional political spectrum and environmental politics" (p. 178). Distributive politics, as he defines it, "is concerned with distribution and redistribution of the products and other intended benefits of economic activity." The ethical debate in this sphere is "carried out in terms of equity." Environmentalism, according to Paehlke's autonomy thesis, offers a totally separate discourse; an ideology that is altogether apart from the conventional left-right continuum (p. 7). Environmental politics, Paehlke explains, "competes with the whole distributional agenda" (p. 189). To map the contemporary ideological spectrum properly, he argues that one needs two dimensions. The first is the familiar left-right dimension that turns on distributive economic concerns; the second is completely independent and runs

from pro- to anti-environmentalism (p. 190, also p. 178; cf. Cotgrove 1982, 112, and Milbrath 1984, 24).

A related but different version of the autonomy thesis is argued by students of the "New Politics." Largely drawing upon data derived from Western Europe, they agree with Paehlke that environmentalism is "orthogonal" to the materialistic, equity-based politics of the Old Left, but unlike Paehlke these scholars embed environmentalism in the emergence of a new left-right framework pivoting around "postmaterial" issues, such as participation and individuals freedom (Dalton 1994, esp. 121-34; Inglehart 1977, 1990). The environmental movement, like other "new social movements," such as the peace and the women's movement, is said to be driven by a new "elite-challenging" as opposed to "elite-directed" style of politics (Inglehart 1977, 3). In this view it is citizen participation and opposition to elite authority, more than equal distribution of resources, that is the motive power behind environmental commitment.³

A third and dramatically different alternative to the Douglas-Wildavsky cultural hypothesis is offered by Kempton Boster, and Hartley in their study, *Environmental Values in American Culture* (1995). Whereas Douglas and Wildavsky argue that environmental activism is strongly joined to egalitarianism, Kempton and his colleagues counter that there is a "single cultural consensus" on environmental values and beliefs, and those few who do not share this consensus do not adopt a coherent and consistent alternative. By "cultural consensus" they do not mean that every last person agrees with each and every environmental value or belief; instead, they mean that "there is only one set of culturally agreed upon answers" (p. 211; also 196-7). The general public, in this view, closely resem-

bles environmental activists. Even members of the radical environmental group, Earth First!, have "more or less the same beliefs and values as other Americans." What differentiates environmental activists from the general public, according to Kempton et al., is less what they believe and value than their willingness to make personal sacrifices for their values and beliefs (p. 209). Far from being part of an egalitarian challenge to dominant American values and institutions, environmental activism is the American cultural mainstream.

DATA AND METHODS

To test these rival hypotheses, we carried out several surveys. The first went to the northwestern U.S. membership of three environmental groups: Audubon Society, Sierra Club, and the Earth Island Institute. The first two are well-known mainstream environmental groups, while the third is an avowedly nonmainstream organization that defines itself as working at the intersection of social justice and ecology issues.⁴ For comparative purposes, we sent the same survey to a small group of leaders in the Sierra Club and Earth Island Institute. We also mailed a much shorter version to a random sample of residents in Oregon's capital, Salem, and the adjacent, largely rural, Yamhill County. On occasion, for comparative purposes only, we also draw upon a survey of members of the radical environmental group, Earth First! More specific information on sampling methods and the nature of each sample is given in Appendix A.

Respondents were offered a series of statements designed to measure egalitarian, individualistic, and hierarchical cultural biases as well as a range of environmental attitudes and beliefs.⁵ For each item, respondents were asked to place

themselves on a seven-point Likert-type scale, ranging from strongly agree to strongly disagree. *Egalitarianism*, *Individualism* (which we also call *Market Individualism*), and *Hierarchy* were each measured by three-item scales (see Appendix B for the items used in this and other scales, as well as for the reliabilities of all scales). To measure support for the environment, in both samples we used a single item: "We are spending too little money on improving and protecting the environment."

In the environmental group sample,⁶ we also constructed a ten-item scale modeled on the New Environmental Paradigm pioneered by Dunlap and Van Liere (1978) and used by Milbrath (1984) and others. The central elements of this paradigm that we attempted to measure are anti-anthropocentrism and the beliefs that there are limits to growth, nature is fragile, the possibility of ecological catastrophe is imminent, and a fundamental transformation is needed in the way we live our lives (Dunlap et al. 1992, 4, 6; Milbrath 1984, 44–8). For the Salem-Yamhill general public, we constructed a five-item scale designed to measure level of environmental concern.

IS ENVIRONMENTALISM IDEOLOGICALLY AUTONOMOUS?

We begin by testing whether environmental attitudes and beliefs constitute a relatively autonomous sphere of ideas or are embedded in cultural biases and/or in the conventional left-right ideological spectrum. First, we examine the correlations between egalitarian or distributive concerns, on the one hand, and environmental commitments, on the other. Second, we look at the relationship between environmentalism and the participatory, "elite-challenging" New Politics. Finally, we investigate the re-

lationship between market individualism and environmentalism.

Equality

If Paehlke is correct that environmentalism constitutes a relatively autonomous sphere of ideas, then we would expect to find a weak relationship between environmentalism and egalitarianism. If Douglas and Wildavsky's theory of cultural bias is correct, then the correlation should be strong. As Table 5.3 shows, among both environmental activists and the Salem-Yamhill general public there are consistently robust relationships between egalitarianism and environmentalism. Those concerned about inequality are substantially more likely to show concern about environmental degradation and to favor spending more on environmental protection.⁷

Paehlke's autonomy thesis does not fare well, even if we use the conventional liberal-conservative self-designation (see Table 5.3). Among both activists and the public, there are generally strong correlations between environmental attitudes and ideological *Self-designation*, as well as between environmental attitudes and *Party Identification* (also see Guth et al. 1995, esp. 372; and Dunlap et al. 1992, 10). Liberals and Democrats are more likely to express ecological consciousness, show strong environmental concern, and support spending for environmental protection.

If ideological self-designation and party identification account for environmental attitudes so well, then why introduce the concept of egalitarianism? To test whether egalitarianism contributes to our understanding of environmentalism, we looked at the partial correlation between the two, controlling for liberal-conservative self-identification and party identification. In

TABLE 5.3 Correlates of Environmentalism

	Environmental Activists		Salem-Yamhill Public	
	<i>New Ecological Consciousness</i>	<i>Spending on Environment</i>	<i>Environmental Concern</i>	<i>Spending on Environment</i>
Egalitarianism	.39** (.31**)	.36** (.19**)	.53** (.38**)	.47** (.33**)
Individualism	-.34**	-.36**	-.43**	-.37**
Hierarchy	-.09*	-.13**	-.16**	-.13*
Ideology	.29**	.36**	.39**	.38**
Party ID	.24**	.34**	.38**	.37**
Participation	.09*	-.02	NA	NA
Age	-.08*	-.10**	-.06	-.03
Education	-.02	.10**	.05	.09
Gender	-.06	.00	-.21**	-.08
Income	-.13**	-.04	-.04	.07

Note: Correlation coefficients are Pearson's r . In parentheses are partial correlations, controlling for ideology and party identification. Variables are coded so that positive values indicate liberal, Democrat, and male. * $p < .05$; ** $p < .01$; two-tailed test.

NA = Not asked in the survey.

both populations, as Table 5.3 shows, egalitarianism explains significant additional variance in environmental attitudes even after controlling for ideological self-designation and party identification.

Participation and Authority

The New Politics argument rests on three distinct claims: (1) The New Politics issues of participation and authority are independent of the Old Politics issues of redistribution; (2) environmental attitudes and beliefs are autonomous from the old redistributive politics; and (3) environmental attitudes and beliefs are embedded in the New Politics issues of participation and authority. We have already seen that the second of these claims is not correct, but what about the other two? The theory still could

be vindicated if the relationship between environmentalism and the New Left value of participation is greater than the relationship between environmentalism and the Old Left value of equality.

The environmental activists were offered a classic New Politics statement: "We should all participate in each decision that directly affects us."⁸ Consistent with the New Politics argument, *Participation* is only weakly related to egalitarianism (Pearson's $r = .14$), and it is completely unrelated to ideological self-designation and party identification. But contrary to the New Politics argument, as Table 5.3 shows, the importance respondents attach to participation also shows no relationship with support for environmental spending and virtually none with the ten-item measure of ecological consciousness. The value activists place

on participation, in short, has little or nothing to do with their environmental beliefs or attitudes.⁹

Another way to test the New Politics thesis that environmentalism is distinguished by its "elite-challenging" character is to examine the relationship between environmentalism and our hierarchy scale, which includes such statements as "one of the problems with people today is that they challenge authority too often" and "society works best when people strictly obey all rules and regulations." The elite-challenging hypothesis leads us to expect a strong inverse relationship between hierarchy and environmental support. Table 5.3 does show a consistently inverse relationship, but it is uniformly weak. Elite-challenging attitudes, then, do not appear to be strongly related to environmental attitudes, either among the general public or among activists.¹⁰

Market Individualism

What about attitudes toward the market? Is the new environmentalism at bottom the old antimarket impulse? (Or, looked at differently, is opposition to environmentalism grounded in traditional promarket attitudes?) Among both the Salem-Yamhill public and activists, Table 5.3 shows, there is a strong inverse relationship between

support for market individualism and support for environmentalism. It is, in fact, almost the mirror image of the relationship between egalitarianism and environmentalism, which raises the question whether individualism and egalitarianism are not better conceived as opposite ends of a continuum rather than separate dimensions. Certainly the egalitarianism and individualism scales are inversely correlated (Pearson's $r = -.48$ in the activist sample and $-.44$ in the Salem-Yamhill public).¹¹ May it not be more appropriate, then, to combine the items into a single scale? One way of addressing this question is to enter egalitarianism and individualism in a regression equation simultaneously to determine whether any unique additional variance in environmental attitudes is explained by including a second measure of cultural bias. As Table 5.4 reports, both individualism and egalitarianism help explain significant unique variance in environmental attitudes. Moreover, in both samples, adding any one of the individualist items to the three-item egalitarian scale reduces the reliability of the scale. Finally, in both samples, factor analysis with varimax rotation revealed two distinct factors, one comprising all three egalitarian items, the other composed of the three individualist items. (see Appendix C). Thus, the two measures'

TABLE 5.4 Standardized Partial Regression Coefficients for Egalitarianism and Individualism

	Environmental Activists		Salem-Yamhill Public	
	<i>New Ecological Consciousness</i>	<i>Spending on Environment</i>	<i>Environmental Concern</i>	<i>Spending on Environment</i>
Egalitarianism	.28	.24	.42	.38
Individualism	-.21	-.23	-.25	-.21

Note: All relationships are significant at $p < .01$; two-tailed test.

factor structure, internal consistency, and nonredundant predictive power justify treating them as measures of distinct albeit related constructs.

The explanatory importance of market individualism and egalitarianism holds up even when we enter these two cultural bias variables into a regression equation together with the standard demographic variables (*Age, Income, Gender, and Education*) as well as party identification, ideological self-designation, and the hierarchical cultural bias. In both the environmental activist and general public sample, as Table 5.5 documents, egalitarianism and market individu-

alism consistently emerge as the variables that explain the greatest amount of variance in environmental attitudes. This is further support for the Douglas-Wildavsky cultural thesis.

IS THERE A CULTURAL CONSENSUS AROUND ENVIRONMENTALISM?

Kempton, Boster, and Hartley's (1995) cultural consensus thesis leads us to expect relatively small differences between the public and activists in both environmental attitudes and cultural biases. Douglas and Wildavsky's cultural bias thesis, in contrast,

TABLE 5.5 Standardized Partial Regression Coefficients for Cultural Bias, Political Self-Identification, and Demographic Traits

	Environmental Activists		Salem-Yamhill Public	
	<i>New Ecological Consciousness</i>	<i>Spending on Environment</i>	<i>Environmental Concern</i>	<i>Spending on Environment</i>
Cultural bias				
Egalitarianism	.28**	.14**	.31**	.28**
Individualism	-.22**	-.19**	-.22**	-.22**
Hierarchy	.14**	.08	-.11*	-.05
Political self-identification				
Ideology	.08	.14*	.07	.10
Republican	-.05	-.14**	-.11	-.14
Democrat	-.13*	-.07	-.02	-.01
Demographic traits				
Age	-.01	-.02	-.02	.03
Education	-.04	.06	-.01	.02
Gender	-.09*	.01	-.04	.06
Income	-.01	.04	-.05	.02
Multiple R	.44	.42	.61	.56
Standard error	.88	.98	1.20	1.55
R ² , All variables	.20	.18	.37	.32
R ² , Egalitarianism and Individualism only	.18	.17	.33	.25
R ² , Egalitarianism only	.15	.13	.28	.22

* $p < .05$; ** $p < .01$; two-tailed test.

leads us to expect large differences (Wildavsky 1991). Moreover, Douglas and Wildavsky's cultural theory also leads us to predict that the more egalitarian the environmental group, the more environmentally concerned the members of that group will be, whereas the consensus thesis leads us to expect environmental groups, even the more radical among, to be quite similar in attitudes.

Previous research has consistently shown widespread support for environmental protection among the general public (Brick, Hannigan, and Krueger 1995; Dunlap and Scarce 1991). Our results are consistent with those findings. Generally, as Table 5.6 documents, the Salem-Yamhill respondents show high levels of environmental concern. Although the public clearly worries about environmental degradation and values environmental protection, it is not surprising that they are less intensely concerned than activists. Only about one in eight Salem-Yamhill respondents, for instance, agrees in the strongest possible terms that we will soon experience an ecological catastrophe, compared to about half of the Earth Island sample and one in three Audubon and Sierra Club respondents. These findings seem to support the consensus thesis that there is a general proenvironmental sentiment, and what separates activists from the public is primarily the intensity with which they hold a belief rather than what they believe.

Other items, however, measuring attitudes toward science and technology and "deep ecology," reveal sharper differences, not only between the public and the activists but also among the activists themselves. Table 5.6 shows that Salem-Yamhill respondents have a strong faith in the promise of science and technology to solve human problems, a faith largely shared by Audubon and Sierra Club members. Earth Islanders

and especially members of Earth First! take a far more jaundiced view of science and technology (cf. Milbrath 1984, 31). There is also nothing approaching a cultural consensus on issues of deep ecology. While activists generally feel we would be better off with a dramatic population reduction, the public does not. And the core deep ecology tenet that humans are no more important than any other species divides environmentalists, while the public decisively rejects such a notion. In fact, one-third of the Salem-Yamhill sample disagrees in the strongest possible terms. The substantial divergence on questions of deep ecology and technology suggests that beneath broadly shared environmental concerns are often quite different conceptions of how human beings should relate to nature and how environmental problems should be handled.¹²

The consensus thesis fares particularly poorly when we compare the cultural biases of the general public with those of environmental activists.¹³ As Table 5.6 documents, the public is far less egalitarian and far more supportive of both hierarchy and market individualism. Moreover, this cultural gap becomes more pronounced as one moves toward greater activism and leadership. In each of the three environmental groups surveyed, as Table 5.7 shows, the more active members consistently express greater antipathy to individualism, greater support for egalitarianism, and more distrust of hierarchical authority relations.

THE POLICY IMPLICATIONS OF CULTURAL DISSENSUS

What does the divergence in cultural bias between environmental activists and the general public mean for environmental policymaking? Having pronounced the discovery of a "pervasive and strong" commitment to environmental values among the

TABLE 5.6 Percentage Endorsing Environmental and Cultural Statements

	Salem-Yamhill	Audubon Society	Sierra Club	Earth Island	Sierra Leaders	Earth Island Leaders	Earth First!
Environmental concern							
1. If things continue on their present course, we will soon experience a major ecological catastrophe.	64	81	86	91	100	93	NA
2. The oceans are gradually dying from oil pollution and dumping of waste.	67	75	87	92	84	86	95
3. We are fast using up the world's natural resources.	78	94	95	97	100	93	NA
4. We are spending too little money on improving and protecting the environment.	57	86	93	96	100	97	94
Technology and deep ecology							
1. Science and technology provide the human race with its best hope for the future.	61	56	55	34	45	21	17
2. Humans are no more important than any other species.	32	51	53	60	61	52	NA
3. We would be better off if we dramatically reduced the number of people on this earth.	40	63	68	76	88	83	NA
Cultural bias							
1. What our country needs is a fairness revolution to make the distribution of goods more equal.	32	38	41	59	47	70	71
2. The world would be a more peaceful place if its wealth were divided more equally among nations.	33	48	53	72	50	86	64
3. We need to dramatically reduce inequalities between the rich and the poor, whites and people of color, and men and women.	66	80	82	89	85	97	NA
4. Competitive markets are almost always the best way to supply people with the things they need.	76	59	47	28	34	34	17
5. Society would be better off if there was much less government regulation of business.	55	31	12	10	9	7	NA
6. People who are successful in business have a right to enjoy their wealth as they see fit.	76	38	34	24	27	17	13
7. Society works best when people strictly obey all rules and regulations.	65	50	31	26	30	7	15
8. Respect for authority is one of the most important things that children should learn.	87	72	46	39	42	24	NA
9. One of the problems with people today is that they challenge authority too often.	44	26	13	10	3	3	NA

NA = Not asked in the survey.

TABLE 5.7 Mean Score on Cultural Bias Scales

	Egalitarianism	Hierarchy	Individualism
Salem-Yamhill	-.13	.77	.92
Audubon			
Inert (<i>N</i> = 47)	.32	.49	.50
Active (<i>N</i> = 101)	.57	.19	-.24
Highly active (<i>N</i> = 61)	.46	-.17	-.45
Sierra Club			
Inert (<i>N</i> = 46)	.41	-.37	-.27
Active (<i>N</i> = 99)	.63	-.64	-.56
Highly active (<i>N</i> = 53)	.73	-.58	-.74
Leaders (<i>N</i> = 33)	.73	-.84	-1.14
Earth Island			
Inert (<i>N</i> = 24)	.63	-.69	-.40
Active (<i>N</i> = 103)	.95	-.78	-.96
Highly active (<i>N</i> = 162)	1.60	-1.00	-1.37
Leaders (<i>N</i> = 29)	1.87	-1.63	-1.41

Note: Earth cultural bias scale runs from -3 (strongly disagree) to +3 (strongly agree).

American public, Kempton et al. are led to ask: "Why is there not more environmental action? Why don't people act collectively to strengthen environmental laws, build infrastructure with reduced environmental impact, or institute incentives for behavior change?" (1995, 220). In other words, why, if Americans share the same basic values as environmentalists, do they not behave more like environmentalists? Kempton et al. explain this puzzle by focusing on the "barriers to action" that prevent widely shared environmental values from being transformed into "environmentally beneficial actions" (p. 220). Among these barriers are misinformation (the mistaken belief, for example, that cutting down rainforests is causing global warming), "structural constraints" (that we lack a strong public transit system or bikeway system, for instance), "fundamental incentive structures" (for instance, that capitalist "companies earn more

by producing and selling more, not by making people more satisfied with life"), as well as "divergent individual and group self-interests" (pp. 220, 212).

Our findings of cultural dissensus suggest that the impediments to environmental actions go well beyond institutional constraints, self-interest, or inadequate information. Or, rather, each of these is itself shaped by cultural commitments. Americans do not behave more like environmental activists because culturally they are quite unlike them. To begin with, the general public overwhelmingly believes in markets, business, and capitalism, while the activists generally do not. Most Americans do not see a lot wrong with a system that enables one to acquire more goods rather than being content with only a few. For environmental activists committed to an egalitarian culture, living with less is not just a sacrifice for the sake of the environment but a concrete

expression of their commitment to an egalitarian way of life and their rejection of the acquisitive life of competitive individualism. To pose the issue in terms of self-interest versus altruism is to miss the rival value systems that undergird environmental policy debates.

Our point is not that activists want environmental amenities that the general public does not value—quite the contrary. Both want cleaner air and water, wilderness and species preservation, habitat protection, and a healthier, safer earth. Both are concerned about environmental degradation and are uneasy about the prospect of environmental catastrophe. But the divergence in their cultural biases is important because these biases shape the means activists choose to realize shared environmental goals. More specifically, since many or perhaps most activists do not trust markets, believing it unjust that resource allocations should reflect willingness and ability to pay, they may spurn policies that rely on markets to solve problems. Our evidence suggests that the public may be more willing to accept such market-based solutions to environmental problems.

IMPLICATIONS FOR "CULTURAL THEORY"

The strong relationships reported in this article between egalitarian and antimarket cultural biases, on the one hand, and environmental attitudes and beliefs, on the other, cast serious doubt on Paehlke's ideological autonomy thesis. Our evidence regarding the New Politics thesis is more mixed. Individual-level correlations show little or no relationship between an elite-challenging outlook and environmental attitudes; yet, the environmental activists are far more elite-challenging than are the Salem Yamhill public. The dramatic difference

in cultural biases between activists and the public undercuts the cultural consensus thesis, as do the substantial differences in cultural bias between radical and mainstream environmental groups. Our findings, then, refute the autonomy and consensus theses, but do they vindicate Douglas and Wildavsky's cultural theory?

Our results support the claim that environmental attitudes are embedded in broader sociocultural orientations. Moreover, Douglas, Wildavsky, and their various collaborators appear to be correct in arguing that the value one places on equality and markets is an important determinant of environmental attitudes and beliefs. Furthermore, these cultural theorists, together with theorists of the New Politics, appear to be correct in their view that environmental activists often adhere to cultural orientations markedly divergent from those of the general public. Nevertheless, our findings hardly demonstrate the indisputable triumph of cultural theory. Proponents of that theory posit four distinct cultural biases and four distinct attitudes toward nature, yet we found the environmental debate to be primarily a dispute between egalitarians and individualists (cf. Cotgrove 1982). Although we did not test for fatalism, the other cultural bias we tested, hierarchy, proved to be only weakly and inconsistently related to environmental attitudes.

This muddled empirical result mirrors a theoretical muddle about how hierarchical attitudes toward environmental issues are supposed to differ from individualistic attitudes (see especially Dake and Wildavsky 1991, 17). At times, cultural theorists collapse market individualism and hierarchy into a single "establishment" or "center" culture that downplays environmental and technological risks (Douglas and Wildavsky, 1982, chapter 5); at other times, they suggest that hierarchists will be somewhere in

between the environmental alarmism of egalitarians and the unbridled optimism of competitive individualists (Thompson, Ellis, and Wildavsky 1990, 26–7). Although we found that the hierarchy and individualism scales were intercorrelated,¹⁴ our results are more consistent with the latter than the former hypothesis. The relationship between hierarchy and environmentalism is radically different from that between individualism and environmentalism. Although hierarchical attitudes toward the environment can be distinguished from individualistic attitudes, it is hard to say positively what *is* the hierarchical conception of the environment.

Moreover, we found that ideological self-designation on the liberal-conservative scale correlates highly with both egalitarianism and market individualism, which suggests that these cultural biases are conceptually similar to the conventional left-right ideological continuum (cf. Dake and Wildavsky 1991).¹⁵ Would it not be better, then, to speak of ideology rather than cultural bias? The difference may be largely semantic; indeed, Wildavsky often seems to use the terms “cultural bias” and “ideology” almost interchangeably (1987, 13, and 1988, 593, 594; also see Fine 1995, 130, 132; Wilson 1992, chapter 1). Ideology, as Todd Gitlin has said, is but “contested culture” (Swidler 1986, 279, n14). Wildavsky tends to prefer “culture” to “ideology,” however, because, as Geertz (1973, esp. 196–200) pointed out more than thirty years ago, the term “ideology” connotes psychologically “deformed” or “distorted” thought. Wildavsky, following Douglas, prefers the term “cultural bias” because he means to insist that all preferences, not just those with which he disagrees, are “mired in bias” (Wildavsky 1984, 25).

The problem with using “culture” when not referring to entire nations or linguistic,

religious, or ethnic groups is that this is at odds with standard usage (Laitin 1988, 589). For Douglas and Wildavsky, however, the key gauge of culture is not a shared language, god, or flag but whether the same people consistently line up on the same side of seemingly unrelated issues (Wildavsky 1988, 593, 595). Our survey did not probe attitudes beyond the environmental domain, but research on new social movements has consistently demonstrated the overlap between the personnel, methods, and ideology of the environmental, peace, antinuclear, feminist, and consumer protection movements (Johnston and Klandermans 1995a; O’Riordan 1995, 5). Douglas and Wildavsky’s cultural theory implies that those who are active across a range of social movements will share the same cultural bias or, if you must, ideology or even “ideoculture” (Johnston and Klandermans 1995b, 12).

The suitability of the term “culture” is especially problematic when one relies, as we have, on attitudinal data alone. A full test of the Douglas-Wildavsky cultural theory would incorporate ethnographic data detailing social and institutional relations within environmental groups (Marris, Langford, and O’Riordan 1996, 6; Gross and Rayner 1985; cf. Laitin 1988, 591–2). If we found, for example, that groups whose members share egalitarian preferences (Earth Island and Earth First! in our surveys) are also organized in a more egalitarian manner, then we would be more justified in referring to “culture” rather than “ideology,” since shared social relations as well as values and beliefs would be involved.

In an exchange with Wildavsky in the pages of this journal, Laitin objected that Wildavsky’s cultural theory “does not answer his question about the source of preferences but merely pushes it back one step” (Laitin 1988, 590; also Friedman 1991, 346). Egalitarianism explains a substantial amount

of variation in environmental preferences, but what explains the preference for egalitarianism? This is an important question, but to concede that Wildavsky's cultural theory pushes the question of preference formation back a step is not to deny the utility of cultural explanations (cf. Ellis 1993, 106–7). As a logical matter, there can be *no* value or preference about which one cannot ask a further “but why?” question. Laitin's objection, then, is not specific to the Douglas-Wildavsky version of cultural theory; it

applies to all attempts to explain specific beliefs or attitudes in terms of more general and stable values or worldviews.¹⁶ Douglas and Wildavsky freely admit that their cultural theory “has very little to say about people's choices between social forms” (Douglas 1982b, 7; also Wildavsky 1987, 4, 6). What their cultural theory does say is that once an individual opts for a particular set of ideas and institutions, a wide range of other attitudes and behaviors follow. Predicting a lot from a little is our idea of a powerful theory.

APPENDIX A

Sample Information and Methods

ENVIRONMENTAL ACTIVISTS/MEMBERS

The Audubon sample was obtained from an August 1994 membership list of the Salem Audubon Society. We selected a systematic sample of 400 names from a list of more than 800. Although the majority of the chapter lives in Salem, members also reside in a number of smaller towns in the area. Of the 400 surveys sent out in May 1995, 36 were returned undeliverable; the 214 surveys returned completed represent a response rate of 59% (214/364). The Sierra Club sample was randomly drawn by club officials from the membership lists of the Oregon chapter, which counts approximately 14,000 members. Surveys were mailed in June 1995. Three were returned undeliverable, and 202 were completed and returned on time, for a response rate of 51% (202/397). The Earth Island sample was drawn by obtaining a list of members in Oregon and Washington. We sent the survey to each of the 246 Oregon members and randomly selected 254 of the 410 Washington members in May 1995. Of these 500 surveys, 16 were returned undelivered; the 290 completed surveys represent a response rate of 60% (290/484). One follow-up mailing was used for each group.

SALEM-YAMHILL PUBLIC

In December 1995, we mailed a shorter version of the survey to residents of Yamhill County and Salem, Oregon. Systematic probability samples of 400 households in the county and 400 households in Salem-Keizer were drawn from the respective phone books. For Salem-Keizer, 24 surveys were undeliverable, and the 197 surveys returned and completed yielded a response rate of 52% (197/376). For Yamhill County, 15 surveys were undeliverable, and the 180 surveys returned and completed represented a response rate of 47% (180/385). The total response rate for the two surveys was 50% (377/761). Two follow-up mailings were made. To compensate for a pronounced gender imbalance (almost two males to every one female), we weighted the sample for gender in calculating mean scores and frequencies for the Salem-Yamhill data.

Demographically, the Salem-Yamhill respondents have substantially lower education levels than do members of the three environmental groups, who tend to be extremely well educated. Almost three-quarters of the environmentalists claim to have college degrees, as compared to 43 per-

cent of the public sample (46% in Salem, 38% in Yamhill). In age and household income, the two samples look remarkably similar, with environmentalists slightly more affluent and no different in average age. Within the environmental groups, however, there was substantial age variation. Audubon respondents are substantially older than either Sierra Club or Earth Island respondents. Among the former, for instance, 36% are over age 65, and only 22% are under age 45, compared to 22% and 43% for the latter two.

ENVIRONMENTAL LEADERS

In late summer 1995, the same version of the environmental survey was sent to 50 leaders in both the Sierra Club and the Earth Island Institute. The latter list was obtained from the projects given on the inside cover of a recent issue of the group's magazine, in consultation with Mary Houghteling, Earth Island's Development Director. The Sierra Club leadership list was compiled by Bob Frenkel, chair of the Oregon chap-

ter. We received 33 surveys from the Sierra Club and 29 from Earth Island, for a response rate of 66% and 58%, respectively. No follow-up letter was sent.

EARTH FIRST!

The sample was obtained from Dan Metz's (1995) survey of the Portland-based group, the Voluntary Human Extinction Movement. The group's motto, "May we live long and die out," expresses its leader's belief that only by voluntarily halting human reproduction can the earth and its creatures recover and flourish. The questionnaire, which included a number of the same items used in the environmental survey, was sent in April 1995 to all U.S. subscribers of the group's newsletter, *These Exit Times*. Only two were returned as undeliverable. The response rate, with no follow-up mailing, was 58% (219/375). The survey included a question asking respondents whether they belonged to Earth First! Seventy-nine respondents (36%) reported that they did.

APPENDIX B

Measurement and Scale Construction

For the first seven categories below, reference is made to a seven-point scale: strongly disagree (-3), disagree (-2), somewhat disagree (-1), neither agree nor disagree (0), somewhat agree (+1), agree (+2), strongly agree (+3).

NEW ECOLOGICAL CONSCIOUSNESS

The scale is scored as an average of the ten items in Table 5.8. Each item was scored on a seven-point scale. Standard deviation and the internal consistency of items are reported in Table 5.8.

ENVIRONMENTAL CONCERN

The scale is scored as an average of the five items in Table 5.9. Each item was scored on a seven-point scale. Standard deviation and the internal consistency of items are reported in Table 5.9. Scoring on items 2 and 5 was reversed.

EGALITARIANISM

The scale is scored as an average of the three hierarchy items in Table 5.10. Each item was scored on a seven-point scale.

TABLE 5.8 New Ecological Consciousness

	Valid N	Standard Deviation	Item-to-Total Correlation	Alpha If Item Deleted
1. If things continue on their present course, we will soon experience a major ecological catastrophe.	704	1.30	.64	.80
2. What human beings are currently doing to nature can be fairly characterized as an "ecoholocaust."	700	1.50	.65	.80
3. Humans are no more important than any other species.	701	2.00	.42	.82
4. We would be better off if we dramatically reduced the number of people on this earth.	697	1.78	.43	.82
5. No wild place will be safe from us until we reconsider our devout belief that economic growth is always good.	700	1.47	.55	.81
6. We can only save the planet by radically transforming our social lives with each other.	698	1.61	.46	.82
7. Unrelenting exploitation of nature has driven us to the brink of ecological collapse.	702	1.51	.60	.80
8. We have reduced natural beauty to postcard prettiness, just another commodity for our consumption.	697	1.63	.58	.80
9. Human happiness and human reproduction are less important than a healthy planet.	694	1.67	.43	.82
10. The oceans are gradually dying of oil pollution and dumping of waste.	703	1.21	.49	.82
Ten-item New Ecological Consciousness Scale	663	.99	NA	NA
Cronbach's alpha = .83				

NA = Not applicable.

Standard deviation and the internal consistency of items are reported in Table 5.10.

HIERARCHY

The scale is scored as an average of the three hierarchy items in Table 5.9. Each item was scored on a seven-point scale.

Standard deviation and the internal consistency of items are reported in Table 5.9.

INDIVIDUALISM

The scale is scored as an average of the three individualism items in Table 5.10. Each item was scored on a seven-point scale. Standard

TABLE 5.9 Environmental Concern

	Valid N	Standard Deviation	Item-to-Total Correlation	Alpha If Item Deleted
1. If things continue on their present course, we will soon experience a major ecological catastrophe.	376	1.88	.80	.82
2. The problems of the environment are not as bad as most people think.	376	1.77	.68	.85
3. The oceans are gradually dying from oil pollution and dumping of waste.	377	1.73	.71	.84
4. We are fast using up the world's natural resources.	375	1.69	.69	.85
5. People worry too much about human progress harming the environment.	377	1.88	.63	.86
Five-item Environmental Concern Scale	373	1.46	NA	NA
Cronbach's alpha = .87				

NA = Not applicable.

deviation and the internal consistency of items are reported in Table 5.10.

SPENDING ON THE ENVIRONMENT

Item wording was: "We are spending too little money on improving and protecting the environment." The item was scored on a seven-point scale. In the activist sample, standard deviation = 1.18; in the unweighted Salem-Yamhill sample, standard deviation = 1.87.

PARTICIPATION

Item wording was: "We should all participate in each decision that directly affects its." The item was scored on a seven-point scale. Standard deviation = 1.49. The item was not used in the Salem-Yamhill survey.

POLITICAL ACTIVITY

Environmental group members were asked: "Which, if any, of the following activities

have you engaged in during the past four years? (1) Written a letter to a member of Congress or the state legislature about an environmental issue. (2) Written a letter to the editor about an environmental issue. (3) Boycotted a company's products because of its record on the environment. (4) Done volunteer work for an environmental group. (5) Attended a meeting of an environmental group." In Table 5.7 in the text, those who reported performing one or fewer of these activities were scored as "inert"; those performing two or three were scored as "active"; and those performing four or five were scored as "highly active."

PARTY IDENTIFICATION

"Do you think of yourself as closer to the Republican Party or Democratic Party." Values ranged from 0 (Republican) to 1 (Democrat), with "Neither" as a third option. Standard deviation = .33 in activist sample, .50 in unweighted Salem-Yamhill sample. In

TABLE 5.10 Cultural Biases

	Sample	Valid N	Standard Deviation	Item-to-Total Correlation	Alpha If Item Deleted
Egalitarianism					
1. The world would be a more peaceful place if its wealth were divided more equally among nations.	Activist	701	1.78	.61	.70
	Public	374	1.85	.55	.75
2. We need to dramatically reduce inequalities between the rich and the poor, whites and people of color, and men and women.	Activist	699	1.49	.60	.71
	Public	370	1.90	.61	.68
3. What our country needs is a fairness revolution to make the distribution of goods more equal.	Activist	695	1.66	.63	.67
	Public	370	1.75	.65	.64
Three-item Egalitarianism Scale	Activist	689	1.37	NA	NA
	Public	368	1.52	NA	NA
Cronbach's alpha = .77 in both populations.					
Hierarchy					
1. One of the problems with people today is that they challenge authority too often.	Activist	700	1.54	.55	.69
	Public	375	1.83	.45	.56
2. Society works best when people strictly obey all rules and regulations.	Activist	700	1.63	.59	.64
	Public	372	1.61	.49	.49
3. Respect for authority is one of the most important things that children should learn.	Activist	703	1.74	.58	.65
	Public	375	1.35	.43	.58
Three-item Hierarchy Scale	Activist	698	1.33	NA	NA
	Public	370	1.23	NA	NA
Cronbach's alpha = .75 in activist sample and .64 in Salem-Yamhill public sample.					
Individualism					
1. Competitive markets are almost always the best way to supply people with the things they need.	Activist	700	1.70	.44	.57
	Public	377	1.50	.41	.59
2. Society would be better off if there was much less government regulation of business.	Activist	701	1.65	.45	.55
	Public	374	1.82	.46	.54
3. People who are successful in business have a right to enjoy their wealth as they see fit.	Activist	700	1.73	.47	.53
	Public	373	1.53	.49	.49
Three-Item Individualism Scale	Activist	693	1.30	NA	NA
	Public	372	1.24	NA	NA
Cronbach's alpha = .64 in both populations.					

NA = Not applicable.

the regression analysis reported in text Table 5.5 and the partial correlations reported in text Table 5.3, dummy variables were created for Republican and for Democrat.

IDEOLOGY

"In general, when it comes to politics, do you usually think of yourself as...Strongly Conservative, Conservative, Somewhat Conservative, Somewhat Liberal, Liberal, Strongly Liberal, None of the Above." Standard deviation = 1.17 in activist sample, 1.15 in unweighted Salem-Yamhill sample.

AGE

Responses were coded in six categories, from under age 25 (1) to over age 65 (6). Standard deviation = 1.48 in activist sample, 1.40 in unweighted Salem-Yamhill sample.

APPENDIX C

Rotated Factor Matrices

	Factor 1	Factor 2
Salem-Yamhill		
Peaceful place	.77343	-.16219
Reduce differences	.78429	-.24657
Fairness revolution	.85439	-.14971
Competitive markets	-.20150	.69237
Less regulation	-.05738	.81803
Enjoy wealth	-.30116	.71093
Environmentalists		
Peaceful place	.79551	-.19512
Reduce differences	.79781	-.20145
Fairness revolution	.82797	-.19571

EDUCATION

Responses were coded in six categories, from some high school (1) to graduate degree (6). Standard deviation = 1.37 in activist sample, 1.52 in unweighted Salem-Yamhill public.

GENDER

Responses were coded female (0) or male (1). Standard deviation = .50 in activist sample, .47 in unweighted Salem-Yamhill sample.

HOUSEHOLD INCOME

Responses were coded in six categories, from less than \$20,000 (1) to more than \$100,000 (6). Standard deviation = 1.49 in activist sample, 1.41 in unweighted Salem-Yamhill sample.

	Factor 1	Factor 2
Environmentalists		
Competitive markets	-.32272	.64730
Less regulation	-.07675	.81083
Enjoy wealth	-.21482	.74243

Note: In each sample, an initial principal components extraction produced two factors with eigenvalues greater than one. The eigenvalue of the first factor was 2.78 (46.4% of the variance) in the Salem-Yamhill sample and 2.85 (47.6% of the variance) in the environmentalist sample; the eigenvalue of the second factor was 1.06 (17.6% of the variance) in the Salem-Yamhill sample and 1.00 (16.7% of the variance) in the environmentalist sample. Subsequent common factor analysis retaining these two factors, with varimax rotation, yielded the factor loadings reported in this table.

ENDNOTES

1. Surveying National Opinion Research Center data on support for spending on the environment from 1973 to 1990, Jones and Dunlap (1992) found that age, education, income, gender, race, residence at age 16, current residence, occupational prestige, industrial sector, as well as political ideology and political party, taken all together, could not explain more than about 9% of the variance. Only age (Pearson's $r = -.23$) and to a much lesser extent education ($r = .14$) and ideology ($r = .14$) showed much of a relationship with support for environmental spending.

2. Recently, there has been closer empirical scrutiny. See, for example, Marris, Langford, and O'Riordan 1996; Grendstad and Selle 1997.

3. Environmentalism was originally no more than a passing footnote to Inglehart's "postmaterialism" thesis (1971, 1012), but the environmental movement is now generally considered "the archetypical example of postmaterial politics" (Dalton 1994, xiii).

4. Our original plan was to survey at least one mainstream and one nonmainstream group. We chose these three primarily because they were the ones that granted us access to their membership list. We also hoped to survey a so-called wise-use group, but we were not successful in gaining access to its membership list.

5. We made no effort to measure Wildavsky's fourth category, "fatalism," largely because previous survey research (Jenkins-Smith 1994a, 16) has found it to be inconsequential in understanding environmental attitudes.

6. Throughout this article, we often refer to the Sierra Club, Earth Island, and Audubon members surveyed as "environmental activists." Although not all members of environmental groups are activists in the usual sense of that term, the great majority of our respondents deserve that label. During the past five years, more than 60% had attended an environmental group meeting; slightly more than half had done volunteer work for an environmental group; almost three-fourths had written a letter to a legislator regarding an environmental issue; and 80% participated in a product boycott because of the

company's record on the environment. The only political activity reported by less than a majority was writing a letter to the editor about an environmental issue, done by fewer than one-third. Of these five political activities, at least two were reported by 83% of respondents and four or five were reported by 40%.

7. The stronger relationship for the Salem-Yamhill group is likely due largely to the less restricted range of environmental responses among the public as compared to the activists. The standard deviation on the environmental spending item was 1.18 among the activists, compared to 1.87 for the public. Similarly, the standard deviation on the ten-item measure of ecological consciousness was 0.99, in contrast to 1.50 for the five-item measure of environmental concern used in the general public survey. The standard deviation for each item used in these scales is reported in Appendix B.

8. One of Inglehart's (1977, 399-400) two measures of "postmaterialism" is: "Give the people more say in important governmental decisions." Because our participation item proved to be so weakly related to environmental attitudes and beliefs, we dropped the item in the Salem-Yamhill survey.

9. Nor can the weakness of this relationship be attributed simply to the restriction of range on the participation item. The range and standard deviation (1.49) on the participation item are identical to those for another item: "We need to dramatically reduce inequalities between the rich and the poor, whites and people of color, and men and women" (see Table 5.10). Yet, the Pearson's r correlation between this egalitarian measure and the environmental spending item is .33, and the correlation with the new ecological consciousness scale is .28.

10. When one controls for other variables, as Table 5.5 shows, these weak relationships are even further at attenuated or, as is the case among activists, reversed.

11. These results are virtually identical to those found by Marris, Langford, and O'Riordan (1996, Table 6.2).

12. It is possible that there is an emerging consensus on biocentrism (Kempton, Boster, and

Hartley 1995, 224.) Such a claim is difficult to test since it involves the future direction of change. It is possible to say, however, that judging by our data, no such consensus has yet emerged. Moreover, to the extent that environmental attitudes remain tied to contested egalitarian and individualistic cultural biases, we would expect that it will be difficult for such a consensus to emerge.

13. Caution is necessary in generalizing from the Salem-Yamhill sample, which differs in a number of important ways from the nation or even the Pacific Northwest. Tables 5.6 and 5.7 likely overstate to some extent the differences in cultural bias between activists and the public. Two surveys by Jenkins-Smith (1994b) in New Mexico and the United States used an item virtually identical to one of ours: "What our country needs is a fairness revolution" (Jenkins-Smith used "society" rather than "country"). He found mean scores of $-.14$ for the state and $-.22$ for the nation. While those scores are still slightly less egalitarian than those of Audubon ($-.06$) and Sierra Club members ($.03$), they are more egalitarian than for the Salem-Yamhill sample ($-.47$). For another similar item, "People who are successful in business have a right to enjoy their wealth as they see fit." (Jenkins-Smith's item was, "People who get rich in business have a right to keep and enjoy their wealth.") he found that the public overwhelmingly endorsed this individualistic measure (mean scores of 1.33 and 1.40) in ways that seem comparable to the Salem-Yamhill sample (1.20) and quite unlike our activists. Obviously, larger national surveys are needed to gauge more accurately the attitudinal gap between activists and the general public.

14. The Pearson's r , correlation coefficient between hierarchy and individualism is $.45$ in the activist sample and $.27$ in the general public sample. These intercorrelations, however, are substantially less strong than previous research (using different items) has found. In Dake and Wildavsky (1991, 21), the intercorrelation between market individualism and hierarchy is $.54$; in Marris, Longford, and O'Riordan (1996, Table 6.2; also see 27) it is $.65$ or $.53$, depending on the items used.

15. For egalitarianism and ideological self-designation, Pearson's r is $.52$ among activists and $.45$ among the Salem-Yamhill public. The correlation between market individualism and ideology is $-.63$ among activists and $-.45$ among the general public. The correlation between hierarchy and ideology is $-.49$ in the activist sample but only $-.23$ among the general public.

16. A more troubling question remains, however. According to Wildavsky (1988, 6), what matters most to people is how they live with one another, but how do we know this is true? What matters most to some people could be how they live with nature. It is by no means obvious that cultural bias is primary and environmental commitment secondary or derivative. The strong relationship we uncovered between cultural bias and environmental values and beliefs is consistent with the Wildavsky-Douglas hypothesis, but it is also consistent with a model that portrays people deriving their cultural biases from their ecological concerns. Judging between these alternative models calls for further research into the relative stability of cultural biases and environmental values and beliefs as well as their temporal development.

REFERENCES

- Brick, Phil, Pat Hannigan, and Ian Krueger. 1995. "Common Goals, Divided Communities: A Survey of Attitudes about Economic Change and Natural Resources in the Hells Canyon Region." Department of Politics, Whitman College, Walla Walla, WA. Typescript.
- Cotgrove, Stephen. 1982. *Catastrophe or Cornucopia: The Environment, Politics and the Future*. Chichester, Eng: John Wiley.
- Dake, Karl, and Aaron Wildavsky. 1990. "Theories of Risk Perception: Who Fears What and Why?" *Daedalus* 119(Fall):41-60.
- Dake, Karl, and Aaron Wildavsky. 1991 "Individual Differences in Risk Perception and Risk-Taking Differences." In *The Analysis, Communication and Perception of Risk*, ed. B. John Garrick and Willard C. Gekler. New York: Plenum Press.

- Dalton, Russell J. 1994. *The Green Rainbow: Environmental Groups in Western Europe*. New Haven, CT: Yale University Press.
- Douglas, Mary. 1970. *Natural Symbols: Explorations in Cosmology*. London: Barrie and Rockliff.
- Douglas, Mary. 1975. "Environments at Risk." *Implicit Meanings: Essays in Anthropology*. London: Routledge.
- Douglas, Mary. 1982a. "Cultural Bias." *In the Active Voice*. London: Routledge.
- Douglas, Mary. 1982b. "Introduction to Grid/Group Analysis." In *Essays in the Sociology of Preception*, ed. Mary Douglas. London: Routledge.
- Douglas, Mary. 1997. "The Depoliticization of Risk." In *Culture Matters: Essays in Honor of Aaron Wildavsky*, ed. Richard J. Ellis and Michael Thompson. Boulder, CO: Westview Press.
- Douglas, Mary, and Aaron Wildavsky. 1982. *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers*. Berkeley: University of California Press.
- Dunlap, Riley F., George H. Gallup, Jr., and Alec M. Gallup. 1993. "Of Global Concern: Results of the Health of the Planet Survey." *Environment* 35(November):7-15, 33-40.
- Dunlap, Riley E., and Rik Scarce. 1991. "The Polls—Poll Trends: Environmental Problems and Protection." *Public Opinion Quarterly* 55 (Winter):651-72.
- Dunlap, Riley E., and Kent D. Van Liere. 1978. "The 'New Environmental Paradigm.'" *Journal of Environmental Education* 9(Summer):10-19.
- Dunlap, Riley E., Kent D. Van Liere, Angela Merzig, William R. Catton, Jr., and Robert E. Howell. 1992. "Measuring Endorsement of an Ecological Worldview: A Revised NEP Scale." Paper presented at the sixth meeting of the Society for Human Ecology, Snowbird, Utah.
- Ellis, Richard J. 1993. "The Case for Cultural Theory: Reply to Friedman." *Critical Review* 7 (Winter):81-128.
- Fine, Gary Alan. 1995. "Public Narration and Group Culture: Discerning Discourse in Social Movements." In *Social Movements and Culture*, ed. Hank Johnston and Bert Klandermans. Minneapolis: University of Minnesota Press.
- Friedman, Jeffrey. 1991. "Accounting for Political Preferences: Cultural Theory vs. Cultural History." *Critical Review* 5(Spring):325-51.
- Geertz, Clifford. 1973. "Ideology as a Cultural System." *The Interpretation of Cultures*. New York: Basic Books.
- Grendstad, Gunnar, and Per Selle. 1997. "Cultural Theory, Postmaterialism, and Environmental Attitudes." In *Culture Matters, Essays in Honor of Aaron Wildavsky*, ed. Richard J. Ellis and Michael Thompson. Boulder, CO: Westview Press.
- Gross, Jonathan L., and Steve Rayner. 1985. *Measuring Culture: A Paradigm for the Analysis of Social Organization*. New York: Columbia University Press.
- Guth, James L., John C. Green, Lyman A. Kellstedt, and Corwin E. Smidt. 1995. "Faith and the Environment: Religious Beliefs and Attitudes on Environmental Policy." *American Journal of Political Science* 39(May):364-82.
- Inglehart, Ronald. 1971. "The Silent Revolution in Europe: Intergenerational Change in Post-Industrial Societies." *American Political Science Review* 65(December):991-1017.
- Inglehart, Ronald. 1977. *The Silent Revolution: Changing Values and Political Styles among Western Publics*. Princeton, NJ: Princeton University Press.
- Inglehart, Ronald. 1990. *Culture Shift in Advanced Industrial Society*. Princeton, NJ: Princeton University Press.
- Jenkins-Smith, Hank C. 1994a. "Stigma Models: Testing Hypotheses of How Images of Nevada Are Acquired and Values Are Attached to Them." University of New Mexico, Albuquerque. Typescript.
- Jenkins-Smith, Hank C. 1994b. "Frequency Report: USA and NM Samples Combined." Probabilistic Risk Assessment Project, Institute for Public Policy, University of New Mexico. Typescript.
- Johnston, Hank, and Bert Klandermans, eds. 1995a. *Social Movements and Culture*. Minneapolis: University of Minnesota Press.

- Johnston, Hank, and Bert Klандermans. 1995b. "The Cultural Analysis of Social Movements." In *Social Movements and Culture*, ed. Hank Johnston and Bert Klандermans. Minneapolis: University of Minnesota Press.
- Jones, Robert Emmet, and Riley Dunlap. 1992. "The Social Bases of Environmental Concern: Have They Changed Over Time?" *Rural Sociology* 57 (Spring):28-47.
- Kempton, Willett, James S. Boster, and Jennifer A. Hartley. 1995. *Environmental Values in American Culture*. Cambridge, MA: MIT Press.
- Laitin, David. 1988. "Political Culture and Political Preferences." *American Political Science Review*, 82(June):589-93.
- Marris, Claire, Ian Langford, and Timothy O'Riordan. 1996. "Integrating Sociological and Psychological Approaches to Public Perceptions of Environmental Risks: Detailed Results from A Questionnaire Survey." CSERGE Working Paper GEC 96-07. University of East Anglia, Norwich, England.
- Metz, Dan. 1995. "Dissecting the Voluntary Human Extinction Movement." Willamette University, Salem, Oregon. Typescript.
- Milbrath, Lester W. 1984. *Environmentalists: Vanguard for a New Society*. Albany: State University of New York Press.
- O'Riordan, Timothy. 1995. "Frameworks for Choice: Core Beliefs and the Environment." *Environment* 37(October):4-9, 25-9.
- Paehlke, Robert C. 1989. *Environmentalism and the Future of Progressive Politics*. New Haven, CT: Yale University Press.
- Rayner, Steve. 1992. "Cultural Theory and Risk Analysis." In *Social Theories of Risk*, ed. Sheldon Krinsky and Dominic Golding. Westport, CT: Praeger.
- Swidler, Ann. 1986. "Culture in Action: Symbols and Strategies." *American Sociological Review* 51(April):273-86.
- Thompson, Michael, Richard Ellis, and Aaron Wildavsky. 1990. *Cultural Theory*. Boulder, CO: Westview Press.
- Van Liere, Kent D., and Riley E. Dunlap. 1980. "The Social Bases of Environmental Concern: A Review of Hypotheses, Explanations and Empirical Evidence." *Public Opinion Quarterly* 44(Summer):181-97.
- Wildavsky, Aaron. 1984. "From Political Economy to Political Culture, or Rational People Defend Their Way of Life." University of California, Berkeley. Typescript.
- Wildavsky, Aaron. 1987. "Choosing Preferences by Constructing Institutions: A Cultural Theory of Preference Formation." *American Political Science Review* 81(March):3-21.
- Wildavsky, Aaron. 1988. "Political Culture and Political Preferences." *American Political Science Review* 82(June):593-6.
- Wildavsky, Aaron. 1991. *The Rise of Radical Egalitarianism*. Washington, DC: American University Press.
- Wilson, Richard. 1992. *Compliance Ideologies: Rethinking Political Culture*. New York: Cambridge University Press.