MORE STATISTICS, LESS PERSUASION: A CULTURAL THEORY OF GUN-RISK PERCEPTIONS

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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 worldviews: individuals of an egalitarian or solidaristic orientation tend to support gun control; those of a hierarchical or individualist orientation tend to oppose it.
pose 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 toward guns suggests that empirical 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 focusing 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.

INTRODUCTION

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 anticontrol 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? Control supporters take the position that the ready availability of guns diminishes public safety by facilitating violent crimes and accidental shootings; opponents take the position that such availability enhances public safety by enabling potential crime victims to ward off violent predation. Both sides believe that "only empirical research can hope to resolve which of the[se]... possible effects... dominate[s]." Accordingly, social scientists have attacked


the gun issue with a variety of empirical methods—from multivariate regression models\(^5\) to contingent valuation studies\(^4\) to public-health risk-factor analyses.\(^5\)

Evaluated in its own idiom, however, 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 opposition to gun control may well have cost Democrats the White House and Republicans control of the U.S. Senate.\(^6\)

Perhaps empirical social science has failed to quiet public disagreement over gun control because empirical social scientists have not yet reached their own 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 would be 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 by focusing on consequences nar-
rowly 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 lifestyles[ of] the frontier, war in general, crime, masculinity in the abstract, adventure, civic responsibility or irresponsibility, [and] slavery or freedom.” 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. As one southern Democratic senator recently put it, the gun debate is “about values”—“about who you are and who you aren’t.” Or in the even more pithy formulation of another group of politically minded commentators, “It’s the Culture, Stupid!”

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 perception. 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

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8 See Dan M. Kahan, The Secret Ambition of Deterrence, 113 HARV. L. REV. 413, 452-59 (1999) (asserting that what motivates those involved in the gun control debate “is their attachment to competing cultural styles that assign social meanings to guns”).
10 These words appeared on the cover of the July/August 2001 edition of Blueprint magazine, which is published by the Democratic Leadership Council.
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.\textsuperscript{12}

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 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 cultural 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. In Part IV, we conclude 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.

\section{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 a risk-averse manner—investing all of her 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 do not 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

\textsuperscript{11} Throughout this Article, the term "cultural theory of risk" is interchangeably referred to as "cultural theory."
\textsuperscript{12} For an overview of the development of cultural theory, see generally Steve Rayner, \textit{Cultural Theory and Risk Analyses, in Social Theories of Risk} 83 (Krimsky & Goldin eds., 1992).
certificates to demonstrate that she is prudent, responsible, and forward-looking.\textsuperscript{13}

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 while signifying collective hubris, disrespect for the sacredness of nature, and generational selfishness to another.\textsuperscript{14}

The cultural theory of risk, associated most famously with the work of Mary Douglas and Aaron Wildavsky,\textsuperscript{15} 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 accept some and avoid others because they believe it would be dishonorable or cowardly or selfish or base to do otherwise.\textsuperscript{16} 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.\textsuperscript{17}


\textsuperscript{14} 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. PSYCHOL. 1427, 1427 (1996) (examining "the interaction between two psychological systems—cognition and affect—and their joint influence on perception and acceptance of risks, with particular emphasis on the risks from nuclear power").

\textsuperscript{15} E.g., MARY DOUGLAS & AARON WILDAVSKY, RISK AND CULTURE (1982).

\textsuperscript{16} See id. at 72-73 (explaining that private individuals "choose not to be aware of every danger," and that when choosing between risks, "subjective values must take priority").

\textsuperscript{17} See id. at 73 ("One salient difference between experts and the lay public is that the latter, when assessing risks, do not conceal their moral commitments but put them into the argument, explicitly and prominently.").
Thus, "moral concern guides not just the response to risk but the basic faculty of [risk] perception" as well.\textsuperscript{18}

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."\textsuperscript{19} Thus, even when framed in narrowly factual terms, public disagreements over risks are, in truth, disputes among citizens who subscribe to competing norms and to the conflicting cultural visions that those norms construct.

The most ambitious version of the cultural theory focuses primarily on three general cultural orientations.\textsuperscript{20} The \textit{hierarchical} orientation favors deference to traditional forms of social and political authority and is protective of the roles and status claims they entail.\textsuperscript{21} The \textit{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.\textsuperscript{22} The \textit{individualist} view prizes individual autonomy, celebrates free markets and other institutionalized forms of private ordering, and resents collective interference with the same.\textsuperscript{23}

Each of these worldviews "has its own typical risk portfolio" that

\textsuperscript{18} MARY DOUGLAS, RISK ACCEPTABILITY ACCORDING TO THE SOCIAL SCIENCES 60 (1985).

\textsuperscript{19} DOUGLAS & WILDASKY, supra note 15, at 9.

\textsuperscript{20} See, e.g., Aaron Wildavsky, Choosing Preferences by Constructing Institutions: A Cultural Theory of Preference Formation, 81 AM. POL. SCI. REV. 1, 11-13 (1987) (discussing the defining characteristics of hierarchical, egalitarian, and individualistic cultures).

\textsuperscript{21} See id. at 11 ("Hierarchical cultures favor social conservatism, giving government the right to intervene in matters of personal morality.").

\textsuperscript{22} See id. ("[E]galitarians may support intervention in the economy to reduce economic difference but not intervention in social life to maintain inequality.").

\textsuperscript{23} See id. at 6 ("The social ideal of individualistic cultures is self-regulation."); see also Peters & Slovic, supra note 14, at 1438 ("[I]ndividualists are said to have concerns about social deviance only if it disrupts the stability of market relationships or limits freedom."); Aaron Wildavsky & Karl Dake, Theories of Risk Perception: Who Fears What and Why?, 119 DAEDALUS 41, 44 (1990) ("Individualist cultures support self-regulation, including the freedom to bid and bargain.").
"shuts out perception of some dangers and highlights others." 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.25

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 tend toward hierarchical, egalitarian, or individualist worldviews does in fact strongly predict that person's attitude toward a wide range of societal risks.26 Looking specifically at nuclear power and other technological and environmental risks, Ellen Peters and Paul Slovic have reached similar conclusions.27 Indeed, these scholars have shown that cultural orientations 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.28 Other personal characteristics that have been shown to explain risk perception, such as personality type and affective responses to risk-creating activities, also correlate highly with cultural orientations and are thus plausibly seen as originating in them.29

24 DOUGLAS & WILDAVSKY, supra note 15, at 8, 87.
25 See Wildavsky & Dake, supra note 23, at 44-54 (stating that different political cultures recognize different social hazards).
26 See Karl Dake, Orienting Dispositions in the Perception of Risk: An Analysis of Contemporary Worldviews and Cultural Biases, 22 J. CROSS-CULTURAL PSYCHOL. 61, 70-73 (1991) (discussing results of a study which show that the cultural biases of participants toward hierarchy, egalitarianism, or individualism predict their societal concerns).
27 See Peters & Slovic, supra note 14, at 1449 ("Worldviews . . . appear to influence support for nuclear energy.").
28 See Wildavsky & Dake, supra note 23, 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 risks and an interpretive framework in which these findings cohere.").
29 See Dake, supra note 26, at 78 (presenting findings that worldviews correspond to different personality types); Peters & Slovic, supra note 14, at 1450 ("Affect associ-
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 cultural theory 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 present an empirical study designed to answer that question.

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, while opponents stress the risk that excessive regulation will leave citizens unable to defend themselves against 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 toward gun control—aside from gun ownership—are demographic.\(^{30}\) 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 gun control. There are also significant regional and community-type variations: northeasters are significantly more likely than southerners and westerners, and urban dwellers are significantly more likely than country dwellers, to support control. Insofar as group membership 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.

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 fabled) role in American history has imbued guns with a multiplicity of social meanings. 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.” These same associations also make gun possession an

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32 Id. It might be thought that some of these demographic labels are actually describing the same people—that those who live in rural areas are not only more likely to oppose gun control, but are also more likely to be white than black and Protestant than Jewish. Statistical models controlling for each of these demographic predictors have shown, however, that not only do these demographic descriptors predict differing attitudes toward gun control, but also that they do so independently of one another. See Kleck, supra note 30, at 391-99 (using a multivariate analysis to study the relationship between demographic factors and attitudes toward gun control); see also infra Part II.C (describing the results of our regression analyses).

33 See Kleck, supra note 30, at 401 (stating that the results of the study “support the view that gun control support is more a product of culture conflict than a response to crime”).


35 See Introduction: Guns Made Us Free—Now What?, in Guns in America 1, 8 (Jan E. Dizard et al. eds., 1999) (discussing the “centrality of guns in our national experience” and the symbolic meanings attached to them).

36 See, e.g., Tonso, supra note 7, at 287-88 (“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 word.”) (quoting Jeff Cooper, Fighting Handguns 31 (1958))); James D. Wright et al., Under the Gun: Weapons, Crime, and Violence in America 113 (1983) (“The values of [the 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.”); B. Bruce-Briggs, The Great American Gun War, Pub. Int., Fall 1976, at 37, 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.”); James D. Wright, Ten Essential
evocative token of masculinity; the custom of awarding an adolescent boy his "first gun" has been characterized as "the bar mitzvah of the rural WASP," evocative token of masculinity; the custom of awarding an adolescent boy his "first gun" has been characterized as "the bar mitzvah of the rural WASP," a "veritable rite[] of passage that certifie[s] [his] arrival at manhood." As the tools of the trade for 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 nonconformists and law breakers.

But inverting these meanings, other individuals find guns repugnant. Just as they signify traditionally masculine virtues to some citizens, so too guns signify patriarchy and homophobia to others. 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: "Every handgun owned in America is an implicit declaration of war on one's neighbor." 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 Evans, John and Robert Ken-

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Observations on Guns in America, SOCIETY, Mar./Apr. 1995, at 63, 68 (explaining that for the 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 SLOTKIN, supra note 34 (examining historical evolution of pro-gun meanings in American culture).

37 Bruce-Briggs, supra note 36, at 41.
39 See generally ARTHUR L. STINCHCOMBE ET AL., CRIME AND PUNISHMENT—CHANGING ATTITUDES IN AMERICA 106, 111-12 (1980) (drawing a parallel between hunting and shooting cultures and those that favor summary justice); WRIGHT ET AL., supra note 36, at 104, 118 (noting an increased rate of gun ownership among veterans, but questioning if veteran status is itself a result of pro-gun socialization).
40 See LEE KENNETT & JAMES LA VERNE ANDERSON, THE GUN IN AMERICA: THE ORIGINS OF A NATIONAL DILEMMA 214-15 (1975) (noting the historical centrality of gun control to the women's movement); Wright, supra note 36, at 68 (stating that for pro-control individuals, the gun "symbolizes violence, aggression, and male dominance"); H. Taylor Buckner, Sex and Guns: Is Gun Control Male Control? (Aug. 5, 1994) (unpublished manuscript) (finding that aversion to "macho" style and tolerance of homosexuality predict support for gun control), available at http://www.tbuckner.com/SEXGUN.HTM.
nedy, and Martin Luther King, Jr.\textsuperscript{42} To these citizens, guns are emblems not of legitimate state authority, but of \textit{racism} and \textit{reaction}.\textsuperscript{43}

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 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.

\textbf{B. Empirical Study Design}

Our data source was the 1988-2000 General Social Survey (GSS). 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.\textsuperscript{44} The first scale, \textit{hierarchy-egalitarianism}, measures the degree to which a respondent is inclined toward either the hierarchical worldview or the egal-

\textsuperscript{42} See KENNEDY \& ANDERSON, supra note 40, at 223-25, 231 (describing how President Kennedy’s assassination fueled what had been a “vague concern” over guns).

\textsuperscript{43} See, e.g., STINCHCOMBE \textit{et al.}, supra note 39, at 115 (“Among whites . . . [g]un owners are more likely to oppose busing [of schoolchildren].”); Hofstadter, supra note 38, at 84 (noting that the gun has historically been “an important symbol of white male status”).

\textsuperscript{44} These scales describe relative orientations, not discrete classes of people. In other words, we are not saying that a person is necessarily a \textit{hierarchist} or an \textit{egalitarian}, an \textit{individualist} or a \textit{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 toward contradictory approaches. We also certainly don’t mean to suggest that 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.
tarian 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. Individuals inclined toward an egalitarian worldview, we assumed, would express relatively strong opposition; those of a hierarchist view, relatively weak. 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 that 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. 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 logically opposed to individualism, is implicit in the cultural-theory-of-risk framework. Making it explicit in our model facilitates the analysis by 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.

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 sci-

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45 Items used in the scale are listed in the Appendix.
47 Items used in the scale are listed in the Appendix.
ences 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 termed the "dependent variable." Where one has reasonable theoretical grounds to believe that changes in the former (say, the arrest rate) affect the incidence or level of the latter (say, the crime rate), the existence of a 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 also 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.48

The dependent variable in our model was the interviewees' responses to GSS gun control questions. 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.49 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 correlation between the other independent variables and gun control attitudes.


49 Because of variation over time in items appearing in the GSS survey, 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 (version 2.01, Sept. 2001), available at http://gking.harvard.edu/stats.shtml. In studies such as the present one, multiple imputation is considered superior to listwise deletion, pairwise deletion, and mean substitution. See generally Gary King et al., Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation, 95 AM. POL. SCI. REV. 49, 49-50 (2001) (explaining why multiple imputation is a superior approach and adopting an algorithm for general purpose use). 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. We first 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 coefficients generated by this analysis appear in the second column. We then 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. 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.

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50 We performed logistic regressions as is appropriate for analyses with binary independent variables.

51 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 SCHROEDER ET AL., supra note 48, at 31-32 (explaining standardized coefficients and providing an example using income and family size).
Table 1: Regression Analyses of GSS Data

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<th>With cultural orientations</th>
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<td>(0.03)</td>
<td>(0.03)</td>
</tr>
<tr>
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<td>0.09**</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Party Affiliation</td>
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<td>0.10**</td>
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<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
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<td>0.11***</td>
</tr>
<tr>
<td></td>
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<td>(0.03)</td>
</tr>
<tr>
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</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
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<tr>
<td>Hierarchy-Egalitarianism</td>
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</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
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<tr>
<td>Individualism-Solidarism</td>
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<td>(0.03)</td>
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<tr>
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<tr>
<td>Observations</td>
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</tr>
</tbody>
</table>

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.

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 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 to oppose gun control as those who were relatively egalitarian, and individuals who were relatively individualistic were over four times as likely to oppose gun control as individuals who were relatively solidaristic.

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 conservative or liberal or identifies oneself as a Republican or Democrat. According to the regression analysis, the cultural orientation variables, when combined, have well over four times as large an impact on gun control attitudes than 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 weak predictors of gun control attitudes relative to other variables, including beliefs in the instrumental efficacy of gun control.

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, 44% of individualists and 21% of hierarchists opposed gun permit laws, while only 9% of solidarists and 12% of egalitarians opposed such laws. Of course, the divergence is more extreme among those who hold more extreme views.

See Tom R. Tyler & Paul J. Lavrakas, Support for Gun Control: The Influence of Personal, Sociotropic, and Ideological Concerns, 13 J. APPLIED SOC. PSYCHOL. 392, 394 (1983) (demonstrating that “the political values hypothesis suggests that support for gun control is linked to basic political values”).
Precisely because cultural orientations exert so much influence, the demographic variables usually thought to predict gun control attitudes exert considerably less influence 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, or lives in an urban area—four characteristics otherwise very strongly correlated with attitudes toward gun control—no longer have any significant effect. 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 only 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 considerably more (25%) of the variation in individual attitudes toward gun control than was explained by a demographics-based regression model that lacked measures of cultural orientation.

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

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54 Education likewise loses any significance.

55 Conventionally, the overall power of a regression model is represented in the "$R^2$" term, which expresses the total fraction of the variance in the dependent variable explained by the independent variables. See SCHROEDER ET AL., supra note 48, at 33 ("$R^2$, the coefficient of multiple determination, measures the percentage of the variation in the dependent variable which is explained by variations in the independent variables taken together."); Fisher, supra note 48, at 720 ("The most common way of normalizing the standard error of estimate for different units is to compare it . . . with a measure of the total variation of the dependent variable.").

56 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
D. Gender, Culture, and Guns

One thing that cultural orientations, at least as we have measured them, do not explain also bears mentioning: 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 individualistic women more likely to oppose control than egalitarian and solidaristic women. 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 hierarchic 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 accord with the results of numerous other studies, all of which show that gender predicts risk perception independently of cultural orientation and a myriad of other influences.

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

Our results complicate this account. 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 in-

the much larger GSS sample. Therefore, we omit the NES regression output (but are happy to supply it upon request).

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

56 See Paul Slovic, Trust, Emotion, Sex, Politics, and Science: Surveying the Risk-Assessment Battlefield, 19 Risk Analysis 689, 692 (1999) ("Several dozen studies have documented the finding that men tend to judge risks as smaller and less problematic than do women.").

57 See id. ("Although perceived risk was inversely related to income and educational level, controlling for these differences statistically did not reduce much of the White-male effect on risk perception.").

58 See id. ("The combination of biology and social experience has been put forward as the source of a 'different voice' that is distinct to women.").
sufficient gun control or that of personal defenselessness in a world with excessive control—should be deemed more alarming. It is thus inaccurate to characterize women as "more concerned with risk" in the gun control setting than are men; rather, they are more concerned than are men with the risk of being victimized by a violent or careless gun wielder, but less concerned with the risk of being 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 could be used to ward off a violent attack. 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. Women, for social and biological reasons, 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. For example, one can say that nuclear power opponents are more concerned with the risk of environmental catastrophe than are nuclear power

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61 John Lott considers guns “the great equalizer among the sexes,” and concludes that:

[6]he additional woman carrying a concealed handgun reduces the murder rate for women by about 3-4 times more than one additional man carrying a 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.

LOTT, supra note 1, at 20.

62 Indeed, this phenomenon is well known to risk-regulation experts. For a collection of essays on weighing alternative risks, see RISK VERSUS RISK: TRADEOFFS IN PROTECTING HEALTH AND THE ENVIRONMENT (John D. Graham & Jonathan Baert Wiener eds., 1995).
supporters. By the same token, however, one can say that nuclear supporters are 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. Compared to men’s, women’s concerns about risk are neither greater nor lesser; 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 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 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 an important 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?” 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

68 LOTT, supra note 1, at 21.
against gun control—on instrumental grounds, drawing liberally on
the supportive social science studies.\footnote{Compare 83rd House District, Election '94, HARTFORD COURANT, Nov. 3, 1994, at G23 (quoting a congressional candidate who supported "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.").}

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 accidents or (undesired) aggression. If this were so, however, one would expect variation in violent crime—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 have found that neither actual crime rates, perceived crime rates, prior victimization, nor fear of victimization strongly correlates with public opinion toward gun control.\footnote{See Kenneth Adams, Guns and Gun Control, in AMERICANS VIEW CRIME AND JUSTICE: A NATIONAL PUBLIC OPINION SURVEY 109, 123 (Timothy J. Flanagan & Dennis R. Longmire eds., 1996) ("[F]ear of victimization and perceptions of rising crime rates were unrelated to gun ownership and to opinions on gun issues."); Gary Kleck, Crime, Culture Conflict and the Sources of Support for Gun Control, 99 AM. BEHAV. SCIENTIST 387 (1996) (arguing that gun control support is more a product of culture conflict than a response to crime based on a study indicating that support for gun permits is generally unrelated to crime-related variables); cf. STINCHCOMBE ET AL., supra note 39, at 34-36 (measuring attitudes on gun control as remaining consistent while crime rates became more severe). Our model, which examines the influence of fear of crime on attitudes toward gun control, finds that fear of crime has a relatively small effect. Supra Table 1.}

In any case, the "rational weigher" hypothesis seems to beg the
most important question: what determines how much weight indi-
viduals assign to any given piece of evidence on the consequences of gun
control? Whether permissive concealed-handgun laws promote or de-
ter violent crime has been minutely investigated and ferociously de-
bated 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 some-
ting 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. 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 used to facilitate violent predation or instead being used to repel it (or perhaps being unavailable for self-defense because of excessive regulation).

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. 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. Perhaps individuals who

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66 See generally Timur Kuran & Cass R. Sunstein, Availability Cascades and Risk Regulation, 51 STAN. L. REV. 683 (1999) (stating that an availability heuristic is a mental shortcut where the perceived likelihood of an event is frequently based on the ease with which we can think of relevant examples).

67 See Paul H. Rubin, How Humans Make Political Decisions, 41 JURIMETRICS J. 337, 350 (2001) (discussing how occurrences involving identifiable individuals are given more weight by people than statistics); Cass R. Sunstein, Cognition and Cost-Benefit Analysis, 29 J. LEGAL STUD. 1059, 1066-67 (2000) (discussing how erroneous information that travels between individuals in a cascading fashion can create concern about risks that are actually trivial).

68 See 1999 NATIONAL GUN POLICY SURVEY, supra note 30, at 12 ("However, the idea that the shootings created a surge for gun control is not supported by the evidence . . . . There is little indication that Littleton generally increased support for gun control in the short term and no sign that it did so after about six months.").

69 Compare Peter Annin, "You Could See the Hate," NEWSWEEK, Oct. 28, 1991, at 35, 35 (describing the Killeen, Texas, massacre as "the worst shooting spree in U.S. history"), and Assailant Kills 3 Girls, His Bible-Study Teacher, ST. LOUIS POST-DISPATCH, July 10, 1999, at 21 (characterizing an assailant as someone who "thought it would be neat to hurt somebody and watch them die"), with Scott Glover, Clerk Not Charged in Robbers' Shooting, L.A. TIMES, Feb. 25, 1998, at B3 (reporting that a jewelry store clerk fatally shot two robbers during a botched Valentine's Day heist, and mentioning that "[t]he owners of the jewelry store began keeping a .44-caliber handgun under the counter after a robbery last year"), Art Golab, Senior's Pals Hope He's Taught Thieves a Lesson,
support gun control more readily recall instances of violent predation, and those who oppose it recall instances of heroic self-defense (or instances of self-defense tragically 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 with 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—either 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 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, 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

CHI. SUN-TIMES, Dec. 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.”), and Gun Control Kills Page of the Georgia Chapter of Women Against Gun Control, at http://www.wagc-ga.com/crime.html (last visited Jan. 20, 2003) (listing stories of violent crimes against unarmed victims). 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, N.Y. TIMES, Oct. 9, 1997, at A16 (describing a situation where a sixteen-year-old student in Pearl, Mississippi, walked into the school’s commons and fired “round after round from a hunting rifle” until an assistant principal “who was armed with his own automatic handgun” captured the student); Jonathan D. Silver, As Long as a Month Ago, There Were Signs, PITT. POST-GAZETTE, Apr. 26, 1998, at A1 (reporting that a fourteen-year-old opened fire on classmates at a banquet hall during his middle school dance in Edinboro, Pennsylvania, and was coaxed into surrendering his pistol by the owner of the banquet hall, “who was carrying a shotgun”).

(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, gun-risk stories most “available” to an individual are the ones most congenial to 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 individual might worry more about being unable to defend herself if society takes her gun away than she does about being shot if society fails to disarm others (or vice versa), not simply because she rates one risk as greater in magnitude than the other but because she sees acceptance of one or the other as demeaning or unjust.

This component of the cultural theory of risk explains additional features of public opinion that evade the “rational weigher” and “availability” hypotheses. A substantial percentage of people who say they favor gun control to reduce crime, for example, also apparently accept the proposition that stricter gun control laws would not substantially reduce crime. Likewise, those who oppose gun control appear no more likely than those who support it to believe that gun control interferes with the use of firearms for lawful self-defense. 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” — “a jungle where each relies on himself for survival.”

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71 See Gary Kleck, Targeting Guns: Firearms and Their Control 338-39 (1997) (discussing polls showing that Americans who favor gun control laws simultaneously do not believe that such laws will reduce crime or violence); see also Wright et al., supra note 36, at 235 (noting that the number of people who believe in the effectiveness of gun control to reduce crime is smaller than the number of people who support gun control).


slightly higher crime levels,” they assert, is a price worth paying to avoid a world “in which we routinely wave guns at each other.” Con- control opponents likewise express noninstrumental evaluations of gun risks when they describe gun ownership as an “individual right,” which presumably cannot be subordinated to collective interests in public safety.  

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 is 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.  

If consequentialist arguments cannot 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

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76 See Robert J. Spitzer, The Politics of Gun Control 17-18, 41 (2d ed. 1998) (discussing the Second Amendment and “rights talk” with regard to the gun control debate).  
77 See, e.g., Julian V. Roberts & Loretta J. Stalans, Public Opinion, Crime, and Criminal Justice 299, 242-43 (1997) (describing experiments in which people discount and ignore arguments inconsistent with their prior beliefs); 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) (recounting that when respondents were asked about their position on the death penalty, they tended to endorse all reasons consistent with their attitudes, which researchers conclude may be “an undifferentiated emotional reflection of one’s ideological self-image” rather than based on a set of reasoned beliefs); Tom R. Tyler & Renee Weber, Support for the Death Penalty: Instrumental Response to Crime, or Symbolic Attitude?, 17 Law & Soc’y Rev. 21, 21 (1982) (concluding that death penalty support is “one aspect of general political-social ideology, rather than a response to crime-related concerns and experiences”).
which is attributed to the public's lack of information about the hazards posed by various technologies and to cognitive limitations that distort laypersons' processing of such information.\textsuperscript{78}

The inadequacy of this approach to risk regulation, however, is well known and, by this point, largely accepted even by experts.\textsuperscript{79} 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.\textsuperscript{80} 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.\textsuperscript{81} 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, we should focus our analysis . . . on what is wrong with the state of society."\textsuperscript{82} We must attend openly to the question of what "kind of society . . . we prefer to live in."\textsuperscript{83}

These same conclusions apply to the gun debate. Once the contribution of cultural orientations is exposed, it becomes clear that those involved in the 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 side's fears through law. For the individualist and hierarchist opponents of gun control, it would be a cowardly and dis-

\textsuperscript{78} For an influential statement of this view, see STEPHEN BREYER, BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION (1993).

\textsuperscript{79} See generally Richard L. Revesz, Environmental Regulation, Cost-Benefit Analysis, and the Discounting of Human Lives, 99 COLUM. L. REV. 941 (1999) (addressing how risk regulation and cost-benefit analysis can vary depending on judgments such as discount ratios for the value of a life); Slovic, supra note 58, at 689 (arguing that risk assessment is inherently subjective and that more public participation in both risk assessment and risk decision making would improve the quality of analysis and increase the legitimacy of the decisions).

\textsuperscript{80} See supra Part I (discussing the cultural theory of risk, which describes how individuals evaluate risk according to context-specific norms).

\textsuperscript{81} Cf. DOUGLAS & WILDAVSKY, supra note 15, at 81 ("Science and risk assessment cannot tell us what we need to know about threats of danger since they explicitly try to exclude moral ideas about the good life."); Wildavsky & Duke, supra note 23, at 52 (describing how variations in public perception are not accounted for by knowledge).

\textsuperscript{82} DOUGLAS & WILDAVSKY, supra note 15, at 81.

\textsuperscript{83} Id. at 189.
honorable concession to our own physical weaknesses for us to disarm all private citizens in the interest of public safety. For the proponent of gun 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 herself 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. Control partisans ridicule their adversaries as “hicksville cowboys,” members of the “big belt buckle crowd” whose love of guns stems from their “macho, Freudian hang-ups,” while NRA President Charlton Heston declares

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81 See generally Dan M. Kahan, The Secret Ambition of Deterrence, 113 HARV. L. REV. 413, 451-62 (1999) (viewing the discourse between proponents and opponents of gun control as permeated by “each side’s illiberal ambition to proclaim its cultural and moral ascendancy through the law”).

82 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, Letter to Editor, Dodge City, PITT. POST-GAZETTE, June 1, 1999, at A10 (“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. Wahou.”); Perry Young, We Are All to Blame, CHAPEL HILL HERALD, Apr. 24, 1999, at 4 (“We 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.”).

83 Norman W. Nielsen, Letter to Editor, L.A. TIMES, Apr. 30, 1999, at B6; see also Jim Stingl, In the Shadow of Littleton, NRA Refuses Scarecrow Role, MILWAUKEE J. SENTINEL,
“cultural war” against “blue-blooded elitists” who threaten an “America . . . where you [can] . . . be white without feeling guilty, [and] own a gun without shame.”

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. Consequentialist modes of decision making 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.” 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, welfare reform, environmental regulation, and a host of other controversial policies.

May 2, 1999, at 1 (describing a sign at a gun control rally stating that “[g]un owners have penis envy”).

87 Charlton Heston, The Second Amendment: America’s First Freedom, in GUNS IN AMERICA 199, 203 (Jan E. Dizard et al. eds., 1999); see also id. (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 together and “to win a cultural war”); David Keim, NRA Chief Proves Big Draw at Vote Freedom First Rally, KNOXVILLE NEWS-SENTINEL, 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.”).

88 See BRUCE A. ACKERMAN, SOCIAL JUSTICE IN THE LIBERAL STATE 10-12 (1980) (arguing that reasoning lacks validity if it requires a person to assert that her conception of good is better than that asserted by her fellow citizens); AMY GUTMANN & DENNIS THOMPSON, DEMOCRACY AND DISAGREEMENT 52-94 (1996) (claiming that deliberative democracy asks citizens to justify their beliefs with reasons that can be accepted by those around them); JOHN RAWLIS, POLITICAL LIBERALISM 216-22 (1993) (stating that the idea of public reason is for people to conduct discussions on fundamental issues based on values that others can endorse).


90 See Kahan, supra note 84, at 448 (advocating the expressive underpinnings of the idiom of deterrence as a means to defuse “contentious expressive controversies” inhabiting various areas of criminal law); Note, The CITES Fort Lauderdale Criteria: The Uses and Limits of Science in International Conservation Decisionmaking, 114 HARV. L. REV. 1769, 1769-70 (2001) (identifying the aim to make the decision-making process of the Convention on International Trade in Endangered Species more scientific and less
If this sort of indirection were an effective strategy for suppressing attempts at cultural domination in the 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 confining the gun control debate to empirical arguments can make the issue less contentious is, in fact, an idle one.

As the cultural theory of risk itself illustrates, what individuals accept as truth cannot be divorced from the values and practices that define their cultural identities. Our knowledge of all manners 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 firsthand 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 often signals latent 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 naturally and unquestionably respect. And for that reason, I might well decide not merely that you are misinformed, but that you are evil.31

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

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31 Steven Shapin explains that
[i]t is at 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.

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.

At the same time, consequentialism as a liberal discourse strategy does not 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 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.

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 embarrass-

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92 See, e.g., Kevin Beck, Letter to Editor, Conceal Carry, St. LOUIS DISPATCH, Aug. 12, 1998, at B6 (expressing gratitude to a columnist for “expos[ing] Professor John R. Lott Jr. as an intellectually dishonest toady of the bullet manufacturing industry,” and adding that “[g]un 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 (2001), available at http://www.humanevents.org/articles/03-12-01/coulter.html (stating, “[w]hile 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?” but noting Lott himself disputes these characterizations); Larry Emory, Letter to Editor, Gun-Control Myths: Will They Ever End, NEWS & REC. (Greensboro, N.C.), May 25, 2001, at A14 (“I believe it was Stalin who said, ‘If you tell a lie often enough, it becomes the truth.’ ... These people are liars. The whole gun-control hysteria is built with a fabric of lies and half-truths spread over a minimal framework of truth to give it credibility to the uninformed and gullible.”); Paul Craig Roberts, Unarmed and Unsafe, WASH. TIMES, Mar. 2, 2001, at A16 (“A person can’t help but wonder whether gun-control advocates are uninformed fools or have a secret agenda. Once gun control enters politics, the lying makes even Bill and Hillary Rodham Clinton blush.”).

93 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.”).
ment. 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" 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 catalogued many examples of communities successfully negotiating culture-infused controversies—between archaeologists and Native Americans over the disposition of tribal artifacts; between secular French educators and Muslim parents over the donning of religious attire by Muslim schoolchildren; and between the supporters and opponents of abortion rights in France and Germany. Rather than hide behind culture-effacing modes of discourse, the individuals involved in these disputes fashioned policies expressively rich enough to enable all parties to find their cultural visions affirmed by the law.

94 Id. at 42.
96 See MARC HOWARD ROSS, THE MANAGEMENT OF CONFLICT 4-7 (1993) (recounting an incident where a French school prohibited Muslim girls from wearing traditional scarves only to be overruled by an administrative tribunal).
97 See MARY ANN GLENDON, ABORTION AND DIVORCE IN WESTERN LAW 15-22 (1987) ("At a minimum, one could say for the present French abortion legislation that it is a humane, democratic compromise.").
98 See id. at 25-33 (describing how decisions of the German Constitutional Court and legislation both contributed to striking a balance on the abortion issue between concerns for the pregnant woman and the fetal life).
99 See id. at 40-50 (arguing that a consensus on the abortion issue is slowly emerg-
We do not 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.\textsuperscript{100} When the constraining force of liberal discourse norms breaks down, as it inevitably does, 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 gun control 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 clarify, to the greatest extent possible, the nature of the conflicting cultural views at stake in the gun control debate. That has been the primary aim of the present study.

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 other diverse societal risks.

\textsuperscript{100} See Hunter, supra note 93, at 34 (claiming that some conflicts are intensified by the way they are presented in public with people saying things that were not their original intent).
The second claim was normative: 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 arguments cannot 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 hierarchical 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 econometrics 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 does not 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.
APPENDIX: GSS ITEMS

The GSS item asking about gun control was as follows:

Would you favor or oppose a law which would require a person to obtain a police permit before he or she could buy a gun?

The GSS items included in the hierarchy-egalitarianism scale were as follows:

[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 (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. First (READ ITEM A) . . . are we spending too much money, too little money, or about the right amount on (ITEM)?

[5] Improving the conditions of Blacks

[6] The military, armaments, and defense

The GSS items included in the individualism-solidarism scale 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. First (READ ITEM A) . . . are we spending too much money, too little money, or about the right amount on (ITEM)?

[1] Improving and protecting the environment

[2] Halting the rising crime rate

[3] Improving the nation’s education system

[4] Foreign aid

[6] Social Security

[7] Improving and protecting the nation’s health

[8] Solving the problems of the big cities

[9] Dealing with drug addiction

[10] Mass transportation
