

YALE LAW SCHOOL



Public Law & Legal Theory
Working Paper Series
Working Paper No. 05

**More Statistics, Less Persuasion:
A Cultural Theory of Gun-Risk Perceptions**

by
Donald Braman and Dan M. Kahan

This paper can be downloaded without charge from the
Social Science Research Network Paper Collection at
<http://papers.ssrn.com/abstract=286205>

Extremely Preliminary Draft, Subject to Massive Revisions
address correspondence to dan.kahan@yale.edu

More Statistics, Less Persuasion: A Cultural Theory of Gun-Risk Perceptions

*Donald Braman**
and *Dan M. Kahan†*

ABSTRACT

What motivates individuals to support or oppose the legal regulation of guns? What sorts of evidence or arguments are likely to promote a resolution of the gun control debate? Using the survey methods associated with the *cultural theory of risk*, we demonstrate that individuals' positions on gun control derive from their cultural world views: individuals of an egalitarian or solidaristic orientation tend to support gun control, those of a hierarchical or individualist orientation to oppose it. Indeed, cultural orientations so defined are stronger predictors of individuals' positions than is any other fact about them, including whether they are male or female, white or black, Southerners or Easterners, urbanites or country dwellers, conservatives or liberals. The role of culture in determining attitudes towards guns suggests that econometric analyses of the effect of gun control on violent crime are unlikely to have much impact. As they do when they are evaluating empirical evidence of environmental and other types of risks, individuals can be expected to credit or dismiss empirical evidence on "gun control risks" depending on whether it coheres or conflicts with their cultural values. Rather than focus on quantifying the impact of gun control laws on crime, then, academics and others who want to contribute to resolving the gun debate should dedicate themselves to constructing a new expressive idiom that will allow citizens to debate the cultural issues that divide them in an open and constructive way.

Few issues divide the American polity as dramatically as gun control. Framed by assassinations, mass shootings, and violent crime, the gun debate feeds on our deepest national anxieties. Pitting women against men, blacks against whites, suburban against rural, Northeast against South and West, Protestants against Catholics and Jews, the gun question reinforces the most volatile sources of factionalization in our political life. Pro- and anti-control

* Ph.D. candidate, Yale University, Department of Anthropology.

† Professor of Law, Yale Law School.

We would like to thank Yale Law School for its generous financial support of the research reflected in this article. We are also grateful to David Nickerson for assisting us with statistical analysis and Chrystiane Pereira for assisting us with research.

forces spend millions of dollars to influence the votes of legislators and the outcomes of popular elections. Yet we are no closer to achieving consensus on the major issues today than we were ten, thirty, or even eighty years ago.

Admirably, economists and other empirical social scientists have dedicated themselves to freeing us from this state of perpetual contestation. Shorn of its emotional trappings, the gun debate, they reason, comes down to a straightforward question of fact: do more guns make society less safe or more?¹ Control supporters take the position that the ready availability of guns *diminishes* public safety by facilitating violent crimes and accidental shootings; opponents, that such availability *enhances* public safety by enabling potential crime victims to ward off violent predation. “[O]nly empirical research can hope to resolve which of th[ese] . . . possible effects . . . dominate[s].”² Accordingly, social scientists have attacked the gun issue with a variety of empirical methods — from multivariate regression models³ to contingent valuation studies⁴ to public-health risk factor analyses.⁵

But evaluated in its own idiom, this prodigious investment of intellectual capital has yielded only meager practical dividends. As high-quality studies of the consequences of gun control accumulate in number, gun control politics rage on with unabated intensity. Indeed, in the 2000 election, their respective support for and oppo-

¹ Compare Mark Duggan, *More Guns, More Crime*. *J. Pol. Econ.* (forthcoming 2001), with John R. Lott Jr., *More Guns, Less Crime: Understanding Crime and Gun Control Laws* (2d ed. 2000).

² Ian Ayres & John J. Donohue, *Nondiscretionary Concealed Weapons Laws: A Case Study of Statistics, Standards of Proof, and Public Policy*, 1 *Am. L. & Econ. Rev.* 436, 439 (1999).

³ See, e.g., *id.* at 452-56; Dan Black & Daniel Nagin, *Do “Right to Carry” Laws Deter Violent Crime?*, 27 *J. Legal Stud.* 209 (1998); Duggan, *supra* note 1; Jens Ludwig, *Concealed-Gun-Carrying Laws and Violent Crime: Evidence from State Panel Data*, 18 *Int’l Rev. L. & Econ.* 239 (1998).

⁴ See, e.g., Philip J. Cook & Jens Ludwig, *Gun Violence: The Real Costs* (2000).

⁵ See, e.g., Arthur L. Kellermann & et al., *Gun Ownership as a Risk Factor for Homicide in the Home*, 329 *New Eng. J. Med.* 1084 (1993).

sition to gun control may well have cost Democrats the White House and Republicans control of the U.S. Senate.⁶

Maybe empirical social science has failed to quiet public disagreement over gun control because empirical social scientists themselves haven't yet reached consensus on what the consequences of gun control really are. If so, then the right course for academics who want to make a positive contribution to resolving the gun control debate is to stay the course — to continue devoting their energy, time, and creativity to the project of quantifying the impact of various gun control measures.

But another possibility is that, in focusing on consequences narrowly conceived, empirical social scientists just aren't addressing what members of the public really care about. Guns, historians and sociologists tell us, are not just "weapons or pieces of sporting equipment"; they are also symbols "positively or negatively associated with Daniel Boone, the Civil War, the elemental life styles of the frontier, war in general, crime, masculinity in the abstract, adventure, civic responsibility or irresponsibility, slavery or freedom."⁷ It stands to reason, then, that how an individual feels about gun control will depend a lot on the social meanings that she thinks guns and gun control express and not just on the consequences she believes they impose.⁸ As one southern Democratic Senator recently put it, the gun debate is "about *values*" — "about *who* you are and who you aren't."⁹ Or in the even more pithy formulation of another group of politically minded commentators, "It's about the Culture, Stupid!"¹⁰

⁶ See Jonathan Cowan & Jim Kessler, *Changing the Gun Debate*, Blueprint Magazine, July 12, 2001.

⁷ William R. Tonso, *Gun and Society: The Social and Existential Roots of the American Attachment to Firearms* 38 (1982).

⁸ See Dan M. Kahan, *The Secret Ambition of Deterrence*, 113 Harv. L. Rev. 413, 452-59 (1999).

⁹ Zell Miller, *The Democratic Party's Southern Problem*, N.Y. Times, June 4, 2001, at A17.

¹⁰ Blueprint, July/Aug., 2001.

This view, if correct, has important practical implications for the gun debate. If individuals adopt one position or another because of what guns mean rather than what guns do, then empirical data are unlikely to have much effect on the gun debate. Instead of continuing to focus on the consequences of various types of regulation, academics and others who want to help resolve the gun controversy should dedicate themselves to identifying with as much precision as possible the cultural visions that animate this dispute and to formulating appropriate strategies for enabling those visions to be expressively reconciled in law.

In this respect, we believe that the academic study of gun control stands to benefit from an alliance with the academic study of risk regulation. Members of the public disagree strongly with experts and with one another about the magnitude of various societal risks, from environmental catastrophe to foreign invasion to economic collapse. Through sophisticated survey instruments, anthropologists, psychologists, and sociologists have documented the impact that differences in moral attitudes and cultural orientations have in shaping individuals' perceptions of these kinds of risks. The resulting cultural theory of risk, moreover, has important implications for what must be done — and in particular, what must be said by citizens to one another — in order for such disputes to be definitively settled.

Our goal in this article is to bring the tools of the cultural theory of risk to bear on the gun control controversy. Part I furnishes an overview of the cultural theory of risk. Part II applies the theory to gun control. In addition to reviewing the fit between the cultural theory and existing literature on public opinion toward guns, we also present the results of an original empirical study that demonstrates that attitudes toward gun control do in fact bear the relationship to cultural orientations posited by that theory. Part III spells out the implications of this finding for the kinds of arguments and evidence that are likely to matter in the gun control debate. And Part IV concludes with an exhortation to academics to apply themselves to the creation of a new expressive idiom, one designed to accommodate respectful cultural deliberations over gun control.

I. The Cultural Theory of Risk

Anthropologists, sociologists, and social psychologists have long been interested in the puzzling diversity of risk evaluations. Why might an individual act in an apparently risk-preferring manner in one setting — say, by climbing mountains for recreation — but in risk-averse manner — investing all of his retirement funds in money-market certificates rather than in stocks — in another? Why do different individuals attach radically different evaluations to different societal risks — of, say, a nuclear accident, a foreign war, or the collapse of financial markets?

The answer — or at least one powerful answer — is the complexity and diversity of social norms. Contrary to what rational choice economics assumes, individuals don't have generic attitudes toward risky activities, but instead evaluate them according to context-specific norms that determine what risk-taking connotes about their values and attitudes. So a person may climb mountains on the weekends to demonstrate (to herself and to others) that she possesses courage and physical discipline, and invest her retirement funds in money-market certificates to demonstrate that she is prudent, responsible, and forward-looking.¹¹

Insofar as societies are often the sites of competing norms, moreover, we should expect systematic variation in — and consequently dispute over — public risk assessments. Acceptance of the risks incident to nuclear power, for example, might signal confidence in governmental and scientific authority, man's mastery over his environment, and the feasibility of unimpeded private commerce to one group of citizens, but collective hubris, disrespect for the sacredness of nature, and generational selfishness to another.¹²

¹¹ See generally Elke Weber, *The Utility of Measuring and Modeling Perceived Risk*, in *Choice, Decision, and Measurement* 45 (A. A. J. Marley ed., 1997).

¹² See generally Ellen Peters & Paul Slovic, *The Role of Affect and Worldviews as Orienting Dispositions in the Perception and Acceptance of Nuclear Power*, 26 *J. Applied Soc. Psych.* 1427 (1996).

The *cultural theory of risk*, associated most famously with the work of Mary Douglas and Adam Wildavsky,¹³ systematizes the relationship between risk evaluation, social norms, and political conflict. That theory sees attitudes toward risk as derivative of social norms. Irrespective of what they believe about the actuarial magnitudes of various risks, individuals routinely choose to run some and avoid others because they believe it would be *dishonorable* or *cowardly* or *selfish* or *base* to do otherwise.¹⁴ To the extent that individuals self-consciously rely on these norm-pervaded evaluations, their attitudes toward risk can be said to be *morally derivative* of social norms.

But risk perception can be *cognitively derivative* of social norms as well. The risks that we face in our daily lives are far too vast in number and diverse in nature to be comprehended in their totality. Of all the potential hazards that compete for our attention, the ones most likely to penetrate our consciousness are the ones that comport with our norm-pervaded moral evaluations: it is easy to believe that ignoble activities are also physically dangerous, and worthy ones benign.¹⁵ Thus, “moral concern guides not just response to the risk but the basic faculty of [risk] perception” as well.¹⁶

Because risk perceptions are derivative of social norms in these senses, it would be a mistake, according to the cultural theory, to see political controversy over risk as involving mere factual disagreements. Individuals are primed by norms to perceive certain risks and not others as worthy of public attention. When bestowed, such attention necessarily reinforces the norms that make those risks salient and denigrates the norms that would fix our attention on some alternative schedule of dangers and threats. “We choose [which] risks [to attend to] in the same package as we choose our social institutions.”¹⁷ Thus, even when framed in narrowly factual

¹³ Mary Douglas & Aaron Wildavsky, *Risk and Culture* (1982).

¹⁴ *See id.* at 73.

¹⁵ *See id.* at 72-73.

¹⁶ Mary Douglas, *Risk Acceptability According to the Social Sciences* 60 (1985).

¹⁷ Douglas & Wildavsky, *supra* note 13, at 9.

terms, public disagreements over risks are in truth disputes between citizens who subscribe to competing norms and to the conflicting cultural visions that those norms construct.

The most ambitious version of the cultural theory reduces these orientations to three.¹⁸ The *hierarchical* orientation favors deference to traditional forms of social and political authority and is protective of the roles and status claims that they entail. The *egalitarian* view, in contrast, abhors social stratification, distrusts the social and political authority structures that rest on such differentiation, and favors collective action to equalize wealth, status, and power. The *individualist* view prizes individual autonomy, celebrates free markets and other institutionalized forms of private ordering, and resents collective interference with the same.¹⁹

Each of these worldviews “has its own typical risk portfolio” that “shuts out perception of some dangers and highlights others.”²⁰ Thus, in line with their commitment to fair distribution of resources, individuals of an egalitarian orientation are predictably sensitive to environmental and industrial risks, the minimization of which licenses the regulation of commercial activities productive of disparities in wealth and status. In contrast, individualists, precisely because they are dedicated to the autonomy of markets and other private orderings, tend to see environmental risks from commerce as low — as do hierarchists, in line with their confidence in the competence of authorities to solve society’s problems. Hierarchists and individualists have their own distinctive anxieties — of the dangers of social deviance, the risks of foreign invasion, or the fragility of economic institutions — which egalitarians predictably dismiss.²¹

¹⁸ See, e.g., Aaron Wildavsky, *Choosing Preferences by Constructing Institutions: A Cultural Theory of Preference Formation*, 81 *Am. Pol. Sci. Rev.* 1 (1987).

¹⁹ See *id.* at 6; see also Peters & Slovic, *supra* note 12; Aaron Wildavsky & Karl Dake, *Theories of Risk Perception: Who Fears What and Why?*, 114 *Daedalus* 41, 44-45 (1990).

²⁰ Douglas & Wildavsky, *supra* note 13, at 8, 85.

²¹ See Wildavsky & Dake, *supra* note 19, at 44-54.

The patterns of risk perception posited by the cultural theory have been powerfully borne out by empirical testing. Using sophisticated survey instruments, Karl Dake has shown that the degree to which an individual's cultural orientations tends toward hierarchical, egalitarian, or individualist worldviews does in fact strongly predict that person's attitude toward a wide range of societal risks.²² Looking specifically at nuclear power and other technological and environmental risks, Ellen Peters and Paul Slovic have reached similar conclusions.²³ Indeed, cultural orientations, these scholars have shown, not only explain variance in risk perception, but explain it much more completely than do demographic characteristics such as wealth, education, and political party affiliation.²⁴ Other personal characteristics that have been shown to explain risk perception, such as personality type and affective responses to risk-creating activities, also happen to correlate highly with cultural orientations, and are thus plausibly seen as originating in them.²⁵

To be sure, the cultural theory of risk does not solve all the puzzles associated with the diversity of risk perception. But it involves no exaggeration to say that the cultural theory of risk comes closer to explaining what individuals fear and why than does any other systematic account.

II. Guns, Culture, and Risk

The cultural theory of risk supplies an extremely powerful explanation of political conflict over various types of societal risks. Could it also explain the nature and intensity of the American gun control debate? We now describe an empirical study designed to answer that question.

²² See Karl Dake, *Orienting Dispositions in the Perception of Risk: An Analysis of Contemporary Worldviews and Cultural Biases*, 22 *J. Cross-Cultural Psych.* 61 (1991).

²³ See Peters & Slovic, *supra* note 12.

²⁴ See Wildavsky & Dake, *supra* note 21, at 51 (“Whether we look at knowledge, personality, political orientation, or demographic variables, . . . we find that cultural theory provides the best predictions of a broad range of perceived risk and an interpretive framework in which these findings cohere.”).

²⁵ See Dake, *supra* note 22, at 78; Peters & Slovic, *supra* note 12.

A. Hypotheses

The gun control debate is naturally framed as one involving competing perceptions of risk. Control advocates emphasize the risk that insufficient regulation will make citizens vulnerable to deliberate or accidental shootings, opponents the risk that excessive regulation will leave citizens unable to defend themselves from violent predation. The cultural theory of risk suggests that an individual will select one or the other of these risks for attention depending on how society's response to that risk coheres with that individual's worldview.

Various forms of existing research on public opinion lend plausibility to this view. The strongest predictors of attitudes towards gun control — aside from gun ownership — are demographic.²⁶ Whites are nearly 40% more likely than blacks; Protestants 33% more likely than Catholics and nearly 200% more likely than Jews; and men more than 100% more likely than women to oppose control.²⁷ There are also significant regional and community-type variations: northeasterners are significantly more likely than southern and westerners, and urban dwellers, significantly more likely than country dwellers to *support* control.²⁸ Insofar as group membership

²⁶ See Gary Kleck, *Crime, Culture Conflict and the Sources of Support for Gun Control*, 39 Am. Behavioral Sci. 387, 390, 398 (1996); Tom W. Smith, 1999 National Gun Policy Survey of the National Opinion Research Center: Research Findings 19-20b (2000) [hereinafter "National Gun Policy Survey 1999"]; Tom W. Smith, 1996 National Gun Policy Survey of the National Opinion Research Center: Research Findings 5 (1997) [hereinafter "National Gun Policy Survey 1996"]. Gun ownership, while a strong predictor of attitudes towards gun control, is not a particularly useful one. The most obvious reason is that it simply shifts the question from "why do people support or oppose gun control?" to "why do people own or not own guns?"

²⁷ See General Social Survey, 1988-2000, cross-tabs.

²⁸ See *id.* It might be thought that some these demographic labels are actually describing the same people — that those who live in rural areas are not only more likely to support gun control, but are also more likely to be white than black and Protestant than Jewish. But statistical models controlling for each of these demographic predictors have shown not only that that these demographic descriptors predict differing attitudes towards gun control, but that they do so independently of one another. See Kleck, *supra* note 26. See also Part II.B. *infra* (describing results of our regression analyses).

influences the formation of a person's values, the demographic clustering of gun control attitudes is suggestive, if not conclusive proof, of the impact of culture on gun-risk perceptions.²⁹

The inference that culture is at work also gains support from historical, ethnographic, and even journalistic accounts of the significance of guns in American society. Their prominent (and in many respects fabled³⁰) role in American history has imbued guns with a multiplicity of social meanings.³¹ Used to wrest national independence and to tame the western frontier, guns are thought to resonate as symbols of "honor," "courage," "chivalry," and "individual self-sufficiency."³² These same associations also make gun possession an evocative token of masculinity; the custom of awarding of an adolescent boy his "first gun" has been characterized as "the *bar mitzvah* of the rural WASP,"³³ a "veritable rite[] of passage that certifie[s] [his] arrival at manhood."³⁴ As the tools of the trade for

²⁹ See Kleck, *supra* note 26.

³⁰ See Michael A. Bellesiles, *Arming America: The Origins of a National Gun Culture* (2001).

³¹ See Jan E. Dizard *et al.*, *Introduction: Guns Made Us Free ¾ Now What?*, in *Guns in America: A Reader* 1 (1999).

³² See, e.g., B. Bruce-Briggs, *The Great American Gun War*, Pub. Int., Fall 1976, at 61 ("[The gun culture's] model is that of the independent frontiersman who takes care of himself and his family with no interference from the state"); William R. Tonso, *Gun and Society: The Social and Existential Roots of the American Attachment to Firearms* (1982) (" 'Just to hold [a Colt Model 'P'] in your hand produces a feeling of kinship with our western heritage — an appreciation of things like courage and honor and chivalry and the sanctity of a man's world.' " (quoting gun collector)); Wright, Rossi & Daly, *supra* note 65, at 113 ("The values of th[e] [pro-gun] culture are best typified as rural rather than urban: they emphasize independence, self-sufficiency, mastery over nature, closeness to the land, and so on"). James D. Wright, *Ten Essential Observations on Guns in America*, *Society*, Mar./Apr. 1995, at 68 (for control opponent, the gun "symbolizes manliness, self-sufficiency, and independence, and its use is an affirmation of man's relationship to nature and to history"). See generally See Richard Slotkin, *Gunfighter Nation: The Myth of the Frontier in Twentieth-Century America* (1998) (examining historical evolution of pro-gun meanings in American culture).

³³ Bruce-Briggs, *supra* note 32, at 41.

³⁴ Richard Hofstadter, *America as a Gun Culture*, 21 *Am. Heritage* 4, 82 (1970).

both the military and the police, guns are also emblems of state authority, increasing the appeal of owning them to individuals who hold harshly condemnatory attitudes toward social non-conformists and law-breakers.³⁵

But inverting these meanings, other individuals find guns repugnant. Just as they signify traditionally masculine virtues to some citizens, so guns signify *patriarchy* and *homophobia* to others.³⁶ While some see the decision to own a gun as expressing an attitude of self-reliance, others see it as expressing *distrust* of and *indifference* toward others: “[e]very handgun owned in America is an implicit declaration of war against one’s neighbor.”³⁷ For those who fear guns, the historical reference points are not the American Revolution or the settling of the frontier, but the post-bellum period, in which the privilege of owning guns in the South was reserved to whites, and the 1960s, when gun-wielding assassins killed Medgar Evers, John and Robert Kennedy, and Martin Luther King Jr.³⁸ To these citizens, guns are emblems not of legitimate state authority, but of *racism* and *reaction*.³⁹

From the historical and ethnographic literature, one can infer not only that the gun control controversy is culturally grounded, but that the cultural fault lines that divide Americans on this issue

³⁵ See generally Stinchcombe, *supra* note 59, at 106, 111-12; Wright, Rossi & Daly, *supra* note 65, at 104, 112, 118.

³⁶ See H. Taylor Buckner, *Sex and Guns: Is Gun Control Male Control?* (unpublished manuscript, Aug. 5, 1994) (finding that aversion to “macho” style and tolerance of homosexuality predict support for gun control); Lee Kennett & James La Verne Anderson, *The Gun in America: the Origins of a National Dilemma* (1975) (noting historical centrality of gun control to women’s movement); Wright, *supra* note 32, at (for pro-control individuals, the gun “symbolizes violence, aggression, male dominance”).

³⁷ Don B. Kates Jr., *Public Opinion: The Effects of Extremist Discourse on the Gun Debate*, in *The Great American Gun Debate* 109 (D. B. Kates Jr. and G. Kleck ed., 1997) (quoting Gary Wills).

³⁸ See Kennett & Anderson, *supra* note 36, at 223-25, 231.

³⁹ See, e.g., Hofstadter, *supra* note at 221 (noting that the gun has historically been “an important symbol of white male status”); Stinchcombe, *supra* note 59, at 113.

overlap substantially with the ones featured in the cultural theory of risk. The association of guns with traditional gender roles and with state authority should make gun control anathema to individuals of a relatively hierarchical orientation. Those of an egalitarian orientation, in contrast, should support gun control as a means of affirming gender and racial equality. Persons of a relatively individualist orientation should oppose gun control, which they are likely to see as denigrating the ideal of individual self-reliance. By the same token, individuals who are less inclined toward individualism should favor gun control in order to express trust in, solidarity with, and collective responsibility for the well-being of, their fellow citizens. These are the hypotheses that we decided to test.

B. Empirical Study Design

Our data source was the General Social Survey (GSS), 1988-2000. Conducted by the National Opinion Research Center at the University of Chicago since 1972, the GSS is the premier social science survey of American public opinion.

Using appropriate questions from the survey, we constructed two scales for measuring respondents' cultural orientations.⁴⁰ The first scale, *hierarchy-egalitarianism*, measures the degree to which a respondent is inclined toward either the hierarchical worldview or the egalitarian worldview, which are naturally opposed to one another. For this purpose, we selected GSS items focusing on attitudes toward race, sexual orientation, the military, and capital punishment.⁴¹ Individuals inclined toward an egalitarian worldview, we

⁴⁰ These scales describe relative orientations, not discrete classes of people. In other words, we are not saying that a person is necessarily a *hierarchicalist* or an *egalitarian*, an *individualist* or a *solidarist*. Indeed, it may be (and often is) the case that these norms are competing not only within a society, but within individuals themselves as they come into contact with social institutions that push them towards contradictory approaches. Also, we certainly don't mean to suggest our scales provide a detailed understanding of cultural variation — that requires good history and ethnography. What our cultural orientation scales do provide, however, are heuristic measures that enable reasonable comparisons of the influence of cultural values relative to other characteristics, beliefs, and experiences on individuals' attitudes toward gun control.

⁴¹ The specific GSS items were as follows

assumed, would express relatively strong opposition, those of a hierarchist view relatively weak, to racial discrimination. We also assumed that hierarchists, because of their dedication to conventional gender roles and their abhorrence of social deviance, would condemn homosexuality, while egalitarians, because of their opposition to social differentiation and their tolerance of deviance, would not condemn it. Those of a hierarchical orientation, we posited, should have a favorable view of the military, an institution which is symbolic both of the state's claim to authority and of conventional gender roles. They should also support capital punishment, which is symbolic of the state's intolerance of social deviance.⁴² Those inclined toward egalitarianism should have a relatively negative view of the military and oppose capital punishment for similar reasons.

The second scale, *individualism-solidarism*, measures the degree to which a respondent is inclined toward an individualist worldview or an opposing solidarist one. Although solidarism is not an orientation that figures in previous analyses based on the cultural theory of risk, we believe such a worldview, which we define as the simple negation of individualism, is implicit in the cultural-theory-of-risk framework. Making it explicit in our model facilitates the analysis by

-
- (1) *Do you favor or oppose the death penalty for persons convicted of murder?*
- (2) *Do you think there should be laws against marriages between (Negroes/Blacks/African-Americans) and whites?*
- (3) *What about sexual relations between two adults of the same sex—do you think it is always wrong, almost always wrong, wrong only sometimes, or not wrong at all?*
- (4) *[do you agree with the statement] It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family.*
- (5 and 6) *We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount. Are we spending too much money, too little money, or about the right amount on...*
- (5) *Improving the conditions of Blacks;*
- (6) *The military, armaments and defense.*

⁴² See generally Barbara Ann Stolz, *Congress and Capital Punishment: An Exercise in Symbolic Politics*, 5 L. & Pol. Q. 157 (1983).

making our measure of the individualist orientation commensurate with our measure of the hierarchist and egalitarian ones.

For this scale, we chose GSS items in which respondents were asked whether they believed society should be spending more or less on a variety of regulatory and social welfare programs. We surmised that those of an individualist orientation, in line with their support for the autonomy of markets and other private orderings, would favor spending less. In line with their dedication to collective responsibility for the welfare of others, respondents of a solidarist orientation, we assumed, would favor spending more.⁴³

We used a multivariate regression model to assess the influence of cultural orientations, so measured, on attitudes toward gun control. Regression analysis is the standard technique used in the social sciences to measure the causal or functional influence of one or more events or conditions, which are styled “independent variables,” on another event or condition, which is styled the “dependent variable.” Where one has reasonable theoretical grounds to believe that changes in the former (say, the arrest rate) affects the incidence or level of the latter (say, the crime rate), the existence of a

⁴³ The specific GSS items were as follows:

We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount. Are we spending too much money, too little money, or about the right amount on...

- (1) Improving and protecting the environment;*
- (2) Improving and protecting the nation's health;*
- (3) Solving the problems of the big cities;*
- (4) Halting the rising crime rate;*
- (5) Dealing with drug addiction;*
- (6) Improving the nation's education system;*
- (7) Foreign aid;*
- (8) Welfare;*
- (9) Social Security;*
- (10) Mass Transportation; and*
- (11) Parks and recreation.*

statistically significant correlation between the two can be viewed as confirming a causal relationship. Within a simple regression model, such a correlation is expressed as a “coefficient” in an equation that relates changes in the independent variable to changes in the dependent variable. Where a theory suggests that an event or condition (again, crime) can be affected simultaneously by multiple influences (not just arrest rate, but unemployment rate, and education levels), multivariate regression analysis can be used to measure the relative size of the coefficients associated with each independent variable, and hence to indicate the relative impact of each on the dependent variable.⁴⁴

The dependent variable in our model was the interviewees’ response to a GSS gun-control question, which asks whether the respondent would “favor or oppose a law which would require a person to obtain a police permit before he or she could buy a gun?” The independent variables included the hierarchy-egalitarianism and individualism-solidarism scales, a variety of demographic and political orientation measures used in previous analyses of public opinion toward gun control, and respondents’ expressed fear of crime.⁴⁵ Our hypothesis about the relationship between cultural orientation and gun control attitudes predicted that the correlation between our scales and support for gun control would be positive, statistically significant, and large relative to the correlations between the other independent variables and gun control attitudes.

⁴⁴ See generally Larry D. Schoroeder, David L. Sjoquist & Paula E. Stephan, *Understanding Regression Analysis: An Introductory Guide* 11-28 (1986); Franklin M. Fisher, *Multiple Regression in Legal Proceedings*, 80 Colum. L. Rev. 702, 703-20 (1980).

⁴⁵ Because of variation in items appearing in the GSS survey over time, we were not able to generate complete data for every respondent in the sample. Missing data was therefore imputed, using AMELIA: A Program for Missing Data by James Honaker, Anne Joseph, Gary King, Kenneth Scheve, and Naunihal Singh (2001). In studies like the present one, multiple imputation is considered superior to listwise deletion, pairwise deletion, and mean substitution. See, generally, Gary King, James Honaker, Anne Joseph, Kenneth Scheve, *Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation*, 95 Am. Pol. Sci. Rev. 1, 49 (2001). Even using these other methods, however, the cultural orientation scales exerted similar explanatory power.

C. Results and Discussion

We ran two separate regressions, the results of which are reported in Table 1. In the first, we regressed all the independent variables (which are listed in the first column of Table 1) *except* for our cultural orientation scales against the dependent variable of support for gun control. The standardized coefficients⁴⁶ generated by this analysis appear in the second column. In the second analysis, we regressed *all* the independent variables, including our cultural orientation scales, against support for gun control; the standardized coefficients for this analysis appear in the third column of Table 1. This approach allows us to observe not only how much cultural orientations matter relative to other variables, but also how much explanatory power is gained overall by adding cultural orientations to the regression model. It also reveals how much of the explanatory power conventionally associated with other variables is actually attributable to systematic variations in cultural orientations across different social groups.

⁴⁶ Standardization allows the influence of independent variables — which correspond to diverse characteristics that lack a common unit of measure in the real world — to be made commensurable with each other. The standardization technique involves computing each variable's coefficient in terms of how much a single standard deviation of change in the independent variable affects the size of the dependent variable. See Schoroeder, Sjoquist & Stephan *supra* note 44, at 31-32.

	without cultural orientations	with cultural orientations
Female	0.41*** (0.03)	0.39*** (0.03)
Black	0.06* (0.03)	0.01 (0.03)
Northeast	0.07* (0.03)	0.05 (0.03)
South	-0.06* (0.02)	-0.04 (0.03)
West	-0.12*** (0.02)	-0.12*** (0.02)
Urban	0.06* (0.02)	0.05 (0.03)
Catholic	0.15*** (0.03)	0.13*** (0.03)
Jewish	0.08** (0.03)	0.06 (0.03)
Education	0.08** (0.03)	0.03 (0.03)
Socio-Economic	0.09** (0.03)	0.09** (0.03)
Party Affiliation	0.17*** (0.03)	0.10*** (0.03)
Political Orientation	0.20*** (0.03)	0.11*** (0.03)
Fear of Crime	0.17*** (0.03)	0.18*** (0.03)
Hierarchy - Egalitarianism		0.14*** (0.03)
Individualism - Solidarism		0.33*** (0.03)
Constant	1.25** (0.08)	1.26*** (0.08)
Cox & Snell R ²	0.064	0.080
Observations	12378	12378

*Note: To allow for comparison, betas have been standardized. Numbers in parentheses represent standard errors. * indicates p-value < 0.05; ** indicates p-value < 0.01; *** indicates p-value < 0.001.*

Table 1. Logistic Regression of GSS Data

As Table 1 illustrates, the cultural orientation scales generated statistically significant effects consistent with our predictions. That

is, the more egalitarian and solidaristic an individual's worldview, the more likely that person was to support gun control; likewise, the more hierarchical and individualistic the respondent's worldview, the more likely he or she was to oppose gun control. Indeed, among individuals of divergent orientations, the contrast in attitudes toward gun control was stark. Thus, individuals who were relatively hierarchical in their outlooks were nearly twice as likely as those who were relatively egalitarian, and individuals who were relatively individualistic over four times as likely as individuals who were relatively solidaristic, to oppose gun control.⁴⁷

Even more impressive was the predictive power of cultural orientation relative to other explanatory variables. Combined, the two cultural orientation scales have a bigger impact on gun control attitudes than does *any* other demographic variable. Indeed, with the exception of gender, no other characteristic comes close to the explanatory power of cultural orientations. Thus, cultural orientations have an impact on gun control attitudes that is over three times larger than being Catholic, over two times larger than fear of crime, and nearly four times larger than residing in the West.

Whether one is hierarchical or egalitarian, individualistic or solidaristic, also matters more than whether one is Republican or Democrat, conservative or liberal. According to the regression analysis, the cultural orientation variables, when combined, have well over four times as large an impact on gun control attitudes as does either party identity or political orientation. This finding is important because it demonstrates that cultural orientations are ultimately not reducible to conventional political ideologies, which have been found to be relatively weak predictors of gun control atti-

⁴⁷ To estimate differences in opposition to gun control, all other variables were set to their mean and opposition to gun control was predicted at moderately divergent points of the two cultural orientations distributed along seven point scales. (This would be similar to comparing moderate liberal and moderate conservative positions on standard seven point scales measuring political views.) When this was done, forty-four percent of individualists and twenty one percent of solidarists opposed gun permit laws, while only nine percent of solidarists and twelve percent of egalitarians opposed such laws. Of course, the divergence is more extreme among those who hold more extreme views.

tudes relative to other variables, including beliefs in the instrumental efficacy of gun control.⁴⁸

Precisely because cultural orientations exert so much influence, the demographic variables conventionally thought to predict gun control attitudes exert considerably less in a model that takes cultural orientations into account. Indeed, after cultural orientations are controlled for, whether one is black, resides in the South, resides in the Northeast, is a Jew, or lives in an urban area — five characteristics otherwise very strongly correlated with attitudes toward gun control — no longer have *any* significant effect.⁴⁹ These results suggest that the primary demographic divisions in gun control attitudes are indeed artifacts of divergent cultural influences. They demonstrate, too, that the hierarchy-egalitarianism and individualist-solidarist constructs are strong representations of the cultural influences for which demographics are often used as proxies.

The aim of developing a regression model, of course, is not just to assess the relative importance of various independent variables, but also to account for as much of the variance in the dependent variable as possible. In this respect, a model that includes cultural orientations is clearly superior to one that does not. Overall, our model explained 25% more of the variation in individual attitudes toward gun control than was explained by a demographics-based regression model that lacked measures of cultural orientation.⁵⁰

These results, in sum, strongly support our hypotheses. As is true for a wide variety of disputes involving risk regulation, differences in cultural orientations supply the most powerful explanation

⁴⁸ See Tom R. Tyler & Paul J. Lavrakas, *Support for Gun Control: the Influence of Personal, Sociotropic, and Ideological Concerns*, 13 *J. Applied Social Psych.* 392 (1983).

⁴⁹ Education likewise loses any significance.

⁵⁰ Conventionally, the overall power of a regression model is represented in the “R²” term, which expresses the total fraction of the variance in the independent variable explained by the independent variable. See See Schroeder, *supra* note 44, at 33; Fisher, *supra* note 44 at 720. Including cultural orientation variables in our model increased its R² from .064 to .08.

of why Americans disagree about whether and how to regulate guns.⁵¹

D. Gender, Culture, and Guns

One thing that cultural orientations, at least as we have measured them, *don't* explain also bears mentioning. That's the impact of gender on gun control attitudes. Cultural orientations clearly matter *within* a gender. Hierarchic and individualistic men are more likely to oppose control than egalitarian and solidaristic men, and hierarchic and individualist women more likely to oppose control than egalitarian and solidaristic women.⁵² However, as Table 1 reveals, the inclusion of cultural orientation measures in the regression model did very little to reduce the variation in attitudes *across* genders. Whether one is hierarchical or egalitarian, individualist or solidarist in one's orientation, one is still substantially more likely to favor gun control if one is a woman than if one is a man. Interestingly, in this respect, our results are in accord with the results of numerous other studies, all of which show that gender predicts risk perception independently of cultural orientation and myriad other influences.⁵³

But while our analysis does nothing to dispel the gender and risk mystery, we do think that our results deepen understanding of

⁵¹ We also ran a similar set of tests, and obtained similar results, using the National Election Studies (NES) year 2000 survey data sets. Again, the cultural orientation variables predicted gun control attitudes in line with our hypotheses and were statistically significant. Again, the cultural orientation variables substantially increased the overall explanatory power of the regression model — this time by about 33%. And again the cultural orientation variables had a larger impact on gun control attitudes than did a variety of demographic variables, most of which were statistically insignificant, presumably because of the relatively smaller size of the NES sample. Indeed, although the overall fit of our model was stronger for the NES data ($R^2 = 0.213$), we do not regard the analysis of the relatively small NES sample to be as illuminating as our analysis of the much larger GSS sample and therefore omit the NES regression output (but are happy to supply it upon request).

⁵² When data from male and female respondents are disaggregated, cultural orientations produce nearly as large an impact on the gun control attitudes of both.

⁵³ See Peter Slovic, *Trust, Emotion, Sex, Politics, and Science: Surveying the Risk-Assessment Battlefield*, 19 *Risk Analysis* 689 (2000).

the precise character of it. It is commonly asserted that women are *more* concerned with risk of all types — environmental and social — than are men. One suggested explanation for this finding is that the prospect of accident, misfortune, or suffering is more salient for women, either because they tend to have less political and physical power than men and are thus more vulnerable in their daily lives, or because they are predisposed by a combination of social and genetic factors to be more empathetic.⁵⁴

Our results complicate these assessments. In the case of the gun control debate, the issue is not *whether* to accept a particular risk but rather *which* of *two* risks — that of firearm casualties in a world with insufficient gun control, or that of personal defenselessness in a world with excessive control — we should find the least acceptable. It is thus inaccurate to characterize women as “more concerned with risk” in the gun-control setting; rather they are more concerned with the risk that they will be victimized by a violent or careless gun wielder, but *less* concerned with the risk that they will be deprived of the power to repel a violent attack.

Similarly, it seems inadequate to attribute gender differences in gun control attitudes to either a heightened sense of fear or a more robust sense of empathy on the part of women. If the salience of misfortune, accident, or suffering determines an individual’s position on gun control, then women are more attuned than are men to the prospect of being victimized by a violent or careless gun-toter, but they are *less* attuned to the prospect of being deprived of a weapon that one could have used to defend oneself from violence. Women might experience greater vulnerability than men; but such vulnerability doesn’t by itself determine whether they should favor greater efforts to disarm those who might prey on the weak or instead favor the removal of restrictions that prevent the weak from arming themselves with guns — the “great equalizer” — to compensate for their lack of strength.⁵⁵ Women, for social and biological reasons,

⁵⁴ See *id.*

⁵⁵ See Lott, *supra* note 1, at 20 (“Guns appear to be the great equalizer among the sexes. . . . One additional woman carrying a concealed handgun reduces the murder rate for women by about 3-4 times more than one additional man carrying a

might be more caring than men; but for whom should they be expected to care more — the individual who is shot by someone whom the law might have disarmed, or the individual who might have repelled an attack had the law not disarmed *her*?

On reflection, moreover, it seems that the characterization of women as being more concerned with risk than are men is no more cogent in other settings. As in the case of gun control, most disputes over risk in fact pit one anxiety or fear against another.⁵⁶ Nuclear power opponents can be said to be more concerned than nuclear power supporters are with the risk of environmental catastrophe. By the same token, however, nuclear supporters can be said to be more concerned with the risk of economic stagnation in the event of inadequate energy supplies — a condition the brunt of which would surely be borne disproportionately by weaker and more vulnerable members of society. So in opposing nuclear power to a greater extent than do men, women are not displaying a greater aversion to risk *per se*, but rather a greater aversion to one sort of risk and a smaller aversion to another.

Our analysis, then, supports a recharacterization of the systematic differences in the attitudes of women and men toward risk. Women's concerns about risk are neither greater nor lesser than men's; they are just different. In *all* settings, some influence is making *one* sort of risk more worthy of attention to women and *another* more worthy of attention to men. We would surmise that that influence is cultural — as opposed to political or biological — given the demonstrated power of opposing cultural orientations to focus individuals' attention on different sorts of threats and dangers. Nevertheless, the precise difference in values that might explain why women are concerned with some risks and men with others seems

concealed handgun reduces the murder rate for men. This occurs because allowing a woman to defend herself with a concealed handgun produces a much larger change in her ability to defend herself than the change created by providing a man with a handgun.").

⁵⁶ Indeed, this phenomenon is well known to risk-regulation experts. See generally *Risk Versus Risk: Tradeoffs in Protecting Health and the Environment* (John D. Graham & Jonathan Baert Wiener eds., 1995).

to evade the hierarchy-egalitarianism and individualism-solidarism framework central to existing work on the cultural theory of risk. Refining the cultural theory of risk to account for gender differences thus remains a task for future study.

III. The Futility of Consequentialism

We have presented evidence that cultural orientations strongly affect individual attitudes on gun control. This finding has important implications for the gun control debate. Indeed, it suggests that the dominant arguments in that debate are miscast.

Most participants in the gun control debate frame their positions in consequentialist terms. “Despite intense feelings on both sides of the gun debate,” writes one prominent commentator, “everyone is at heart motivated by the same concerns: Will gun control increase or decrease the number of lives lost?”⁵⁷ Accordingly, economists and social scientists have dedicated themselves to amassing empirical data aimed at determining the net impact of gun control laws on public safety. Politicians, too, ordinarily justify their stances — whether for or against gun control — on instrumental grounds, drawing liberally on the supportive social science studies.⁵⁸

What must one assume about how individuals decide to support or oppose gun control in order for the widespread reliance on empirical data to make sense? One possibility is that individuals behave like rational utility maximizers, weighing the expected benefit of firearms as instruments of self-defense against the expected cost of them as sources of lethal accident or (undesired) aggression. If this were so, however, one would expect variation in violent crime —

⁵⁷ Lott, *supra* note 1, at 21.

⁵⁸ Compare 83rd Congressional District, Election '94, Hartford Courant, Nov. 3, 1994, at G23 (congressional candidate: “I support retention of the ban on assault weapons and other gun-control measures as a cost-effective method of fighting violent crime.”), with Dan Balz, *Moving Slowly From Right to Center*, Wash. Post, Apr. 25, 1999, at A1 (“With many Americans alarmed by the proliferation of guns, Bush defended his support for legislation in Texas that allows a person to carry a concealed weapon. ‘We live in a dangerous society,’ Bush said. ‘People feel like they need to defend themselves.’”).

and hence variation in the likelihood that guns will be used for violent purposes — to explain a substantial amount of the variation in attitudes toward gun control. In fact, numerous studies — including ours — have found that neither actual crime rates, perceived crime rates, prior victimization, nor fear of victimization — strongly correlates with public opinion toward gun control.⁵⁹

In any case, the “rational weighing” hypothesis seems to beg the most important question: what determines *how much* weight individuals assign to any given piece of evidence on the consequences of gun control? Whether permissive concealed hand-gun laws promote or deter violent crime has been minutely investigated and ferociously debated by economists and other social scientists. Very few members of the public possess the technical training necessary to evaluate the quality of the conflicting empirical studies for themselves. So something independent of — indeed, prior to — their assessment of the data must be inclining individuals to accept one empirical claim or the other in this debate.

Another view, founded in cognitive psychology, assumes that individuals are, in effect, *irrational* weighers. Through a dynamic known as the “availability heuristic,” individuals are thought to base estimates of the probability of particular events (of, say, nuclear accident or groundwater contamination by toxic wastes) on the salience of particular instances of them — a cognitive process that often leads to significant misestimations of the true probability of those events.⁶⁰ On this account, we should expect individuals to believe that restrictions on guns increase or decrease public safety based on how readily they can recall examples of firearms being

⁵⁹ See Kenneth Adams, *Guns and Gun Control*, in *Americans View Crime and Justice: A National Public Opinion Survey* 123 (T. J. Flanagan and D. R. Longmire eds., 1996); Gary Kleck, *Crime, Culture Conflict and the Sources of Support for Gun Control*, 39 *Am. Behavioral Sci.* 387 (1996); Arthur L. Stinchcombe *et al.* *Crime and Punishment — Changing Attitudes in America* 104 (1980). Our model, which looks includes only fear of crime, finds that that factor has a significant but relatively small effect on gun control attitudes. See Table 1 *supra*.

⁶⁰ See generally Timur Kuran & Cass R. Sunstein, *Availability Cascades and Risk Regulation*, 51 *Stan. L. Rev.* 683 (1998).

used to facilitate violent predation or instead being used to repel it (or perhaps being unavailable for self-defense because of excessive regulation).⁶¹

But this hypothesis, too, seems relatively weak. To begin, existing research suggests that dramatic and highly publicized instances of gun violence, such as the Columbine High School massacre, do *not* in fact affect public opinion on gun control.⁶² In addition, like the more straightforward “rational weighing” hypothesis, the “availability” hypothesis begs an important question: *why* do individuals more readily recall either offensive or defensive (or perhaps thwarted defensive) uses of guns? Stories of both sorts abound.⁶³ Perhaps individuals who support gun control more readily imagine instances of violent predation and those who oppose it instances of heroic self-defense (or instances of self-defense tragically

⁶¹ See Paul H. Rubin, *How Humans Make Political Decisions*, 41 *Jurimetrics J.* 337, 350 (2001); Cass R. Sunstein, *Cognition and Cost-Benefit Analysis*, 29 *J. Legal Stud.* 1059, 1066-67 (2000).

⁶² See Smith, *supra* note 26, at 12.

⁶³ Compare, e.g., *Assailant Kills 3 Girls, His Bible-Study Teacher*, *St. Louis Post-Dispatch*, July 10, 1999, at 21; Peter Annin, “*You Could See the Hate*”, *Newsweek*, October 28, 1991, at 35 (discussing Killeen massacre, “the worst shooting spree in U.S. history”); with Art Golab, *Senior’s Pals Hope He’s Taught Thieves A Lesson*, *Chicago Sun-Times*, December 10, 1998, at 8 (“The day after 81-year-old Bruno Kosinski shot and wounded a man he said tried to rob him, neighbors in his Ukrainian Village neighborhood hailed him as a hero.”); Scott Glover, *Clerk Not Charged In Robbers’ Shooting*, *Los Angeles Times*, February 25, 1998, at B-3 (Jewelry store clerk fatally shot two robbers during a botched Valentine’s Day heist; “The owners of the jewelry store began keeping a .44-caliber handgun under the counter after a robbery last year.”); *Gun Control Kills Page of the Georgia Chapter of Women Against Gun Control* (multiple frustrated defense stories). Indeed, examples of both offensive and defensive uses often appear in the *same* story. See, e.g., Kevin Sack, *Southern Town Stunned by Arrests in Murder Plot*, *New York Times*, October 9, 1997, at A16 (A 16-year-old student in Pearl, Miss. walked into the school’s commons and fired “round after round from a hunting rifle.” An assistant principal “who was armed with his own automatic handgun,” captured the student.); Jonathan D. Silver, *Friends Ignored Signs of Trouble from Teen*, *Arizona Republic*, April 26, 1998, at A4 (Andrew Wurst, a 14-year-old, opened fire on classmates at a banquet hall during his middle school dance in Edinboro, Pa. The owner of the banquet hall, “who was carrying a shotgun,” coaxed the teen into surrendering his pistol.).

thwarted by gun control regulation) — but something independent of, and prior to, the stories themselves has to explain why one or the other is more “available” to particular individuals.

In contrast to either of these views, the cultural theory of risk posits that individuals’ assessments of empirical evidence will depend on their cultural orientation. The norms that construct their worldviews determine which risk — that insufficient control of concealed weapons will make citizens vulnerable to deliberate or accidental shootings, or that excessive control will leave citizens unable to defend themselves from attackers — appears larger in size or otherwise more worthy of amelioration by law.

The psychology of risk perception posited by the cultural theory of risk explains *how* individuals weigh evidence of the consequence of control. Confronted with competing factual claims and supporting empirical data that they are not in a position to verify for themselves, ordinary citizens naturally look to those whom they trust to tell them what to believe about the consequences of gun control laws. The people they trust, unsurprisingly,⁶⁴ are the ones who share their cultural outlooks, and who, as a result of those outlooks, are more disposed to credit one sort of gun-control risk than the other.

The cultural theory of risk also explains what makes instances of offensive gun use more salient for some individuals and instances of (successful or frustrated) defensive use more salient for others. The cultural theory of risk posits that the norms that construct cultural orientations operate as a mental filter, blocking apprehension of some risks while letting others pass through. Accordingly, the stories about guns that are most “available” to an individual are the ones that are most congenial to his or her cultural commitments.

These conclusions rest on the thesis that perceptions of gun-control risk, like perceptions of various others sorts of risk, are cognitively derivative of social norms. The cultural theory also suggests that attitudes toward risk are likely to be *morally derivative*. Thus, an

⁶⁴ See Marilyn B. Brewer and Rupert J. Brown, *Intergroup Relations*, in t, 2 *The Handbook of Social Psychology* 554 (Daniel T. Gilbert *et al.*, eds., 4th ed. 1998).

individual might worry more about being unable to defend himself if society takes his gun away than he does about being shot if society fails to disarm others (or vice versa) not simply because he rates one risk as greater in *magnitude* than the other but because he sees acceptance of one or the other as *demeaning* or *unjust*.

This component of the cultural theory explains additional features of public opinion that evade the “rational weigher” and “availability” hypotheses. A substantial percentage of the persons who say they favor gun control to reduce crime, for example, also apparently accept the proposition that crime would *not* be reduced substantially if the government enacted stricter gun control laws.⁶⁵ Likewise, those who oppose gun control appear to be no more likely than those who support it to believe that gun control interferes with the use of firearms for lawful self-defense.⁶⁶ These findings make sense only if we assume that many individuals’ attitudes toward gun control are not based solely on their beliefs about the impact of gun control on public safety.

Indeed, when justifying their positions on gun control, individuals often acknowledge that their evaluations of gun risks are *moral* and not merely instrumental in nature. Control supporters, for example, argue that arming private citizens to deter crime would endorse a vision of “society based on an internal . . . balance of terror,”⁶⁷ “a jungle where each relies on himself for survival.”⁶⁸ “[A] world with slightly higher crime levels,” they assert, is a price worth paying to avoid a world “in which we routinely wave guns at each

⁶⁵ See Gary Kleck, *Targeting Guns: Firearms and Their Control* 339-40 (1997); see also James D. Wright, Peter H. Rossi & Kathleen Daly, *Under the Gun: Weapons, Crime, and Violence in America* 236 (1983) (number who believe gun control would be effective in reducing crime is smaller than number who support gun control).

⁶⁶ See Tom W. Smith, 1996 National Gun Policy Survey of the National Opinion Research Center: Research Findings 8 & 33 tbl. 6 (1997).

⁶⁷ H. Laurence Ross, *Book Review*, 98 *Am. J. Sociology* 661, 662 (1992).

⁶⁸ Ramsey Clark, *Crime in America* 88 (1971).

other.”⁶⁹ Control opponents likewise express noninstrumental evaluations of guns risks when they describe gun ownership as an “individual right,” which presumably can’t be subordinated to collective interests in public safety.⁷⁰

Insofar as individual attitudes toward gun control fit the psychological profile associated with the cultural theory of risk, there is little prospect of consequentialist arguments resolving the gun debate. Individuals will simply conform — and if that’s not feasible, subordinate — their perceptions of what guns *do* to their culturally grounded understandings of what guns *mean*. In this respect, empirical gun-control studies will prove as inert as empirical death-penalty studies, which individuals have been shown to credit or not depending on whether such studies conform to the positions individuals hold on symbolic grounds.⁷¹

If consequentialist arguments can’t resolve the gun debate, what kinds of arguments can? Again, those who study gun control can learn from the experience of those who have studied other societal risks.

Experts have traditionally advocated basing risk regulation on narrowly consequentialist measures of environmental and industrial hazards. Techniques such as “cost benefit analysis” and “comparative risk assessment” rank hazards according to a uniform expected-utility metric. The policies they generate are defended as superior to any based directly on public risk perceptions, the unruly character of which is attributed to the public’s lack of information about the

⁶⁹ Lindsay Boyer, *Who Needs a Gun?* (letter to editor), N.Y. Times, June 19, 1999, at A14 col. 4.

⁷⁰ See Robert J. Spitzer, *The Politics of Gun Control* 25-26, 49 (1995).

⁷¹ See Tom R. Tyler & Renee Weber, *Support for the Death Penalty: Instrumental Response to Crime, or Symbolic Attitude*, 17 L. & Soc. Rev. 21 (1982); Phoebe C. Ellsworth & Lee Ross, *Public Opinion and Capital Punishment: A Close Examination of the Views of Abolitionists and Retentionists*, 29 Crime & Delinq. 116 (1983); Julian V. Roberts & Loretta Stalans, *Public Opinion, Crime, and Criminal Justice* 239, 242-43 (1997).

hazards posed by various technologies and to cognitive limitations that distort layperson's processing of such information.⁷²

The inadequacy of this approach to risk regulation, however, is well known and, by this point, largely accepted even by many experts.⁷³ As the cultural theory of risk underscores, conflicting assessments of environmental and technological hazards are *not* primarily (or even largely) a consequence of imperfect information or cognitive defects but rather a reflection of the diverse *social meanings* that ordinary citizens attach to such dangers.⁷⁴ Egalitarians, solidarists, individualists, and hierarchists, then, aren't really arguing about what empirical data to trust; they are attempting to push certain risks to the center of the perceptual stage and to banish others to the wings because risk regulation is pregnant with visions of the good society.⁷⁵ Expected utility analysis cannot tell us whose vision — the egalitarian's, the solidarist's, the individualist's, or the hierarchist's — is better. "Instead of being distracted by dubious calculations," then, we must attend openly to the question of what "kind of society . . . we prefer to live in."⁷⁶

These same conclusions apply to the gun debate. Once the contribution of cultural orientations is exposed, it becomes clear that those involved in gun control debate aren't really arguing about whose perception of risk is more grounded in empirical reality; they are arguing about what it would say about our shared values to credit one or the other sides' fears in our law. For the individualist and hierarchist opponents of gun control, it would be a cowardly and dishonorable concession to our own physical weak-

⁷² For an influential statement of this view, see Stephen Breyer, *Breaking the Vicious Circle: Toward Effective Risk Regulation* (1993).

⁷³ See generally Richard L. Revesz, *Environmental Regulation, Cost-Benefit Analysis, and the Discounting of Human Lives*, 99 Colum. L. Rev. 941 (1999); Slovic, *supra* note 53.

⁷⁴ See Part I *supra*.

⁷⁵ See Douglas & Wildavsky, *supra* note 13, at 81, 194-95; Wildavsky & Dake, *supra* note 19, at 52.

⁷⁶ Douglas & Wildavsky, *supra* note 13, at 81, 189.

nesses for us to disarm all private citizens in the interest of public safety. For the proponent of control, it would send an unacceptable message of mutual distrust in each other's intentions, of collective indifference to each other's welfare, and of the legitimacy of traditional status differentiations to rely on each citizen's decision to arm himself as a means of keeping the civil peace. Just as it would be obtuse to attempt to regulate environmental and technological risks without regard to what accepting various risks *means*, so it is obtuse to think that the competing risks associated with gun control can be evaluated without taking account of what citizens think running *those* risks conveys about society's values. The only philosophically cogent way to resolve the gun control controversy is to address explicitly, through democratic deliberations, the question of what stance the law should take toward the competing cultural visions that animate the gun control debate.

IV. A Pluralistic Expressive Idiom?

At least some participants in the gun control debate, of course, *do* frame their appeals in explicitly cultural terms. These individuals speak not in the technical, detached language of statistics, but in the fiery, assaultive idiom of expressive condemnation.⁷⁷ Control partisans ridicule their adversaries as "hicksville cowboy[s]," members of the "big belt buckle crowd"⁷⁸ whose love of guns stems from

⁷⁷ See generally Dan M. Kahan, *The Secret Ambition of Deterrence*, 113 Harv. L. Rev. 413 (1999).

⁷⁸ Margery Eagan, *Rally Proves Gun Lovers Are Still out There*, Boston Herald, May 18, 1999, at 4; see also Richard Cohen, *The Tame West*, Wash. Post, July 15, 1999, at A25 ("[Republican control opponents] all pretend to be upholding American tradition and rights, citing in some cases an old West of their fervid imagination and suggesting remedies that can only be considered inane."); Ted Flickinger, *Dodge City* (Letter to the Editor), Pittsburgh Post-Gazette, June 1, 1999, at A-10 ("The widespread availability of guns in a society in which many so-called adult males still embrace the frontier mentality makes it a certainty these periodic adolescent outbursts will be tragically repeated. It's still Dodge City out there, boys. Wahoo."); Perry Young, *We Are All to Blame*, Chapel Hill Herald, April 24, 1999, at 4 ("[W]e seem crippled by a mythological 'tradition' (a frontier gun world that ceased to exist 100 years ago and was wrong even then) and bullied into submission by a ridiculous minority of airheads like B-movie actor Charlton Heston and the National Rifle Association.").

their “macho Freudian hang ups,”⁷⁹ while NRA President Charlton Heston declares “cultural war” against “blue blooded elitists” who threaten an “America . . . where you [can] . . . be white without feeling guilty, [and] own a gun without shame.”⁸⁰

Most citizens undoubtedly find this culturally chauvinistic style of debate exceedingly unpleasant. Indeed, it is precisely the judgmental tone of expressive condemnation, we believe, that explains the appeal of public safety arguments in the mainstream gun debate.

American political culture is heavily influenced by liberal discourse norms, which direct those engaged in public debates to disclaim reliance on contested visions of the good life and instead base arguments on grounds acceptable to citizens of diverse moral outlooks.⁸¹ Consequentialist modes of decisionmaking seem to satisfy this standard. Furnishing apparently “objective procedures and criteria” for policymaking, econometrics, cost-benefit analyses, contingent valuation studies and the like are “decidedly divorced from statements about morality.”⁸² Because they elide contestable judgments of value, instrumental arguments are the “don’t ask, don’t tell” solution to cultural disputes in the law — not just over gun control, but over policies like the death penalty, hate crimes, wel-

⁷⁹ Norman W. Nielsen, Letter to Editor, L.A. Times, Apr. 30, 1999, at B6. See also Robert Reno, NRA Aims but Shoots Self in Foot, *Newsday* (New York, N.Y.), May 9, 1999, at 5H (sign at gun control rally: “Gun owners have penis envy.”)

⁸⁰ See Charlton Heston, *The Second Amendment: America’s First Freedom*, in *Guns in America: A Reader* 203 (Jan E. Dizard et al., eds., 1999) (exhorting those who “prefer the America . . . where you [can] pray without feeling naïve, love without being kinky, sing without profanity, be white without feeling guilty, own a gun without shame” to join and “to win a cultural war”); David Keim, *NRA Chief Proves Big Draw at Vote Freedom First Rally*, *Knoxville News-Sentinel* (Knoxville, Tenn.), Nov. 2, 2000, at A1 (“‘Our country is in greater danger now than perhaps ever before,’” Heston warned. “‘Instead of Redcoats, you’re fighting blue-blooded elitists.’”).

⁸¹ See John Rawls, *Political Liberalism*, Lecture VI (1993); Bruce A. Ackerman, *Social Justice and the Liberal State* 8-12 (1980); Amy Gutmann & Dennis Thompson, *Democracy and Disagreement* ch. 2 (1996).

⁸² Martin Rein & Christopher Winship, *The Dangers of “Strong” Causal Reasoning in Social Policy*, *Society*, July/Aug. 1999, at 39.

fare reform, environmental regulation, and a host of other controversial policies.⁸³

If this sort of indirection were an *effective* strategy for suppressing attempts at cultural domination in law, it might be prudent to assent to the continued centrality of public safety arguments in the gun debate, notwithstanding — indeed, exactly because of — their remoteness from the cultural cleavages that really divide Americans on this issue. But the hope that the gun control debate can be made less contentious by confining it to empirical arguments is in fact an idle one.

As the cultural theory of risk itself illustrates, what individuals accept as truth can't be divorced from the values and practices that define their cultural identities. Our knowledge of all manner of fact — that men landed on the moon in 1969; that Andrew Wiles solved Fermat's Last Theorem; that the paternity of a baby can be determined from a DNA test — derives not from first-hand observation but from what we are told by those whose authority we trust. Whom we regard as worthy of such trust (religious leaders or scientists at major research universities; Rush Limbaugh or the editors of the *New York Times*) is governed by norms that we've been socialized to accept. For this reason, factual disagreement can be ripe with political and cultural conflict. If you insist that I am wrong to believe that the Holocaust took place, or that God created the world, you obviously aren't reporting that your sensory experience differs from mine; you are telling me that you *reject* the authority of institutions and persons I am morally impelled to defer to. And for that reason, I might well decide not merely that you are misinformed, but that you are evil.⁸⁴

⁸³ See Kahan, *supra* note 77; Rein & Winship, *supra* note 82; Note, *The CITES Fourt Lauderdale Criteria: The Uses and Limites of Science in International Conservation Decisionmaking*, 114 Harv. L. Rev. 1769 (2001).

⁸⁴ See generally Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England* 20 (1994) ("It is a least uncivil, and perhaps terminally so, to decline to take knowledge from authoritative sources. . . . Persistent distrust therefore has a moral terminus: expulsion from the community. If you will not know, and accept the adequate grounds for, what the community knows, you will not belong to it, and even your distrust will not be recognized as such.")

Because the facts that individuals accept about gun control bear exactly this relationship with their cultural identities, there is little reason to think that recourse to empirics can shield us from the conflict generated by clashing worldviews. Indeed, it seems quite obvious that it hasn't. The mainstream empirical debate turns out to be no less vituperative than the open cultural warfare being engaged in at the fringes. While predictably failing to change anyone's mind, empirical analyses *do* reinforce the conviction of those who already accept their conclusions that a rational and just assessment of the facts *must* support their position. The disagreement is then no longer seen as a reflection of differing visions of the good society, but an ethical battle over acceptance of an indisputable, objective truth. Instead of challenging one another's worldviews, those who continue the debate simply challenge one another's honesty and integrity.⁸⁵

At the same time, consequentialism as a liberal discourse strategy doesn't even succeed in vanquishing open cultural conflict. On the contrary, it tends only to deepen the acrimonious quality of it. Most Americans are not cultural imperialists, but as the gun debate starkly illustrates at least some *are*. For them, the liberal norm against public moralizing lacks any constraining force. By speaking in the muted tones of public safety in a (vain) effort to avoid giving

⁸⁵ See, e.g., Matt Bai, *The Gun Crowd's Guru*, Newsweek, Mar. 12, 2001, at 36 ("After one debate, [Lott] sent an e-mail to Doug Weil, Handgun Control's resident Ph.D., which read in part: 'Either you no longer have a conscience and thus no longer care whether your false statements end up getting people killed, or you're unable to separate your dreams from reality.' His enemies are equally vitriolic. Perhaps because Lott comes from their own academic world, gun-control advocates just about lose their minds talking about him. 'This guy has been dishonest from day one,' shouts Weil. Opponents have accused Lott of getting funding from the gun industry (he hasn't) and lying about his Ph.D. (he didn't)."); Kevin Beck, *Conceal Carry* (Letter to Editor), St. Louis Dispatch, Apr. 12, 1998, at B6 (expressing gratitude to columnist for "expos[ing] Professor John R. Lott Jr. as an intellectually dishonest toady of the bullet manufacturing industry. Gun nuts have been in our faces lately with his alleged study saying that not carrying a gun made our streets unsafe."); Ann Coulter, *More Facts, Fewer Liberals*, Human Events, <http://www.humanevents.org/articles/03-12-01/coulter.html> ("While having dinner recently with John Lott, author of *More Guns, Less Crime*, one of life's enduring debates came up: Are liberals evil or just stupid?").

offense, moderate commentators, politicians, and citizens cede the rhetorical stage to these expressive zealots, who happily seize on the gun debate as an opportunity to deride their cultural adversaries and stigmatize them as deviants.⁸⁶

In order to civilize the gun debate, then, *moderate* citizens — the ones who are repulsed by cultural imperialism of all varieties — must come out from behind the cover of consequentialism and talk through their competing visions of the good life without embarrassment. They must, in the spirit of genuine democratic deliberation, appeal to one another for understanding and seek policies that accommodate their respective worldviews. An open debate about the social meanings the law should express is not just the only *philosophically cogent* way to resolve the gun debate; it is also the only *practical* way to resolve it in terms that embody an appropriate dedication to political pluralism.

This conclusion presupposes that expressive debate in law can be simultaneously pertinent and tolerant. The liberal anxiety that it can't be — that the only way to avert “the domination of one cultural and moral ethos over all others”⁸⁷ is to cleanse public discourse of appeals to contested cultural views altogether — is far too pessimistic. Anthropologists, sociologists, and comparative law scholars have in fact cataloged many examples of communities successfully negotiating culture-infused controversies — ones between archaeologists and Native Americans over the disposition of tribal artifacts;⁸⁸ between secular French educators and Muslim parents over

⁸⁶ Cf. James Davison Hunter, *Culture Wars: The Struggle to Define America* 321 (1991) (“A . . . condition . . . essential for rationally resolving morally grounded differences in the public realm would be the *rejection by all factions of the impulse of public quiescence*. . . . [T]here is a tendency among those Americans in the middle of these debates to hesitate from speaking at all.”).

⁸⁷ *Id.* at 42.

⁸⁸ See Jack F. Trope and Walter R. Echo-Hawk, *The Native American Graves Protection and Repatriation Act: Background and Legislative History*, 24 *Arizona L. J.* 35 (1992); Gene A. Marsh, *Walking the Spirit Trail*, 24 *Arizona L. J.* 79 (1992); see also Robert Winthrop, *Resolving Culturally-Grounded Conflict in Environmental Change* (unpublished manuscript, Aug. 1999) (describing cultural dispute resolution

the donning of religious attire by Muslim school children;⁸⁹ between the supporters and opponents of abortion rights in France and Germany.⁹⁰ Rather than hide behind culture-effacing modes of discourse, the individuals involved in these disputes fashioned policies that were expressively rich enough to enable *all* parties to find their cultural visions affirmed by the law.⁹¹

We don't mean to understate the difficulty of adapting this strategy of pluralistic expressive deliberations to the gun control issue. Our society has grown so accustomed to the constraints that liberalism places on political discourse that we seem to lack the vocabulary and habits necessary for debating cultural issues in a constructive way.⁹² When the constraining force of liberal discourse norms break down, as they inevitably do, we lapse into acrimony and contempt.

This is the problem that scholars and others who want to make a constructive contribution to the gun debate should dedicate themselves to solving. The construction of a pertinent yet respectful expressive idiom for debating guns is a task that will require at least as much energy and creativity as has been invested so far in the study of gun control's consequences. Indeed, we imagine that anthropologists, sociologists, and philosophers will play a larger role in this project than will economists.

The first step in such a project, of course, is to get as clear as we can about the nature of the conflicting cultural views at stake in the gun control debate. That has been the primary aim of the present study.

techniques used to resolve conflicts over development of sacred Native American lands).

⁸⁹ See Marc Howard Ross, *The Management of Conflict* 5-7 (1993).

⁹⁰ See Mary Ann Glendon, *Abortion and Divorce in Western Law* ch. 1 (1987).

⁹¹ See *id.* at 33-50; Ross, *supra* note 89, at 167-93; Winthrop, *supra* note 88, at 9.

⁹² See Hunter, *supra* note 86, at 34.

Conclusion

In this article, we have presented two claims and a plea. The first claim was descriptive: that individuals' attitudes toward gun control are derivative of the type of social order they prize. Simply put, individuals who are inclined toward egalitarian and solidaristic worldviews are much more likely to support gun control than are individuals who are inclined toward hierarchic and individualistic worldviews.

Indeed, using the methods associated with the cultural theory of risk, we have attempted to show that cultural orientations so defined predict a person's position on gun control more completely than does any other fact about her. In this respect, individuals' perceptions of "gun risks" are of a piece with their perceptions of diverse other societal risks.

The second claim was normative: that those interested in *resolving* the gun debate should turn their attention away from quantifying the consequences of gun control. Because individuals' positions are derivative of their cultural orientations, consequentialist argument can't settle the dispute between those who favor control and those who oppose it. The social norms that construct individuals' cultural worldviews act as a cognitive filter, causing them to credit certain risks and supporting evidence and to dismiss others. As a result, those who generate empirical data on gun control will always be preaching to the choir.

Even more important, the norms that construct individuals' cultural orientations invest collective responses to risks with *social meaning*. Individuals of hierarchist and individualist orientations oppose gun control because they believe it would be cowardly and dishonorable — a gesture of individual impotence — for society to disarm citizens for their own protection. Egalitarians and solidarists, in contrast, support control because to them the anxiety that control will render individuals defenseless against predation connotes distrust of and indifference toward their fellow citizens, the celebration of traditional gender roles, and racism. No amount of economics or cost-benefit analysis can tell us how to respond to these

risk appraisals; only a frank and open discussion of the competing worldviews that sponsor them can.

Our plea is that scholars of gun control turn their attention to the project of constructing a new expressive vocabulary for carrying such deliberations forward. As the persistent and persistently vituperative character of the gun debate demonstrates, the emergence of a pertinent, civilized, and constructive discussion of the cultural values that inform the gun debate cannot be taken for granted. Impoverished by the influence of liberalism, our political discourse just doesn't supply us with the resources we need for a productive and tolerant discussion about our cultural differences. Currently, our only options are silence — which is what the mainstream empirical debate amounts to — and scorn.

Remedying this problem is the task that scholars and others who want to settle the American gun question can most profitably dedicate themselves to. We are not in a position to say what sort of policies an open and honest engagement of these cultural differences will produce. But we feel certain that simply addressing the gun issue in *this* way, rather than in the alternately duplicitous and contemptuous way in which we now address it, would by itself enhance the quality of our democratic life.