

Deliberation Across the Cultural Divide: Assessing the Potential for Reconciling Conflicting Cultural Orientations to Reproductive Technology

John Gastil, Justin Reedy, Donald Braman, and Dan M. Kahan*

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Introduction

From birth control and abortion to in vitro fertilization and genetic enhancement, reproductive technologies are furnishing Americans not only with new modes of control over sexual and reproductive choice, but also with new sites for cultural conflict. The flare-up over the HPV vaccine provides a recent and typical example, with adversaries quickly and intuitively taking up sides in the debate.¹

The conventional representation of this conflict focuses on particular constituencies: the feminist community's embrace of women's right to maximize their reproductive options and Christian conservatives' claims of Biblical prohibition against some of those same

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¹ See, e.g., Lawrence K. Altman, *Doctors Support a Childhood Vaccine for a Sex-Related Virus*, N.Y. TIMES, Oct. 28, 2005, at A13.

choices. Kristin Luker's *Abortion and the Politics of Motherhood* is a cornerstone in this argument, and it firmly established the feminist-Christian nexus as the key to understanding societal conflict over reproductive technology in the United States.² Other works have followed in a similar vein, identifying particular social groups as framing or exploiting reproductive technology choices for their own rhetorical or moral purposes.³ This account—call it the traditional account—is one of open cultural combat between individuals with competing visions of the good society.

It is a good story, and there is undoubtedly a lot of truth to it; however, it is also missing something crucial. Alongside the explicit and conscious conflict over values is a subtler and more tenacious form of conflict, one that occurs without the participants even being aware of it. It is a conflict that emerges at the implicit level of cognition and serves to support and exacerbate the explicit considerations of competing values and moral worth. This subtler form of conflict is a product of what we call *cultural cognition*, a set of social and psychological processes that underwrite divergent factual beliefs on matters that implicate our diverse and often divergent values and cultural commitments. From gun control and pornography to nuclear power and global warming, cultural cognition pushes us to view the physical world of material consequence as consistent with our moral visions of the good society. Cultural cognition helps to explain not only why we believe that our preferred laws and policies are right and just, but also why they are good for the health and welfare of our fellow citizens.

This approach complicates how we think about what our conflicts are about and how to seek common ground. In a pluralistic society there is constant pressure to put aside sectarian values and to focus on neutral arguments about welfare based on the facts as we know them. The debate over the HPV vaccine—to take one example from the domain of reproductive technology—is not just a debate over whether it is morally acceptable to administer a vaccine to a child, but also over whether the vaccine will, all things considered, have positive or negative effects on the health and welfare on those who are vaccinated.⁴

² See generally KRISTIN LUKER, *ABORTION AND THE POLITICS OF MOTHERHOOD* (1985) (providing a history of the issues framing the abortion debate, its current status, and the future of the debate).

³ See, e.g., GENE BURNS, *THE MORAL VETO: FRAMING CONTRACEPTION, ABORTION, AND CULTURAL PLURALISM IN THE UNITED STATES* 2–4 (2005) (explaining that historically people have framed contraception and abortion issues differently depending on shifting social and political views).

⁴ See Altman, *supra* note 1.

Indeed, to the main participants in this debate, the welfare of those being vaccinated is what they care about most. This welfarist turn in the debate does not lead to convergence, however, because the phenomenon of cultural cognition leads the parties to strongly contrasting views of what the welfare effects of the vaccine are—views that are tightly correlated with their core cultural commitments and values.⁵ So even when individuals attempt to put their potentially illiberal sectarian values to the side and have a respectful debate over shared and supposedly neutral welfare concerns, they end up disagreeing just as vehemently.⁶

Because cultural cognition can—and often does—result in this kind of cognitive illiberalism, those who believe that welfarist considerations have an important role to play in the debate over reproductive technologies stand to benefit from an investigation into cultural cognition's effects on the debate. Understanding how cultural cognition has shaped and is likely to shape public reactions to emerging reproductive technologies can help those who are engaged in these policy discussions guard against the pull of cognitive illiberalism and help them clear effective paths to common ground that might otherwise have eluded them. Beginning that process is the goal of this Article.

We proceed in three parts. Part I introduces the key concepts and propositions in the cultural theory of mass opinion that we deploy in this analysis. Part II explores the cultural character of debates over reproductive technology. We explore theoretical relationships between cultural orientations and key aspects of reproductive technology conflicts, such as how different cultural worldviews approach science, innovation, religion, and women's rights. To look at a specific case, we consider how arguments on genetic enhancement resonate with different cultural values, and we juxtapose these findings with a map of where the American public stands in general on cultural value questions. Part III adds a conception of public deliberation to the analysis and considers theoretical relationships between the features of deliberation and cultural orientations. Finally, Part IV brings this discussion back to the context of reproductive technology to consider briefly the potential for deliberative politics on these issues.

⁵ See Dan M. Kahan et al., *The Second National Risk and Culture Study: Making Sense of—and Making Progress in—the American Culture War of Fact* 10–13 (Yale Law Sch. Pub. Law Working Paper Group, Paper No. 154, 2007), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1017189.

⁶ See *id.*

I. A Cultural Theory of Mass Opinion

The starting point for our cultural approach is the pioneering work of Mary Douglas and political scientist Aaron Wildavsky.⁷ Douglas and Wildavsky believed that individuals viewed risks through the lens of culture.⁸ They argued that competing visions of the good society not only motivated people to make claims about which social arrangements they preferred, but also oriented them to the facts about which activities were dangerous and which were benign—at least insofar as these facts related to their commitments to competing visions of the good society.⁹ The authors seized on two orienting sets of values that they believed would be particularly powerful, values that can be expressed as polar dimensions. One dimension distinguishes a more individualistic worldview from its collectivist counterpart,¹⁰ while the other distinguishes an egalitarian worldview from one that emphasizes the importance of traditional social, political, and economic hierarchies.¹¹

A host of studies have since confirmed both Douglas and Wildavsky's general insights and the specific power of these two orienting values across a wide array of risk and policy concerns.¹² For example, the 2004 National Risk and Culture Survey of a random sample of 1,800 American households found survey measures of cultural orientation to be powerful predictors of a range of risk perceptions and

⁷ On cultural theory, see generally MICHAEL THOMPSON, RICHARD ELLIS & AARON WILDAVSKY, *CULTURAL THEORY* (1990); MARY DOUGLAS & AARON WILDAVSKY, *RISK AND CULTURE: AN ESSAY ON THE SELECTION OF TECHNICAL AND ENVIRONMENTAL DANGERS* (1982); and Aaron Wildavsky, *Choosing Preferences by Constructing Institutions: A Cultural Theory of Preference Formation*, 81 *AM. POL. SCI. REV.* 3 (1987). There is a large empirical and theoretical body of work on risk perception that builds on these theories. Representative studies include Dan M. Kahan et al., *Culture and Identity-Protective Cognition: Explaining the White Male Effect in Risk Perception*, 4 *J. EMPIRICAL LEGAL STUD.* 465, 472–91 (2007); Karl Dake, *Orienting Dispositions in the Perception of Risk: An Analysis of Contemporary Worldviews and Cultural Biases*, 22 *J. CROSS-CULTURAL PSYCHOL.* 61, 61 (1991); 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); and Linda Steg & Inge Sievers, *Cultural Theory and Individual Perceptions of Environmental Risks*, 32 *ENV'T & BEHAV.* 250, 250 (2000).

⁸ See DOUGLAS & WILDAVSKY, *supra* note 7, at 7–11. This presentation is an adaptation of the original theory, stressing the attitudinal component of cultural theory and replacing the grid/group pairing with the closely related four-orientation approach.

⁹ See *id.* at 9.

¹⁰ The collectivist worldview is alternatively referred to as a “solidarist” worldview, which we treat as a synonym.

¹¹ See DOUGLAS & WILDAVSKY, *supra* note 7, at 97–101.

¹² See *supra* note 7.

policy perceptions.¹³ This survey also confirmed that culture was a more powerful predictor than either demographics, e.g., region, ethnicity, sex, or political orientations (partisanship, left-right ideology); in many cases, the cultural account sapped all of these predictors of their explanatory power.¹⁴ Moreover, these orienting values proved a powerful predictor of attitudes even at low levels of political knowledge, whereas people only at the higher levels of political knowledge were attuned to the more partisan cues in their information environments.¹⁵

A subsequent series of national survey experiments conducted in 2006 and 2007 has replicated these results and provided additional insight into the cognitive mechanisms underlying culture's effect on opinions.¹⁶ In particular, these studies confirmed that people can readily recognize the cultural orientations of message senders (speakers, authors, etc.) and the cultural cues embedded in ostensibly neutral messages.¹⁷ The more culturally resonant a message and its sender, the more likely one is to credit the information or adopt the position advocated in the communication.¹⁸ This cognitive cueing process happens relatively quickly and does not require high levels of political knowledge or a special kind of cultural sophistication.¹⁹

At the heart of the model is what can be described as one's cultural orientation, which includes one's values, as well as complementary characteristics, such as patterns of social relations and ways of speaking. Demographics are often viewed as proxies for cultural orientation, and many studies of mass opinion implicitly assume (though rarely articulate) this assumption. On this account, race, ethnicity, region, community, and various conceptions of ideology can be treated as common but imperfect proxies for this richer conception of cultural orientation. Though culture is sometimes reduced to one's demographic characteristics, such as when sociolinguist Deborah Tannen re-

¹³ See Kahan et al., *supra* note 7, at 472–91; Dan M. Kahan et al., *Fear of Democracy: A Cultural Evaluation of Sunstein on Risk*, 119 HARV. L. REV. 1071, 1086–87 (2006); John Gastil et al., *The “Wildavsky Heuristic”: The Cultural Orientation of Mass Political Opinion* 12–21 (Yale Law Sch. Pub. Law Working Paper Group, Paper No. 107, 2005), available at <http://ssrn.com/abstract=834264>; see also The Cultural Cognition Project at Yale Law School, <http://research.yale.edu/culturalcognition> (last visited July 17, 2008).

¹⁴ See Gastil et al., *supra* note 13, at 21–22.

¹⁵ See Kahan et al., *supra* note 13, at 492–93.

¹⁶ See generally Kahan et al., *supra* note 5.

¹⁷ See *id.* at 11–12.

¹⁸ See *id.*

¹⁹ See *id.*

fers to women and men as existing in two separate linguistic cultures,²⁰ we conceptualize demographics as affecting the relative social prominence or acceptability of different cultural identities. On this account, one's cultural orientation is influenced but not determined by the character of one's family, community, or geographic region of origin, and one's biological sex, ethnicity, and socioeconomic status can also combine to make a given cultural mode more or less available to any individual. For the purposes of the present discussion, though, the *origins* of one's cultural orientation are far less important than its *consequences* for attitude formation and deliberation.

Among the various common expressions of one's cultural orientation are political partisanship and the liberal-conservative self-identification. As conceptualized herein, partisanship is one's willingness to be associated with a particular political party, as well as the frequency with which one affiliates with that party. For most citizens, active partisanship is limited to registration in a party's name and voting for its candidates, though many voters live in states where even party registration and primary ballot selection do not require party identification. Nonetheless, it is important to recognize that partisan identity is all at once a cognitive self-labeling (thinking of oneself as a Republican), a verbal self-expression (saying to a surveyor or a fellow citizen, "I am a Republican"), and a pattern of social association (seeking the company of self-described Republicans). As we conceptualize these variables, they are more a reflection of one's cultural orientation—a means of expression and a mode of association—than an independent force in explaining attitudes.

Because the cultural orientation of individuals is shaped by demographics and underwrites conventional political and ideological expressions, the *structure* of cultural cognition's influence on mass opinion and public deliberation shares much in common with conventional theories of public opinion and persuasion. We incorporate familiar concepts, such as selective attention to information,²¹ message framing,²² filtering,²³ and heuristics.²⁴ Each of these processes can be traced along the bottom of Figure 1, from the pool of available infor-

²⁰ See DEBORAH TANNEN, *GENDER AND DISCOURSE* 19–21 (1994).

²¹ See Diana C. Mutz & Paul S. Martin, *Facilitating Communication Across Lines of Political Difference: The Role of Mass Media*, 95 *AM. POL. SCI. REV.* 97, 98–99 (2001).

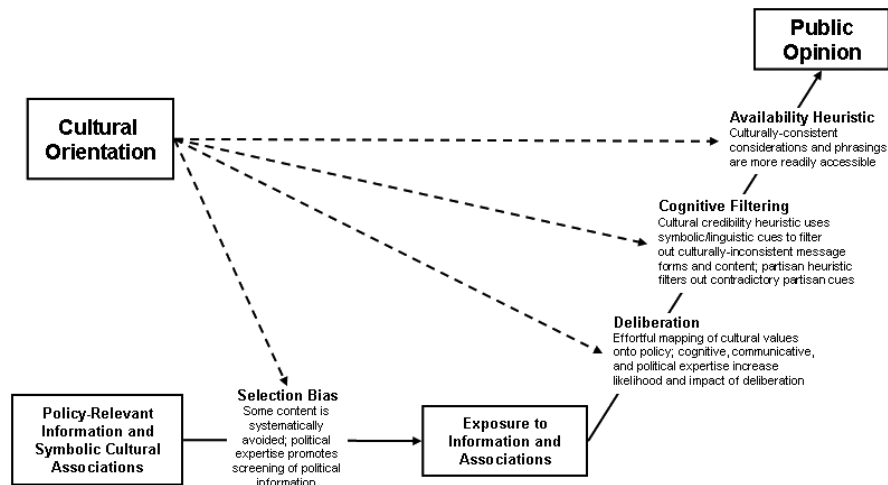
²² See Robert M. Entman, *Framing: Toward Clarification of a Fractured Paradigm*, 43 *J. COMM.* 51, 51–55 (1993) (discussing the concept of frames and how they operate).

²³ See generally ALICE H. EAGLY & SHELLY CHAIKEN, *THE PSYCHOLOGY OF ATTITUDES* 281–97 (1993).

²⁴ See generally ARTHUR LUPA & MATHEW D. MCCUBBINS, *THE DEMOCRATIC DI-*

mation all the way to the expression of a policy attitude. Along the way, culture plays a pivotal role in shaping attitudes, with additional influences provided by political expertise and partisan identity.

Figure 1. Influence Paths from Cultural Orientations to Public Opinion



The path to attitude formation and expression begins with the pool of information and symbolic associations available. In a typical account of this process, the greatest emphasis is given to the messages conveyed through the mass media,²⁵ but it is also important to include social interaction and conversation as sources of information.²⁶ More important still is the inclusion of the omnipresent cultural symbols and signals that flood our social worlds. Compared to the transmission and reception of political information, cultural symbols and cues require relatively little effort on the part of the senders and receivers.²⁷ The relative ease with which cultural knowledge flows has important implications for attitude formation beyond mere exposure level, but that is its first influence. Whereas political sophistication is an important positive influence on the amount of political information a person

LEMMA: CAN CITIZENS LEARN WHAT THEY NEED TO KNOW? (1998); see also EAGLY & CHAIKEN, *supra* note 23, at 326–31, 342–45.

²⁵ See Mutz & Martin, *supra* note 21, at 98–99.

²⁶ See generally ROBERT HUCKFELDT ET AL., POLITICAL DISAGREEMENT: THE SURVIVAL OF DIVERSE OPINIONS WITHIN COMMUNICATION NETWORKS (2004) (describing the importance of disagreement in democratic politics).

²⁷ See Wildavsky, *supra* note 7, at 8.

receives²⁸ and retains,²⁹ it is unlikely that political sophistication has a substantial effect on the amount of cultural information received relevant to a given policy domain.

Another influence on the informational and symbolic inputs in a person's communicative diet is a selection bias. It has often been assumed that people select information sources consistent with their preexisting views, and this finding has been widely reported with regard to media use.³⁰ Recent research has found, however, that a selection bias is even *more* common in choosing interpersonal conversation partners than in selecting news media.³¹ Political selectivity, however, is typically conditional on a modicum of political expertise,³² whereas the cultural selection of symbols, information sources, and associations has happened since time immemorial.³³ All it requires is "social interaction among adherents of a particular culture in contrast to other cultures whose identifiers have different preferences."³⁴ Thus, we naturally self-select ourselves into culturally similar groups and arrangements, and we select culturally reinforcing media, from magazine subscriptions to movie rentals.

In addition to the information and associations a person ultimately encounters, culture (and, to a lesser extent, partisanship) sifts and filters these inputs to arrive at an attitude (or set of salient considerations) and a preferred language for expressing one's views. The first process listed in Figure 1 is effortful deliberation on the merits of a policy in relation to one's core values,³⁵ a relatively special process we discuss in more detail later. The more typical process for translating information and associations into opinion is the automatic deployment of cognitive filtering heuristic reasoning mechanisms. People use cultural signals and cues to recognize a culturally like-minded in-

²⁸ See Vincent Price & John Zaller, *Who Gets the News? Alternative Measures of News Reception and Their Implications for Research*, 57 *PUB. OPINION Q.* 133, 157–58 (1993).

²⁹ See June Woong Rhee & Joseph N. Cappella, *The Role of Political Sophistication in Learning from News: Measuring Schema Development*, 24 *COMM. RES.* 197, 228 (1997).

³⁰ See, e.g., PEW RESEARCH CTR. FOR THE PEOPLE & THE PRESS, *MEDIA CONSUMPTION AND BELIEVABILITY STUDY 1–4* (2004), <http://people-press.org/reports/pdf/215.pdf> (discussing the political polarization reflected in the public's news viewing habits). See generally JOHN R. ZALLER, *THE NATURE AND ORIGINS OF MASS OPINION* (1992).

³¹ See Mutz & Martin, *supra* note 21, at 98.

³² See ZALLER, *supra* note 30, at 21–22.

³³ See Wildavsky, *supra* note 7, at 8–9.

³⁴ *Id.* at 9.

³⁵ For a more in-depth treatment of this process and a definition, see generally Stephanie Burkhalter et al., *A Conceptual Definition and Theoretical Model of Public Deliberation in Small Face-to-Face Groups*, 12 *COMM. THEORY* 1 (2002).

formation source, a culturally similar manner of speech, or even a culturally resonant style of dress, tone of voice, or demographic profile. All of these “peripheral cues” are readily available, as they are fundamental to one’s cultural orientation—which, once again, is more than just one’s core beliefs, but also one’s way of talking and living. All that is required for cueing is that a given informational or symbolic input resonates with one’s cultural orientation. The process requires no special expertise, and given the volume of input one receives in the course of everyday life, cultural resonance is a relatively strong predictor of one’s attitudes, even on public issues that do not appear to be innately “cultural” in character, such as those involving technology or medicine.

The final heuristic process is the “availability heuristic,” which refers to the fact that attitude reports are shaped by “the ease with which instances or associations could be brought to mind.”³⁶ For public opinion scholar John Zaller, this translates into an “Accessibility Axiom,” which holds that “the more recently a consideration had been called to mind,” the more readily it comes into consideration when one is asked to express an attitude.³⁷

The end result of these selecting, cueing, and filtering processes is both a set of policy-relevant considerations and a set of related linguistic preferences. This final point requires a modest shift in how one thinks about attitudes, as commonly measured. Zaller crystallized the notion that measurable “attitudes” are really just averages of the salient and accessible considerations that come into one’s mind when responding to a question.³⁸ We share this view, but also add that the respondent is keenly alert to culturally relevant language and framings. Thus, when a person reports an attitude, they are reporting the

³⁶ Amos Tversky & Daniel Kahneman, *Availability: A Heuristic for Judging Frequency and Probability*, 5 *COGNITIVE PSYCHOL.* 207, 208 (1973).

³⁷ ZALLER, *supra* note 30, at 48.

³⁸ *Id.* at 49. In a weaker sense, this linguistic interpretation of survey response parallels Zaller’s observation that response sensitivity to question wording “because the public, having no fixed true opinion, implicitly relies on the particular question it has been asked to determine what exactly the issue is and what considerations are relevant to settling it.” *Id.* at 95. In a stronger sense, our view differs from Zaller in that we posit that people may lack issue-specific attitudes, per se, while having relatively fixed cultural orientations. In this view, question wording can signal not only a particular policy domain but also what cultural issue, if any, is at hand. To the extent that a question strongly evokes culturally relevant considerations, the response is more closely related to one’s cultural orientation. Thus, an individualist might be more reactive to an item asking about “threats to personal privacy” than one concerning “access to medical information” because the latter phrasing uses less culturally powerful words.

average of their considerations in response to the cultural position taken by the question itself.

II. The Cultural Contours of Reproductive Technology Conflicts

The ongoing debates over reproductive technologies in the United States can be characterized in culture-theoretic terms. By looking closely at the cultural signals given by various advocates, it is possible to map arguments and positions culturally, and then diagram the directions of conflict in these same debates. This Part will briefly review one major issue in the area of reproductive technology: the debate over genetic enhancement.

A. Theoretical Positions

The cultural theory we advance does not prespecify, on theoretical grounds, what position on any given issue will be associated with a particular orientation—those associations are specific to time and place. How cultural orientations line up with particular public policy proposals can be as much a result of political expediency and historical accident as a consequence of underlying cultural convictions. In the early stages of a debate, such as the nascent conflict over genetic enhancement, it is possible that no consensus emerges within one or another cultural camp.

Nonetheless, in light of the social history of related cultural contests in the United States, it is possible to assess likely points of conflict and agreement over reproductive technology. Table 1 suggests how the main values considered can be expected to influence individuals' considerations of important dimensions of reproductive technology: the scientific community, technological innovation, the role of religion in society, and women's rights.

Of the values, only individualism appears likely to hold generally favorable views toward the scientific community and technological innovation. Each of the other cultural groups has concerns, fears, and an abiding skepticism that has risen to the forefront in their assessments of other new technologies. Even egalitarians, who welcome technology that liberates us from class-based drudgery, have a recent history of neo-Luddite wariness of technology further widening our existing divisions of wealth and power and endangering species, ecosystems, and the Earth itself.³⁹

³⁹ See DOV FOX, *Silver Spoons and Golden Genes: Genetic Engineering and the Egalitarian Ethos*, 33 AM. J.L. & MED. 567, 573–74 (2007).

Table 1. How Orienting Values Shape Reproductive Technology Debates

Cultural Orientation				
Actor/Issue	Hierarch	Egalitarian	Individualist	Collectivist
Scientific Community	Skeptical of modern university's liberal educational mission	Skeptical of corporate-funded science	Favorable view of scientific discovery and entrepreneurialism	Concerns about scientists as outspoken dissenters
Technological Innovation	General concern about change, fear of new technology upsetting the social order	Fear of technodystopia imperiling planet but welcomes liberating technology	Generally favorable view of new technology, except when used for surveillance/control	Fear that new technology will break up community ties and interdependencies
Religion in Society	Value role of traditional religions establishing social order	Ecumenical toward non-hierarchical religions, concerned about fundamentalists	View religion as private, separate from state and public issues	Value religion's role maintaining social consensus; wary of multiple religions upsetting social harmony
Women's Rights	Believe sex partly defines one's role in society and the course of life; often holds that male is also head of the household	Believe women's rights must be protected, as patriarchy perpetually threatens them	Believe women should have same freedoms as all other individuals	Women have special responsibility for maintaining family and community bonds

Egalitarianism and individualism are more closely aligned on questions of religion and liberty, both generating concerns about ties between religion and public morality, in particular when it infringes on personal freedom. The plainest difference is simply that individualism implies no *special* concern for women's rights, in relation to other personal liberties, whereas modern American egalitarianism implicates worries over gender-based inequality. By contrast, collectivism and approval of traditional modes of hierarchy celebrate both the role of religion in maintaining the social order and the special respon-

sibility they believe women have for maintaining family and community ties.

These differences, though, are theoretical. How actual arguments play out in any particular debate on reproductive technology depends on more than the potential connections between the objective features of the issue and the principles and theoretical positions of each cultural orientation. It is at this point that we turn to a specific issue and a particular emerging debate—the public argument over the future use of genetic enhancement.

B. Cultural Arguments on Genetic Enhancement

In the last half of the twentieth century, biomedical research has given society a much greater understanding of the genes that control the development of human life. With that knowledge has come the capability to affect those genes and, in some cases, alter human development. Prospective parents have been able to determine, for instance, if their child is at risk for a potentially crippling genetic disorder, giving them the opportunity to end a pregnancy before having a child with an inherited disease.⁴⁰ Except through this kind of selection process, genetic science does not yet allow parents to have “designer” children by actively manipulating the genetic makeup of sperm, ova, or the product of the two, but such capabilities may be possible in the near future.⁴¹

As this sort of genetic manipulation has come closer to a reality, ethicists, scientists, and policy makers have begun to debate the merits of such technology. The different arguments put forth in the debate on genetic enhancement span much of the cultural typology discussed in this Article, and we will consider each cultural perspective, in turn.

Part of what is fascinating about the debate over reproductive technologies is that arguments that bear the signatures of individualism and collectivism are deployed on both sides of the issue. Thus, proponents of genetic enhancement argue, consistent with tenets of individual freedom and choice, that the principles behind the technology have been operating for centuries through individual human mate selection and through selective breeding of crops or animals, for example.⁴² Preventing or restricting the development of genetic enhancement technology would block the natural market-based

⁴⁰ *See id.* at 622.

⁴¹ *See id.*

⁴² Phillip Manning, ‘Frankenfood’ or Godsend?, *NEWS & OBSERVER* (Raleigh, N.C.), Mar. 6, 2005, at 4G.

development of life-saving biomedical advancements, supporters argue.⁴³

Opponents of genetic enhancement, however, also deploy arguments from individualism, warning that humans could become puppets as their traits—and futures—are decided by genetic enhancement prior to conception or birth, and individual choice is stripped away.⁴⁴ If certain traits are promoted, and others are deleted, the argument goes that people will eventually begin to lose their individuality and will become accustomed to limitations on their ability to choose an idiosyncratic and free path to their own ends.⁴⁵ Some people express concern that people who are cloned or otherwise genetically enhanced would essentially be mindless drones or carbon copies of each other—a claim that other commentators, even opponents of genetic enhancement, are quick to decry as a scare tactic.⁴⁶ Individualists have also worried that failure to consider modest restrictions on genetic enhancement may lead government entities to later impose far more severe forms of control over biomedical science and industry.⁴⁷

Communitarian and collectivist arguments are most commonly used by proponents of genetic enhancement. Even if problems of individual choice are implicated by genetic enhancement, on this account, reproductive technologies will ultimately redound to the benefit of all by helping to reduce suffering and prevent diseases.⁴⁸ Other communitarian-style arguments suggest that such advances, while perhaps initially advantaging wealthy populations who can afford to exercise choice, will eventually benefit all.⁴⁹ In short, they argue, the potential benefits for our collective welfare outweigh any concerns we might raise regarding the threat to individual choice or traditional conceptions of morality.⁵⁰

Egalitarian arguments are quite common among opponents of genetic enhancement. An industry providing such gene upgrades at a cost would simply create even more division between the privileged

⁴³ See Johann Hari, *Bio-Luddites Impede Healthier Kids*, SEATTLE POST-INTELLIGENCER, July 7, 2006, at B7.

⁴⁴ See, e.g., Bill McKibben, *Keep Us Human: If We're Truly Smart, We'll Refuse to Foolishly Tamper with Our DNA*, L.A. TIMES, Apr. 14, 2003, at B11; see also Cathy Young, *Troubling Issues in Biotechnology*, BOSTON GLOBE, July 21, 2003, at A13.

⁴⁵ See Young, *supra* note 44.

⁴⁶ See *id.*

⁴⁷ See *id.*

⁴⁸ Editorial, *A Cloning Ban: Senate Shouldn't Repeat the House's Legislative Mistake*, BUFFALO NEWS, Mar. 10, 2003, at B6.

⁴⁹ See Hari, *supra* note 43.

⁵⁰ See *id.*

and the disadvantaged, commentators argue.⁵¹ The richest people in society would be able to improve the wellness and physical traits of their offspring, while those lower on the socioeconomic scale would be left without genetic improvements—susceptible to unexpected illnesses, inherited maladies, and the gambles of regular life.⁵² Along a similar line of reasoning, some commentators warn that genetic enhancement could be used to weed out below-average people from society in general, by selecting genes to make people smarter, more attractive, or more gregarious.⁵³

On the other side of the cultural scale from egalitarian arguments, few arguments explicitly embrace hierarchical reasoning in arguing for or against genetic enhancement. One of the few such arguments focuses on the sporting world, where a commentator contends that regulation of such technology—rather than an outright ban—could allow genetically enhanced athletes to compete against one another on a roughly level playing field.⁵⁴ Divisions in sports already recognize the differences in innate ability between athletes, and the regulation of genetic technology could allow enhanced athletes to compete against one another without affecting competitions between nonenhanced people.⁵⁵

There is, however, a very common form of argument that taps into a traditionalist element of hierarchism, which holds that there are natural hierarchies inherent in human society. Some of the most common arguments against genetic enhancement are that it will become a technology gone awry, a misguided utopian effort to extend our mortality.⁵⁶ We could, unknowingly, make our species into a sort of Frankenstein, a dangerous and unpredictable monster that could destroy the traditional human order and our precious human nature.⁵⁷ This is *not* an explicit argument for protecting social hierarchies, but it is resonant with more explicit economic arguments about the need to accept wealth inequalities for the good of all.

⁵¹ See Caroline S. Wagner, *The Weapons of Mass Creation: Are We Ready for Genetically Enhanced 'Designer People'? If So, Who Will Make the Titanic Decisions Involved?*, L.A. TIMES, Feb. 13, 2003, at B23.

⁵² See *id.*

⁵³ See McKibben, *supra* note 44.

⁵⁴ Gregory M. Lamb, *Will Gene-Altered Athletes Kill Sport? Soon, Animal DNA Could Make Us Faster and Stronger—No Training Needed*, CHRISTIAN SCI. MONITOR (Boston, Mass.), Aug. 23, 2004, at 12.

⁵⁵ See *id.*

⁵⁶ Nicholas D. Kristof, *The Age-Old Question: Humanity Must Tread Carefully as Science Searches for Immortality*, PITTSBURGH POST-GAZETTE, Aug. 14, 2003, at A17.

⁵⁷ See McKibben, *supra* note 44.

C. *Mapping the Cultural Landscape*

There are several interesting features in the cultural landscape around the genetic enhancement debate. Perhaps one of the most interesting is what is absent: few commentators appear comfortable explicitly touting the hierarchical nature of genetic enhancement. Such technology is based on the idea that our genetic makeup and future development can vary widely from person to person, with some people suffering at the hands of poor genes and others flourishing with a stacked deck of good genes. Enhancement of genetic makeup is a way to recognize those differences and utilize them to help make people “better”—healthier, less susceptible to disease, and free of inherited disabilities. Even so, proponents of genetic enhancement research are careful to avoid the idea of “improving” humankind, focusing instead on the benefits of increased choice, reducing suffering, and lowering the incidence of debilitating diseases.

Without a more comprehensive inventory of advocates and arguments, we cannot describe how culture maps onto the genetic enhancement debate with precision. With that caveat in mind, we do recognize a couple of likely cultural clusters. Against enhancement, there are examples of commentators who blend individualist arguments against genetic technology with a concern that genetic enhancement could lead to greater divisions between haves and have-nots—a distinctly egalitarian viewpoint.⁵⁸

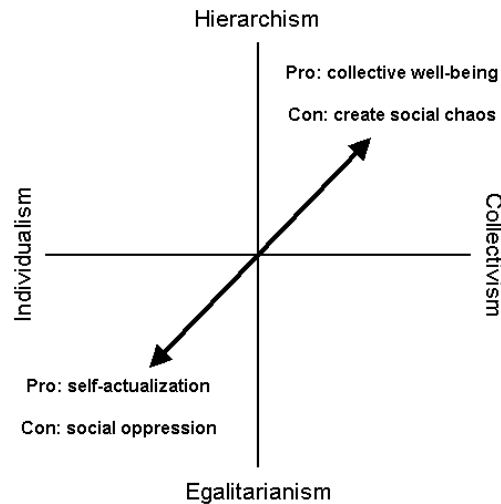
There are also those who worry about the new technology’s threat to the social order, a concern that stretches between the hierarchical and collectivist poles.⁵⁹ On the pro side, individualists and egalitarians alike recognize the potential for this technology to help individuals realize personal aspirations or overcome disadvantages, whereas hierarchs and collectivists see how genetic enhancement could reinforce social hierarchies or promote collective well-being, respectively.

Figure 2 graphically depicts these arguments in the two-dimensional cultural space. Represented in this way, the issue pits the top-right quadrant against the bottom-left. Unlike many protracted cultural conflicts, however, with one corner on the pro side and its counterpart on the con, there are both proponents and dissenters in each of the rival cultural camps.

⁵⁸ See Young, *supra* note 44.

⁵⁹ See McKibben, *supra* note 44.

Figure 2. Cultural Locations of Key Arguments in the Genetic Enhancement Debate



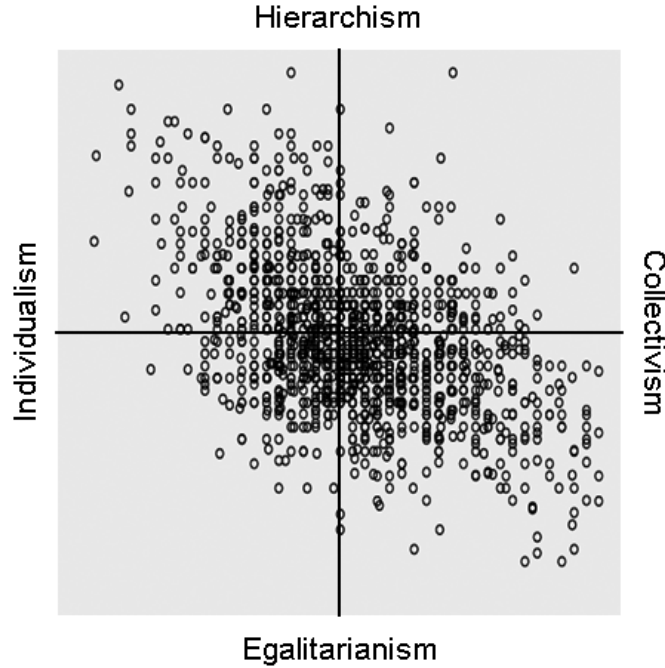
Before considering the implications of the pattern in Figure 2, it is useful to look at the general distribution of the U.S. public on the cultural dimensions. Figure 3 shows the results of a 2004 telephone survey we conducted on a national random sample of 1,600 U.S. citizens.⁶⁰ We asked each respondent to say the extent to which they agreed or disagreed with culturally prototypical statements. For instance, sixty percent agreed with the egalitarian sentiment, “Our society would be better off if the distribution of wealth was more equal.”⁶¹ We combined these items to estimate each person’s cultural orientation, and Figure 3 shows a crude scatter plot of where people fell in two-dimensional cultural space.

For our discussion, there are two important features in this graph. First, the overwhelming majority moderated their responses to our cultural items, ultimately locating themselves in various quadrants but landing nearer the middle of the chart than its extremes. Second, the two quadrants with the greatest number of extreme data points were the top-left and bottom-right. That is, there were relatively few people expressing strong views blending individualism with egalitarianism, on the one hand, and hierarchism and collectivism, on the other.⁶²

⁶⁰ See *supra* notes 13–15 and accompanying text.

⁶¹ See Gastil et al., *supra* note 13, at 13, 39–42.

⁶² Expressed as a simple correlation coefficient, the two dimensions had a significant positive correlation ($r = .46, p < .001$), with hierarchism and individualism positively associated.

Figure 3. Distribution of Cultural Orientations in the U.S., 2004

We discuss this distribution in greater detail in other work,⁶³ but the gist of our findings is that the divide shown in Figure 3 is at the heart of American politics, encompassing (among other things) the partisan divide between Democrats and Republicans, as well as the aforementioned split between feminism and religious conservatism.⁶⁴

Summarizing these findings, it is fair to say that the debate over genetic enhancement could play out in any number of different ways over time. The clusters of elites in the four cultural quadrants have yet to establish clear, consistent, and organized positions on the issue. This means, in turn, that the mass public is not yet receiving a consistent set of cultural cues on which to establish strong policy views.

III. Deliberation, Cultural Orientation, and Conflict

Given the nature of this conflict, as described in Part II, what are the prospects for deliberation on reproductive technology policy? Before answering that question, we again take a step back for a more fundamental look at the nature of public deliberation and cultural orientation.

⁶³ See Gastil et al., *supra* note 13, at 25–27.

⁶⁴ See *supra* notes 2–3 and accompanying text.

A. *Defining Deliberation*

In the simplest of terms, people deliberate when they carefully examine a problem and systematically evaluate a sufficient range of solutions through an open, inclusive exchange that incorporates and respects diverse points of view.⁶⁵ At least to a *degree*, something like face-to-face deliberation does happen in conversations and public meetings.⁶⁶ It is our intention to directly contrast deliberation with the more heuristic information processing and filtering that are the norm for both informal interaction, media information processing, and other political communication.

Research to date on deliberative experiences offers some evidence that it can refine people's policy attitudes, strengthen their information base, and broaden their repertoire of arguments on an issue.⁶⁷ Hoping to produce outcomes like these, civic entrepreneurs have developed a wide range of deliberative processes designed to draw everyday citizens into deliberative exchanges in everything from community forums to official public processes.⁶⁸ Former Senator and Democratic presidential candidate John Edwards picked up on these efforts in October 2007, when he launched his "Democracy One Initiative," which included a proposed "Citizen Congress" that would blend face-to-face meetings with mass-mediated deliberative processes.⁶⁹

Viewed from the perspective of cultural theory, it is less clear what outcomes might result from an ostensibly deliberative event. If, on the one hand, one believes it is enough simply to set up the conditions for deliberation, i.e., a free and open discussion of sufficient duration and topical focus, the actual communication and information processing that takes place might not be so exceptional. Such a dis-

⁶⁵ Burkhalter et al., *supra* note 35, at 418.

⁶⁶ See Michael X. Delli Carpini et al., *Public Deliberation, Discursive Participation, and Citizen Engagement: A Review of the Empirical Literature*, 7 ANN. REV. POL. SCI. 315, 323–24 (2004).

⁶⁷ For a review of empirical literature, see generally *id.* at 332–37. For a review of deliberative democratic theory, see generally Simone Chambers, *Deliberative Democratic Theory*, 6 ANN. REV. POL. SCI. 307 (2003).

⁶⁸ See generally THE DELIBERATIVE DEMOCRACY HANDBOOK: STRATEGIES FOR EFFECTIVE CIVIC ENGAGEMENT IN THE TWENTY-FIRST CENTURY (John Gastil & Peter Levine eds., 2005) (providing a helpful inventory of such processes).

⁶⁹ See John Edwards for President, *One Democracy Initiative: Returning Washington to Regular People*, <http://johnedwards.com/issues/govt-reform> (last visited July 17, 2008); see also John Gastil, *Government by the People*, SEATTLE TIMES, Oct. 17, 2007, http://seattletimes.nwsource.com/html/opinion/2003960790_johngastil19.html (providing the first author's take on this proposal).

cussion might amount to nothing more than another opportunity to pick up cultural cues from one's fellow discussants; the end result would be a calcification of the beliefs and policy preferences one held before the discussion began. Such an outcome has been observed in research on ostensibly deliberating groups, including both ad hoc discussion groups of like-minded peers⁷⁰ and more carefully organized national policy forums.⁷¹

On the other hand, one might take a more demanding approach to defining deliberation. Table 2 provides a conception of deliberation that requires, by definition, particular conversational behaviors and cognitive processes to take place.⁷² If participants do not identify a range of solutions, weigh pros and cons, listen carefully, respect each other's different views, and so on, they may have had a discussion but they have not *deliberated*. This definition of deliberation is precise in its elements but sufficiently broad so that it can be extended from face-to-face discussion to mass-mediated deliberation, in which individual media users experience a kind of deliberation through exposure to and engagement with diverse views in mass media.

This theoretical move no more ensures that deliberation will take place than does wishful thinking change raindrops into gumdrops. The point, rather, is to recognize that mere discussion or media use is not enough if one hopes to bring parties in a cultural dispute to the point where they can weigh competing claims and perspectives. When we refer to deliberation in this Article, we will be referring to a demanding, rigorous process that can likely never be fully achieved but might be approached with modest success if sufficient thought goes into how we design and orchestrate public debates, forums, and even mass-mediated communication processes.

⁷⁰ See David Schkade et al., *What Happened on Deliberation Day?*, 95 CAL. L. REV. 915, 917 (2007).

⁷¹ See John Gastil & James P. Dillard, *Increasing Political Sophistication Through Public Deliberation*, 16 POL. COMM. 3, 20–21 (1999).

⁷² This table is adapted from JOHN GASTIL, *POLITICAL COMMUNICATION AND DELIBERATION* 52 (2008).

Table 2. Definition of Deliberative Discussion and Media Use Behavior

Feature of Deliberative Ideal	Discussant Behavior	Media User Behavior
Analytic Process		
A1. Create a solid information base about problem	Discuss personal and emotional experiences, as well as known facts.	Seek out opportunities to learn of others' experiences and relevant expert analyses.
A2. Prioritize the key values at stake	Reflect on your own values, as well as those of others present.	Consider the diverse concerns underlying issues and how others prioritize issues differently.
A3. Identify a broad range of solutions	Brainstorm a wide variety of different ways to address the problem.	Learn about how people like or unlike yourself think about addressing a problem.
A4. Weigh the pros, cons, and tradeoffs among solutions	Recognize the limitations of your own preferred solution and the advantages of others.	Reassess your biases toward different solutions by seeing how others weigh pros and cons.
A5. Make the best decision possible	Update your own opinion in light of what you have learned. No joint decision need be reached.	Take responsibility for making up your own mind after listening to the advice of experts, partisans, and others.
Social Process		
S1. Adequately distribute speaking opportunities	Take turns in conversation or ensure a balanced discussion.	Make time to listen to sources with views different from your own. Add your own voice when appropriate.
S2. Ensure mutual comprehension	Speak plainly to each other, and ask for clarification when confused.	When you cannot understand an issue or argument, seek clarification from others.
S3. Consider other ideas and experiences	Listen carefully to what others say, especially when you disagree.	When hearing different views, avoid tuning out or ruminating on counterarguments before considering what is said.
S4. Respect other participants	Presume that other participants are honest and well-intentioned. Respect unique life experience.	Give the benefit of the doubt to sources, but demand better behavior from those who violate your trust.

B. How Cultural Orientations Relate to Deliberative Practices

One more reason that consequential deliberation is more often a rare accomplishment than the norm is that not all of the cultural orientations are necessarily disposed toward deliberating. Table 3 summarizes the relationship between cultural orientations and

deliberation. The top half of the table (rows A1–A5) expands on points made earlier to show how the deployment of cultural orientations, generally, undermine the analytic process of deliberation. Cultural filtering corrupts information pools, limits the range of alternatives considered, and biases the weighing of pros and cons. The only net positive contribution cultural orientations might make is to infuse the discussions with value considerations, which might help establish evaluative criteria, e.g., protecting liberty, for assessing policy solutions. Even then, the strong cultural orientations can impede the consideration of opposing values, thereby making cross-cultural deliberation more challenging.

The bottom half of Table 3 (rows S1–S4) shows a more complex relationship between culture and deliberation with regard to the social aspect of deliberative practices. Summarizing these social elements, the hierarch orientation is, by its very conception, skeptical of a mass deliberative process, given the deliberative role presumably played by governing elites. By contrast, egalitarians gravitate toward deliberation because they view it as the natural means by which people of equal status should reach joint decisions. Individualists and collectivists both see virtue and problems in deliberation. The former appreciate the strong voice of the individual, even as dissenter, in deliberation, but individualists might worry about the pressure for mutual consideration and comprehension, which could seem beside the point from their perspective. Collectivists, by contrast, welcome the emphasis on mutual respect and social consensus, but their orientation privileges maintaining cohesion of expressing diverse viewpoints.

The sum of these observations is twofold. First, cultural cognition poses serious obstacles to the analytical processes involved in deliberation. Second, the individuals engaged in a cross-cultural dispute might have intrinsically different notions about the appropriateness of public deliberation as a means of resolving policy conflicts. In particular, egalitarians stand apart from the other cultural orientations in their *theoretical* affinity to deliberative politics, and any conflict that pits egalitarians against others could develop a procedural conflict over the appropriate means of addressing the public dispute.

The character of this difference should not be overstated. In the context of the United States, as well as many other countries, it is likely fair to assume that the overwhelming majority of citizens from any cultural orientation share a general commitment to democracy as a means of self-government. Beyond that, it may even be the case

Table 3. Problems (and Opportunities) Cultural Orientations Present for Deliberation

Cultural Orientation				
Feature of Deliberative Ideal	Hierarch	Egalitarian	Individualist	Collectivist
Analytic Process				
A1. Create a solid information base	Skeptical of any information that comes from culturally dissonant sources or conflicts with culturally ascribed beliefs about the world.			
A2. Prioritize the key values at stake	Culturally affirming values are privileged over all others, creating cross-cultural value conflicts, but those simply make for complex deliberation, rather than undermining it.			
A3. Identify a broad range of solutions	Already committed to a culturally predefined set of generic solutions to all sociopolitical problems.			
A4. Weigh the pros, cons, and tradeoffs among solutions	Selective application of criteria to favor culturally preferred solutions and disfavor those particularly antagonistic to one's orientation.			
A5. Make the best decision possible	Cultural cueing heuristics can compound biased information gathering and processing.			
Social Process				
S1. Adequately distribute speaking opportunities	Believes high-status contributions merit more time.	<i>Consistent with core value of equality.</i>	<i>Belief in equal opportunity, but often must find one's own opportunities.</i>	Only one voice need speak for the whole.
S2. Ensure mutual comprehension	Doubts others' ability to grasp complex issues.	<i>Consistent with concern for rights of less-educated.</i>	People must fend for themselves; comprehension not ensured.	<i>Consistent with core value of mutuality.</i>
S3. Consider other ideas and experiences	Believes high-status contributions merit more consideration.	<i>Consistent with core value of giving each other equal regard.</i>	<i>Consistent with core value of openness to different views.</i>	Believes in consistency over diversity.
S4. Respect other participants	Respect must be earned, not given freely.	<i>Consistent with core value of mutual respect.</i>	<i>Consistent with core value of tolerance of differences.</i>	<i>Consistent with core value of community.</i>

that they all believe in the value of "public discussion," as defined by communication theorist Ernest Bormann when he argues that there

exists a widespread cultural commitment to discussion in Western society.⁷³ After all, there is a long history in the U.S. of group discussion as a model of citizen engagement.⁷⁴

Nonetheless, there are many different *models* of democracy,⁷⁵ and though each model is compatible with deliberation, each articulates it and uses it differently.⁷⁶ Given the pervasiveness of cultural orientations in shaping people's beliefs, it is likely that they similarly shape understandings of democracy, deliberation, and civic responsibility. Thus, hierarchs might favor the elite-competition model of democracy, whereas egalitarians would align with a more participatory model. On the other value dimension, Jane Mansbridge's distinction between adversarial and unitary democracy⁷⁷ might describe the difference between individualists and communitarians, with the former stressing the appropriateness of partisan conflict and the latter prizing social consensus over substantive clash.

Once again, the point here is to recognize that the abstract ideal of deliberation may resonate differently with people from different cultural orientations. A conflict over reproductive technology, or any other public dispute, could become layered with a divergence over democratic procedure on top of substantive disagreement.

IV. Deliberative Opportunities in Reproductive Technology Debates

It is now possible to take these general theoretical ideas back to the context of the debate over genetic enhancement. That debate appears to be a nascent cultural conflict, in that the arguments made thus far appear to cluster into the individualist-egalitarian and hierarchical-collectivist quadrants. In a worst-case scenario, this could be the beginning of a bitter, divisive conflict with poor prospects for cross-cultural deliberation on the issue. But as our brief review of contemporary arguments showed, there are pros and cons currently being voiced on either side of the cultural divide. For a cultural chasm

⁷³ See Ernest G. Bormann, *Symbolic Convergence Theory and Communication in Group Decision Making*, in COMMUNICATION AND GROUP DECISION MAKING 81, 99–104 (Randy Y. Hirokawa & Marshall Scott Poole eds., 2d ed. 1996).

⁷⁴ See generally WILLIAM M. KEITH, DEMOCRACY AS DISCUSSION: CIVIC EDUCATION AND THE AMERICAN FORUM MOVEMENT (2007) (giving an overview of discussion educators and the forum movement).

⁷⁵ See generally DAVID HELD, MODELS OF DEMOCRACY (1987).

⁷⁶ JOHN GASTIL, BY POPULAR DEMAND: REVITALIZING REPRESENTATIVE DEMOCRACY THROUGH DELIBERATIVE ELECTIONS 11–13 (2000).

⁷⁷ See JANE J. MANSBRIDGE, BEYOND ADVERSARY DEMOCRACY ix (Univ. of Chi. Press 1983) (1980).

to open, both cultural camps would have to first resolve their internal disagreements, then find themselves on opposite sides of the issue. Under those circumstances, the most likely policy outcomes would be either stalemate or, if one side or the other gains sufficient political power, the establishment of a one-sided policy regime that offends one or another cultural group while championing its opposite.

But this outcome is only hypothetical. As it stands, with the arguments in both cultural corners split between pros and cons, there may not emerge a clear cultural clash on the issue. Elites and publics with culturally opposite values are not necessarily in disagreement over the appropriateness of genetic enhancement technologies. They will articulate very different rationales—often even *opposing* rationales—but their agreement on policy can help them reach across their more fundamental cultural divide.

Even were the split to appear between individualist-egalitarian and hierarchical-collectivist value clusters, the conflict over genetic enhancement runs counter to the conventional political divide shown in Figure 3. Individualists are more likely to side with egalitarians on this particular issue, and likewise collectivists appear more prepared to side with hierarchs. This means that there are people in each nascent coalition who have traditionally battled alongside persons on the other side of this issue. This complicates any in-group/out-group processes that would normally take place, as each person's primary group identity (as expressed through conventional party politics, for instance) is split between the two sides of the genetic enhancement debate.

This may be a feature of reproductive technology issues generally. The alignment of egalitarian and individualist values, in opposition to hierarchical-collectivist counterparts, was suggested in the theoretical postures of the different cultural orientations in relation to women's rights, religion, technological innovation, and science. To the extent that those are key features of public debates over the HPV vaccine, stem cell research, in vitro fertilization, and other related issues, the same alignment may occur in those cases as well.

A quick glance at the abortion issue suggests that if any of these were to mature into galvanizing cross-cultural conflicts, they would likely become political wedge issues, cutting across the traditional left-right/liberal-conservative/Democratic-Republican divide. Such issues can have traction at times, but they are often deployed repeatedly to limited effect. Neither party has a values coalition that fully embraces either side of such policy debates, though individual candidates and

politicians find it expedient in particular circumstances to take one position or another. The historical successes of pro-choice Republicans (in the northeastern U.S.) and pro-life Democrats (in the southern U.S.) testify to how such issues complicate traditional partisan divides.

Finally, the prospects for deliberation on reproductive technology issues may be aided by the fact that collectivists are, at least theoretically, strongly oriented toward desiring a social consensus. This may mitigate the default distaste that hierarchs have for deliberation, in that collectivists will seek some kind of cultural accommodation rather than risk dividing society in the name of social order. On the other side of the conflict, egalitarians are theoretically inclined to advocate for participatory approaches emphasizing public deliberation. They should be able to forge some momentum toward deliberation, in part by coordination with the collectivists, who are more commonly their allies not only in promoting deliberation but on substantive policy questions.

This scenario is ideal for “cultural vouching,” something we consider one of the most effective means of overcoming unreflective cultural cueing. Under normal circumstances, one hears a culturally resonant message from a culturally like-minded messenger. But what happens when one hears a counter-orientation message from someone you counted as cultural kin? In a series of experiments, we have begun to explore this question, and we are finding evidence that people will listen to these individuals who “vouch” for opposing cultural points of view.⁷⁸

Applying that to the present context, imagine if the individualist-egalitarians end up solidifying their position in opposition to a unified hierarch-collectivist cluster on the issue of genetic enhancement, with one cultural group settling on the pro side and the other on the con. Even in that case, where both sides reach opposing consensus positions, it is likely there will remain dissenters who continue to articulate doubts among the technology’s supporters, or support amidst its detractors. At that point, those people may come to play the role of “voucher,” sowing doubt within their respective cultural groups and thereby keeping the debate from breaking out into an all-out cultural war.

⁷⁸ See Donald Braman et al., *Modeling Facts, Culture, and Cognition in the Gun Debate*, 18 SOC. JUST. RES. 283, 285 (2005), available at http://research.yale.edu/culturalcognition/documents/modeling_cultural_cognition.pdf.

Conclusion

The preceding theoretical analysis cannot predict what will come to pass in the genetic enhancement debate, or other reproductive technology issues. What this does make clear, however, is that a sharp and protracted cultural divide is far from inevitable on genetic enhancement, and probably other issues like it. Those who seek to advance a policy regime that is respectful of the concerns and needs of diverse cultural groups should keep in mind the importance of understanding the cultural character of their own arguments and the convictions of those with opposing views. It will also be important to maintain lines of communication across any cultural divides, in part to keep in contact with cultural vouchers who can reach out to people who share their values, if not their policy preference.

