PARTICIPATORY POLICYMAKING ACROSS CULTURAL COGNITIVE DIVIDES: TWO TESTS OF CULTURAL BIASING IN PUBLIC FORUM DESIGN AND DELIBERATION

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Deliberative theorists posit that highly structured face-to-face policy discussions can transcend ideological differences. By contrast, cultural cognitive theorists argue that people's cultural orientations constrain policy-relevant information processing and forestall the public's ability to reach consensus. Two studies examine whether deliberative processes can span divergent cultural orientations. The first assesses a prominent deliberative forum programme's capacity to frame policy solutions across the quadrants of a two-dimensional cultural grid. The second study examines whether deliberation generates policy recommendations that transcend biases to yield cross-cultural agreement. Results show that public deliberation can encompass multiple cultural orientations and encourage participants to look beyond their biases to discover common ground. When it comes to framing and implementing deliberative public forums, cultural orientations appear to be surmountable obstacles.

INTRODUCTION

The past two decades of scholarship on public policy and governance have ushered in a wave of theory and research on the public's role in policymaking. Participatory policy processes are partly a response to more elite-based and technical processes (Steelman 2001), and they aim to transcend the more simplistic public engagement processes used in conventional policymaking (Renn *et al.* 1995; Van den Hove 2000; Papadopoulos and Warin 2007; Michels and De Graaf 2010).

One prominent (and promising) version of participatory innovation advocates deliberative democratic policymaking (Hajer and Wagenaar 2003; Dryzek 2010; Kies and Nanz 2013). Deliberative democratic models contrast with adversarial and interest-based political debate and policymaking (Mansbridge 1983; Chambers 2003; Leighninger 2006; Fishkin 2009). The differences between these approaches are so vast that one might worry that the critical yardstick of deliberative democracy is less useful as an evaluation tool and better suited for giving a sharp spank to the hindquarters of actual governing systems (Parkinson and Mansbridge 2012; Gutmann and Thompson 2014).

Nevertheless, experiments in public deliberation suggest that the public has the capacity for thoughtful discussion, and public institutions have the flexibility to incorporate such discourse (Nabatchi *et al.* 2012; Grönlund *et al.* 2014). The success of the jury system in the United States and other countries (Vidmar 2000) suggests that even divided societies can incorporate citizen deliberation. The lack of deliberation in modern institutions reflects historical patterns toward corrosive discourse, not inevitabilities (Bessette 1994). Indeed, systematic studies of modern legislatures find considerable variation in their deliberative quality, which in turn explains their ability to reach consensus (Bächtiger *et al.* 2005).

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As deliberative democratic theory has become more empirical (Thompson 2008; Jacobs *et al.* 2009; Neblo *et al.* 2010), it requires testing alongside equally strong but divergent theoretical perspectives. Cultural cognitive theory provides such a juxtaposition. This perspective emerged out of a broader cultural account, which posits that the nature of our relations within existing social and institutional arrangements shapes how we approach the world (Douglas and Wildavsky 1982; Swedlow 2011). As Swedlow (2014, p. 468) explains, 'different types of social and political relations are accompanied by values and beliefs … that allow people to justify these relationships to each other'.

Change occurs within cultural groups when something that is 'anomalous from one cultural perspective' can be 'better explained or understood from another' (Swedlow 2014, p. 470). People have the capacity to reflect on their social conditions and beliefs, even across lines of cultural difference. They can potentially adapt their policy views or even converge (Rayner 1992; Bellamy *et al.* 2014), particularly when placed in a well-structured deliberative social setting that engenders trust in the process (Ney and Verweij 2014).

The more narrow focus here is a variant from that theory. This 'cultural cognition' perspective draws inspiration from cultural theory by placing people on a conceptually related two-dimensional grid, but it departs in at least three ways: cultural theory specifies the worldviews within that grid differently (e.g. eschewing the concept of 'fatalism'); it more commonly views the grid's dimensions as continuous, rather than as quadrants; and it alters the labels of the grid's dimensions, which in cultural cognition range from hierarchical to egalitarian and from individualistic to collectivistic (e.g. Kahan *et al.* 2007, 2010; see Ripberger *et al.* 2015). Even within cultural theory, however, labels have varied across theorists, as noted by Tansey and O'Riordan (1999).

Substantive differences in the interpretations of the cultural quadrants lead to different emphases about the primary cultural conflicts. In cultural theory, the 'stable diagonal' that generates cultural clash stretches from low-grid/low-group to high-grid/high-group – that is, between individualism and hierarchy (Tansey and O'Riordan 1999; Grendstad 2003). In cultural cognition, the more common conflict lies between hierarchical-individualists and egalitarian-collectivists (e.g. Gastil *et al.* 2011).

Another major departure is the conviction that one's cultural orientation remains relatively static within individuals' belief systems. Once formed, a cultural orientation generates a worldview resistant to alternative value propositions and different conceptions of reality. Modern pluralistic societies feature a conflict among rival orientations to the world and the public policy problems people face (Douglas and Wildavsky 1982; Kahan 2012). Though the content of cultural belief systems can change in response to elite cues (Kahan *et al.* 2010), when those cues are static within each cultural group, it is unclear whether cross-cultural policy deliberation is even *possible*.

In this article, we draw on the cultural cognitive approach in studying the potential for structuring participatory policy deliberation that engages people of diverse cultural orientations. To address two distinct questions, we look at two cases – the National Issues Forums (Melville *et al.* 2005) and the 2010 Oregon Citizens' Initiative Review (Knobloch *et al.* 2013).

The first case permits us to answer the question: is it possible to frame policy issues in a way that spans the full variety of cultural orientations? Biased issue framing is a common concern in deliberative designs (Calvert and Warren 2014; Lee 2014). Deliberation itself can appear to have a liberal or egalitarian bias in its emphasis on procedural fairness (Gastil *et al.* 2010; Weiksner *et al.* 2012), though deliberation's restraint of revolutionary impulses provides a countervailing conservative bias (Levine and Nierras 2007; Lee *et al.* 2015). Our

first study will examine whether a prominent public discussion programme has framed national policy issue debates in a way that incorporates diverse cultural orientations.

Our second study addresses the question: can deliberation move people past their cultural biases and toward a policy consensus? This question poses the greater challenge because it pits the optimistic view of deliberative citizen policymaking against years of research showing the polarizing power of cultural biases (Kahan 2007; Gastil *et al.* 2011). What makes this an open question is that cultural cognitive theoretical research typically examines information filtering and opinion formation in experimental surveys (e.g. Kahan *et al.* 2010), rather than during a public meeting that affords participants ample time for reflection and surrounds them with pro-deliberative cues. Moreover, the original cultural theory out of which the cognitive view emerged has long recognized the fluidity of people's beliefs as they move through different social and institutional settings (Rayner 1992; Swedlow 2014). A process designed specifically for deliberative consideration of different views (Ney and Verweij 2014) might afford people a greater opportunity to lay aside pre-existing biases (Nabatchi *et al.* 2012). Accordingly, our second study will examine the convergence (and divergence) of culturally diverse citizens who take part in an intensive deliberative process.

JUXTAPOSING CULTURAL COGNITION AND PUBLIC DELIBERATION

Before turning to the two empirical studies at the heart of this article, we begin by noting how the cultural cognitive approach we employ relates to, but also departs from, the cultural theory that runs through this special issue. Cultural theory emerged out of anthropology (Douglas 1970/1996) but spread quickly to attract scholars from diverse disciplines (Thompson *et al.* 1990; Swedlow 2014).

For instance, research has shown marked variations in perceptions of climate change risks across different cultural groups (e.g. Ripberger *et al.* 2015). Even so, Bellamy *et al.* (2014) found that a deliberative process could bring about convergence between panels of citizens, government officials, and stakeholders on some policy interventions, such as voluntarily living with a low-carbon lifestyle and pursuing offshore wind energy. Such agreement can come from different cultural groups both embracing a larger, 'hegemonic myth' (of the market, in this case), rather than reaching a deliberative agreement on policy (Rayner 1995; Bellamy *et al.* 2014). Whether structured by a larger myth or not, convergence can arise through discourse, such as the sharing of engaging narratives (Jones 2014) – a phenomenon also noted by deliberation scholars (Black 2008). Moreover, cultural theorists expect that policy crises will sometimes generate 'clumsy solutions', which 'consist of creative and flexible combinations of . . . various ways of organizing, perceiving and justifying social relations' (Verweij *et al.* 2006, p. 818).

The cultural cognitive model of public judgement

More than two decades ago, researchers inspired by this theory began conducting survey research to use individuals' attitudes as indicators of cultural orientations (e.g. Jenkins-Smith and Smith 1994; Peters and Slovic 1996; Swedlow 2014). Those studies focused primarily on perceptions of risk, a longstanding interest within cultural theory (Wildavsky and Dake 1990), but the work of Dan Kahan developed that approach into a theory of cultural cognition (Kahan 2007, 2012; Kahan *et al.* 2007, 2010, 2011).

Cultural cognitive theory posits that people hold strong cultural biases that orient their policy opinions but also their cognitive and affective responses to policy actors

and policy-relevant information (Kahan 2012). Cultural orientations emerge out of early political and cultural socialization and are reinforced by processing culturally resonant messages, which update individuals' views when like-minded cultural elites publicly adopt or alter their policy judgements (Kahan *et al.* 2009, 2011).

The orientations referenced in cultural cognitive theory typically appear as two orthogonal dimensions, one stretching from egalitarianism to hierarchism and the other from collectivism to individualism (Kahan *et al.* 2007).[1] Hierarchical individualists believe in a well-ordered society in which individuals advance according to merit. They favour free-market approaches and believe that government regulations unduly constrain the centrifugal forces of a capitalist economy. Hierarchical collectivists, by contrast, seek strong community traditions and social order. They privilege public safety and morality over personal liberty and believe that the state must often protect us from ourselves. In the quadrant opposite the hierarchical collectivists lie egalitarian individualists, who hold a libertarian view that sees liberty and equal opportunity working together. They favour only those government interventions that ensure market competition and protect personal freedom. The final group – egalitarian collectivists – seek to limit socioeconomic inequality and support institutions that counter discrimination and stratification and that protect pluralism.

Any participatory policymaking process must consider how to incorporate these divergent cultural orientations. This requires reconciling different value priorities (Melville *et al.* 2005) among people who have developed divergent empirical beliefs shaped by those values (Kahan 2007, 2012; Wells *et al.* 2009; Gastil *et al.* 2011). One of the main findings of cultural cognitive research has been the persistence of such differences in how people make risk/benefit estimations (Kahan 2012) and judgements about a whole array of policy-relevant facts (Gastil *et al.* 2011).

Deliberative theories of participatory policymaking

Cultural cognition throws down a challenge to deliberative conceptions of participatory policymaking. Deliberation must prove feasible in political environments that feature ubiquitous clashes between different cultural identities (Kahan 2007) or coalitions (Jenkins-Smith *et al.* 2014).

We focus not on the prospects of creating an entire deliberative system (Parkinson and Mansbridge 2012) but on the potential for democratic deliberation occurring in specific places and times. When we speak of democratic deliberation (Gastil 2008), the 'democratic' adjective in this phrase refers to the egalitarian and respectful social character of a forum, assembly, conference, or other public event that engages citizens in the policymaking process. The noun 'deliberation' refers to the analytic process taken on by that public body, which must gather sufficient information, establish evaluative criteria, and apply those to alternative solutions. To count as democratic deliberation, a public event has to meet high standards for both democratic social relations and deliberative problem analysis and decision making (Burkhalter *et al.* 2002). Civic innovators have devised several processes, such as the ones studied herein, to engender democratic deliberation (Gastil and Levine 2005; Nabatchi *et al.* 2012; Grönlund *et al.* 2014).

Some preliminary scholarship has begun to link directly the cultural cognitive and deliberative perspectives to show their interplay (Gastil *et al.* 2008b; Tucker and Gastil 2013). Related studies have shown the potential for deliberation to transcend cultural conflicts (Dryzek 2005; Zapata 2009; Luskin *et al.* 2014; Ney and Verweij 2014). Critics who show the limits of public discussion have often focused on events that lacked key design elements,

such as nonpartisan policy framings, informative issue guides, discussion ground rules, and facilitators (e.g. Mendelberg and Oleske 2000). Overall, past investigations provide reason for optimism about the potential for deliberative designs to function as intended, even in the midst of cultural conflict.

In our two studies, we twice test the limits of this sanguine assessment. Our first study reviews 20 years of the National Issues Forums' discussion guides (Melville *et al.* 2005) to see if that programme has framed controversial public issues in a way that spans the different cultural orientations. The second study focuses on the state of Oregon, in which political-cultural groups have waged pitched battles via ballot measures. We test the capacity of the Oregon Citizens' Initiative Review's citizen panels to engage in deliberation that moves people beyond their cultural biases while drafting policy analyses for the state's electorate (Knobloch *et al.* 2013). After reviewing the data in these studies, we conclude with a summary estimation of the prospects for cross-cultural policy deliberation.

STUDY 1: FRAMING ISSUES ACROSS THE CULTURAL SPECTRUM

Anyone designing a deliberative public event must confront the question of how to frame the issue under discussion. Conscientious organizers introduce multiple perspectives on an issue to ensure that alternative policy views make their way into the discussion (Pan and Kosicki 2001; Leighninger 2006; Lee *et al.* 2015).

Cultural cognitive theory foregrounds the challenge of accommodating divergent policy perspectives across two-dimensional space. Conventional forms of public debate explicitly recognize just two sides to an issue – the pro and the con. That framing aligns with a two-party system and the left–right ideological dimension popular in both politics and political science, but it cannot accommodate four distinct cultural orientations. Thus, mainstream American political debate tends to juxtapose just two of the cultural quadrants – the hierarchical individualists (mostly Republicans) and the egalitarian collectivists (mostly Democrats), with libertarians and communitarians standing at the margins (Gastil *et al.* 2011).[2]

National Issues Forums discussion guides

The designers of one prominent deliberative process – the National Issues Forums (NIF) – have devised dozens of issue framings that always have either three or four choices (Mathews 1994; Gastil and Dillard 1999a; Melville *et al.* 2005). The NIF's public events come in many shapes and engage diverse audiences, including adult literacy programmes, Catholic parishes, and dozens of cities across the United States. Each year, the NIF Institute produces new issue books to help organize national discussions on current policy issues ranging from foreign intervention to free speech to health and social welfare.

Each of the NIF issue books contains three-to-four 'choices' or 'approaches', which represent broad strategies for addressing a given public problem, as illustrated in Figure 1. These framings are designed to transcend partisan political debates by including more than two options and by underscoring trade-offs among these alternatives.

In spite of NIF organizers' attempt at trans-partisanship, a previous study found it was possible to code each policy choice from seven different issue books as either liberal or conservative (Gastil and Dillard 1999b). That study revealed that participants in NIF discussions typically became more crystallized in their views along the liberal-conservative spectrum. For example, people who entered forums favouring a liberal choice were more

N A T I O N A L   I S S U E S   F O R U M S

MODERATOR GUIDE

NATIONAL ISSUES FORUMS

The New Science of Food:
Facing Up to Our Biotechnology Choices

December 2002

The use of new biotechnology tools in our global agricultural and food system has rapidly increased during the past decade. Scientists can now use biotechnology to create characteristics in plants or animals by transferring genetic material from one source to another plant or animal. In the process, new personal and societal decisions emerge about these food and agricultural production practices. Here are three approaches for addressing the challenges.

APPROACH 1: Let Science and Enterprise Guide Our Food System

We should enhance rewards for biotech food and agricultural innovations, foster free enterprise, and base regulations on scientific evidence to benefit the world with an improved food supply.

APPROACH 2: Safety First — Protect Our Health and Environment

We should take extra precautions to ensure that all biotech food and agricultural innovations are safe for humans and the environment and monitor them to quickly resolve any problems.

APPROACH 3: Encourage Multiple Food Sources and Full Disclosure

We should encourage a variety of methods in food and agricultural production and encourage full disclosure to keep our options open as new information develops and preferences change.

FIGURE 1 *Example of a National Issues Forum discussion guide framing a public issue in terms of three different policy approaches*

likely to exit embracing it even more tightly, while also coming to support the other liberal choice in the book (if there was one) and rejecting any conservative alternatives. Nevertheless, such crystallization of pre-existing views is not inevitable; subsequent research showed that cross-ideological convergence can occur in discussion formats modelled on NIF (Gastil *et al.* 2008a). Deliberative Polls, which adapted NIF's issue framing techniques, have shown wide variations in the degree of opinion convergence across numerous issues (Fishkin 2009; Gastil *et al.* 2010).

The distribution of cultural orientations in the US
In this first study, we test the deliberative democratic assumption that a programme such as NIF can frame issues in a way that effectively represents the full cultural map. That requires drawing such a map for the US population, which is the target audience for NIF.

The particular issue books we studied were released from 1989 to 2009, and so to draw our cultural map, we use national data from a 2004 survey of 1,840 adults (Kahan *et al.* 2007).[3]

To measure cultural orientations, this survey used 12 items with 5-point response scales from 'strongly disagree' (−2) to 'strongly agree' (+2) to yield reliable measures of both egalitarianism-hierarchy (six items, M = −0.38, SD = 0.75, alpha = 0.72) and collectivism-individualism (six items, M = 0.38, SD = 0.61, alpha = 0.66). The two scales were weakly correlated (r = 0.13, one-tailed p < 0.001).

When identified by cultural quadrant (excluding those individuals with scores at the exact midpoint on one dimension or another), these measures resulted in a distribution that places a majority (53 per cent) of respondents in the egalitarian-individualist quadrant, 24 per cent in the hierarchical-individualist quadrant, 18 per cent in the egalitarian-collectivist quadrant, and almost none (5 per cent) were scored as hierarchical collectivists. That said, the heaviest concentration of scores is near the middle of the distribution.

Our question is whether this cultural population distribution is well represented by NIF – an ostensibly trans-partisan public discussion programme. Thus, we turn now to the task of culturally mapping the issue books produced by that programme.

Mapping policy options in the National Issues Forums

The NIF issue books used for this study spanned from 1989 to 2009 and included 154 discrete policy choices. To identify the cultural location of each choice, we employed four coders who had training in applying cultural cognitive theory to a variety of policy issues. Coders reviewed the issue booklets' summary pages, like the one shown in Figure 1, but when that proved unsatisfactory, coders read the more detailed content of the discussion guide. (Appendix A presents full coding instructions.) Inter-rater reliability was calculated treating each policy choice's cultural rating as a continuous score and then calculating reliability across the four coders.[4] Reliability estimates were good for both the collectivism-individualism dimension (M = 0.005, SD = 0.81, alpha = 0.82) and the egalitarian-hierarchical dimension (M = 0.007, SD = 0.82, alpha = 0.85). Correlations between the two scales were comparable to the US survey data reported earlier (r = 0.25, p = 0.002).

Figure 2 shows the full distribution of NIF policy coding scores across the two dimensions. Exactly half of the codes were on the hierarchical side, with the other half being egalitarian. Nearly two-thirds were collectivist (36 per cent hierarchical collectivist and 27 per cent egalitarian collectivist), with the other third split between the 24 per cent in the egalitarian-individualist quadrant and 14 per cent in the hierarchical-individualist quadrant. Visual inspection of the graph shows, however, that those policy options coded on the individualist side of the ledger had relatively high scores. The fact that rating averages on both dimensions were near-zero (0.005 for hierarchy and −0.007 for individualism) is remarkable, as it represents a perfect balance across the dimensions.

When the codes are trichotomized along each dimension, with a 'mixed' category containing scores less than 0.50 and greater than −0.50, the hierarchical-egalitarian dimension remains perfectly distributed (33.8 per cent hierarchical, 33.1 per cent mixed, and 33.1 per cent egalitarian). In the other dimension, 39 per cent scored as collectivist, 33.1 per cent as mixed, and 27.9 per cent as individualist. The largest 'corner' of this three-by-three distribution was that of hierarchical collectivists (18.8 per cent), followed by egalitarian individualists (13 per cent), hierarchical individualists (7.8 per cent), and egalitarian collectivists (7.1 per cent).
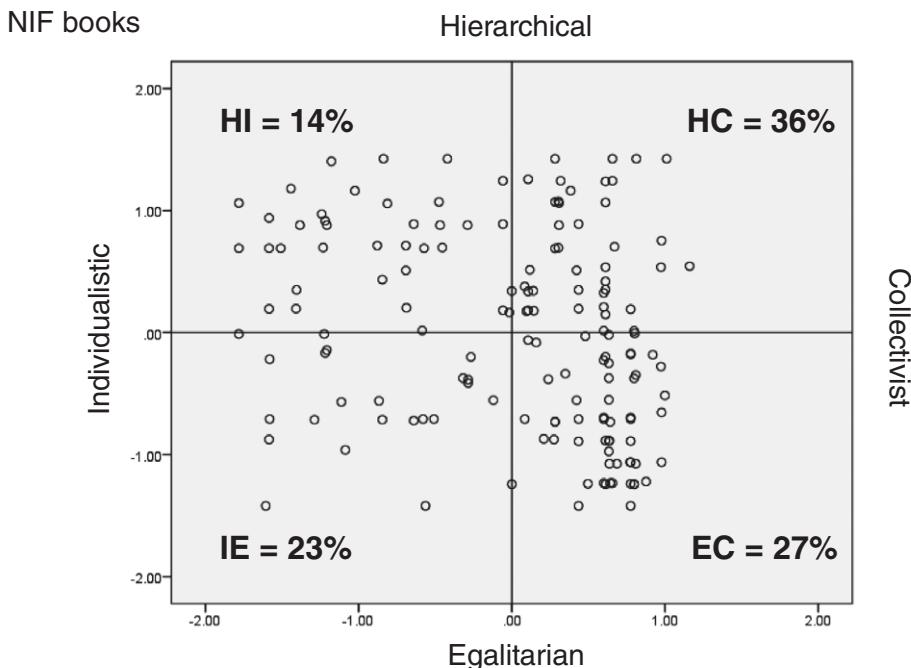
NIF books

FIGURE 2 *Distribution of codings of the policy choices presented in National Issues Forums discussion guides from 1989 to 2009, with percentages falling into the four quadrants (excluding those located along quadrant borders)*

An incidental variable in this dataset yielded one additional, unexpected finding. For data archiving purposes, we noted in the dataset the choice number; in each issue book, the choices come in a number sequence from one to three or one to four. As it happened, this ordering had a significant association, such that hierarchical choices were placed earlier in the list of policy options than egalitarian ones ($r = -0.26$, $p = 0.001$). Put another way, hierarchical choices were three times as likely to be the first choice compared to egalitarian ones.

Summary of findings

Over the 20-year period we studied, NIF offered policy choices distributed widely across the cultural grid, although its issue guides overrepresented collectivist policy choices. That pattern contrasted with a population distribution that de-emphasized the collectivist orientation.

To interpret these findings, it is useful to consider the identity and mission of the NIF Institute and the Kettering Foundation, which spawned it. These entities take a solidly nonpartisan stance and hope to transcend ideological divides (Melville *et al.* 2005). The primary nexus of policy conflict in the US is between the hierarchical-individualists and the egalitarian-collectivists, particularly along the hierarchical-egalitarian dimension (Gastil *et al.* 2011). The NIF struck a near-perfect balance along that dimension but put its foot on the scales with regard to the collectivist dimension, which resonates with the communitarian voice often found in Kettering Foundation writings (e.g. Mathews 1994). Depending on one's perspective, that makes NIF issue guides either a welcome corrective against a

political culture that discounts a communal perspective, or that amounts to bias toward an unpopular cultural orientation.

STUDY 2: CULTURAL COGNITION AND THE 2010 OREGON CITIZENS' INITIATIVE REVIEW

Whereas our first study examined how issues get framed before a public meeting, our second study looks at deliberation on ballot initiatives, for which two-sided yes/no framings are pre-set. Direct democratic processes, such as initiative elections, represent one of the most longstanding forms of participatory policymaking. Such elections, however, rarely constitute an ideal deliberative process through which the public weighs carefully the choices put before it (Bowler and Donovan 1998; Gastil *et al.* 2007).

What makes the State of Oregon (in the Pacific Northwest of the US) interesting is that its voters have access to a unique source of policy information. In 2009, a bipartisan legislative vote and a governor's signature established the Oregon Citizens' Initiative Review (CIR), which became a permanent part of that state's electoral process in the 2011 legislative session. The Review convenes a stratified random sample of 18–24 citizens for a four-to-five-day deliberation on a state ballot measure. Citizen panelists interrogate advocates, opponents, and background witnesses, then synthesize the best evidence and arguments to produce a one-page statement that goes into the official *Voters' Pamphlet* mailed to every registered voter.

The Oregon CIR permits us to test the potential for deliberative citizen policy analysis to transcend cultural bias. Previous research has already demonstrated the deliberative quality of the 2010 Oregon CIR panels (Knobloch *et al.* 2013), but that study left open the question of whether that deliberation shifted the panelists' initiative policy preferences across cultural boundaries, perhaps even toward consensus.

Well-structured deliberation should permit citizens to transcend their particular cultural biases to reach judgements that conflict with the more heuristic judgements they would make on their own. Thus, the CIR should be able to forge supermajorities on issues that otherwise split the electorate along partisan lines. This should occur when discernible facts favour or undermine a proposed law, such as when measures can be shown to have demonstrable flaws that could produce widespread negative consequences. In such a case, the panelists may still have values disagreements but reach what Dryzek and Niemeyer (2006, p. 638) call an 'epistemic consensus', whereby panelists agree on certain claims about a policy's impact.

A stricter test of deliberative theory might require that citizens become so independent of cultural bias that the CIR panelists' judgements become untethered altogether from individual cultural orientations. Thus, this study looks at the judgements of the participants in the 2010 Oregon CIR in relation to those same individuals' cultural orientations.

The Oregon cultural context

Before turning to the CIR panels, it is necessary to establish the cultural context. In this case, we look both at the state-wide Oregon population and the recent history of ballot measures in that state.

To map the Oregon cultural landscape, we used a phone survey of likely Oregon voters (N = 1,908) conducted before the 2010 general election.[5] Twelve survey items with a 4-point response scale from 'strongly disagree' to 'strongly agree' were rescaled and averaged to yield scales from −2 to +2 for egalitarianism-hierarchism (six items, M = −0.31, SD = 0.97,

alpha = 0.88) and collectivism-individualism (six items, M = 0.40, SD = 0.78, alpha = 0.85). The two scales were positively correlated, although more strongly than in Study 1 (r = 0.57, one-tailed p < 0.001).

Relative to the nation as a whole, the Oregon electorate had a higher proportion of hierarchical-individualists (37 per cent for Oregon vs. 24 per cent in the US), more egalitarian-collectivists (28 per cent vs. 18 per cent), and fewer egalitarian individualists (34 per cent vs. 53 per cent), with no more than a single percentage in the hierarchical-collectivist quadrant. If anything, this distribution appeared likely to heighten the aforementioned conflict between the hierarchical-individualist and egalitarian-collectivist cultural groups.

Cross-cultural deliberation at the 2010 Oregon CIR
Could a highly structured deliberative process lead a group of citizens to come together, in spite of these cultural differences? That was one potential outcome of the 2010 Oregon CIR process, which consisted of two separate panels (with distinct sets of citizens) for two state-wide ballot measures in that year's general election. The first panel studied a measure on mandatory minimum sentences (Measure 73) and the second panel looked at a measure establishing medical marijuana dispensaries (Measure 74). Both CIR panels constituted stratified random samples of 24 Oregon voters, who had all their expenses covered and were compensated at a rate equal to the state's average wage.

Each panel met for five consecutive days using a deliberative process adapted from the Citizens' Jury model (Crosby 2003). The panelists received extensive process training, met with advocates and policy experts, and had considerable time for facilitated deliberation – both in smaller subgroups and as a full body – before writing their official Citizens' Statement. The panelists wrote 'Key Findings' related to the measure, divided into pro and con caucuses to write rationales for and against the initiative, then worked as a full panel to scrutinize and approve their Citizens' Statement. Afterward, the Oregon Secretary of State put this Citizens' Statement into the official *Voters' Pamphlet*, where it appeared before the pages of pro and con arguments written and paid for by political organizations and individuals.

To measure CIR panelists' cultural orientations, we used the same survey methods as for the Oregon electorate. Forty-seven of the 48 CIR panelists answered the relevant questions in their end-of-week surveys at the CIR, and we were able to obtain 36 surveys in the year-later follow-up survey that included cultural orientation items.[6] Surveys yielded measures of both the egalitarianism-hierarchism scale (six items, M = −0.36, SD = 0.81, alpha = 0.74) and the collectivism-individualism scale (six items, M = 0.43, SD = 0.79, alpha = 0.81), and the two scales were correlated (r = 0.46, one-tailed p = 0.004).

Would CIR panelists' cultural orientations dictate their final support for and opposition to the ballot measures they studied? To find out, at the end of the fifth and final day of CIR deliberations, panelists answered this question: '. . . What is your position now on this measure?' Respondents had a 5-point response scale from 'strongly oppose' to 'strongly favour'.

Figure 3 shows a cultural grid for the mandatory minimums measure, which the CIR panelists ended up opposing 21–3. That strong opposition came from across the cultural grid, as did the three votes in favour of the measure (although two of those represent estimates resulting from multiple imputation of missing data).

Figure 4 shows a markedly different pattern for the medical marijuana measure. The panel ended up supporting the proposed law on a closely-divided 13–11 vote.
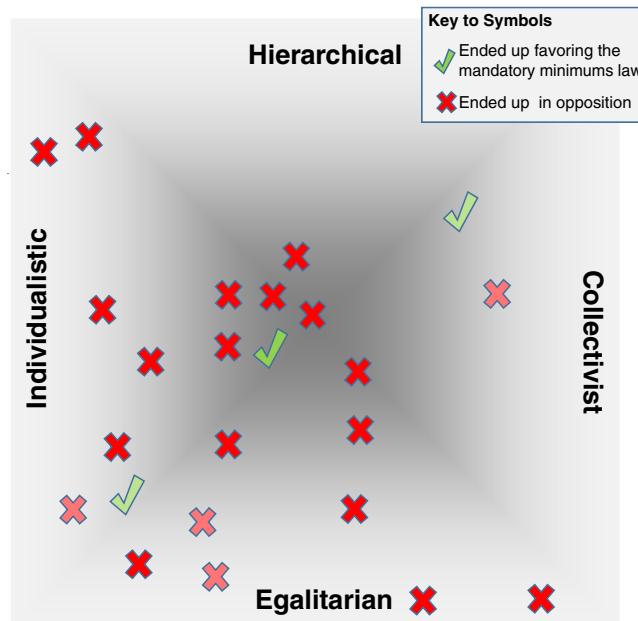
FIGURE 3 *Distribution of support and opposition for mandatory minimum sentencing (Measure 73) among 2010 Oregon CIR panelists, as arrayed by cultural orientations*
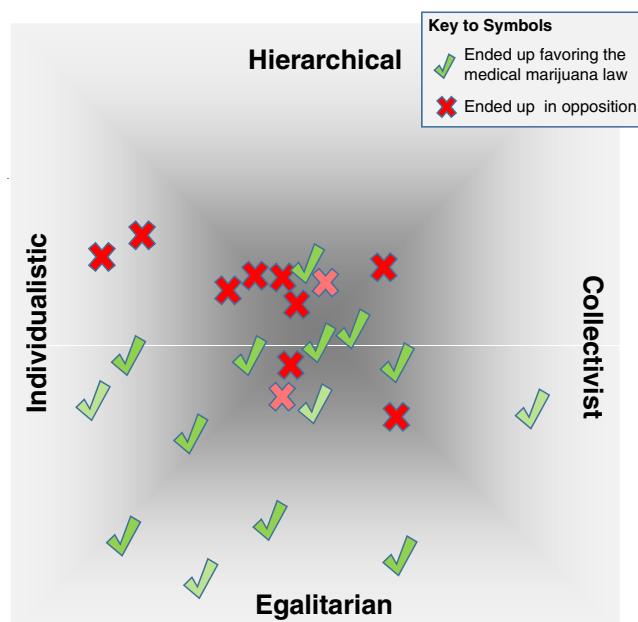*Note:* The lightly shaded marks indicate values estimated using multiple imputation.

FIGURE 4 *Distribution of support and opposition for medical marijuana dispensaries (Measure 74) among 2010 Oregon CIR panelists, as arrayed by cultural orientations*
Note: The lightly shaded marks indicate values estimated using multiple imputation.

Almost all of the measure's support came from egalitarians, with hierarchs generally opposing it.[7]

SUMMARY OF FINDINGS

The outcomes of the CIR panels conducted in 2010 show two distinct outcomes. The result of the mandatory minimums measure is most striking, as panelists from every cultural quadrant turned against a measure that had nearly three-quarters of Oregon voters behind it. Previous analysis showed that the measure's proponents made a poor case for the initiative before the CIR panel (Knobloch *et al.* 2013). By contrast, on medical marijuana the CIR deliberation resulted in a pattern of support that transcended the individualist-collectivist dimension but that aligned quite well with the other one.

In sum, it appears that the CIR panelists were able to transcend their cultural biases in the case of one ballot measure, which they judged as ill-conceived. When the second CIR panel ended up evenly divided on medical marijuana, however, its split roughly paralleled that of the state's larger population, at least with regard to their hierarchical-egalitarian dimension. Thus, the CIR yielded cross-cultural consensus on one issue, but its second convening proved such a result to be far from inevitable.

CONCLUSION

Looking across the two studies, we make two inferences about the prospects of democratic deliberation and the utility of cultural cognitive theory. In answer to the questions that began this article, the National Issues Forums show that a trans-partisan organization can, indeed, frame policy issues in a way that distributes choices across the cultural map. The fact that the issue guides struck a near-perfect balance along the hierarchical-egalitarian dimension itself was remarkable. The question remains as to whether those organizing policy discussions should give equal voice to views that predominate in the population or whether it is just as important for a meeting design to *over*-represent those perspectives that appear less frequently in the population (Gastil 2000), as NIF appears to have done for the collectivist cultural orientation. Regardless, this case study shows that whatever cultural biases might be held by an organization, convening public deliberations does not prevent that entity from offering a culturally diverse array of policy choices.

As for our second research question, the Oregon Citizens' Initiative Review showed that deliberation *can* forge broad policy agreement on controversial public issues. Citizen panelists turned hard against a mandatory minimum sentencing initiative that was not only culturally polarizing but also somewhat popular among its most likely cultural opponents. On a more closely divided issue, however, a second set of citizen panelists split along cultural lines when they ended up favouring, on a 13–11 vote, the establishment of medical marijuana dispensaries.

This difference in outcomes points to the need for more in-depth studies of these cases, as well as the Citizens' Initiative Reviews that have happened since 2010. This should clarify the missing variable that explains when citizen panelists do and do not hew to pre-existing biases. The key to cultural mobility in such cases is not merely the structural features or social relations of the deliberation, per se, because both cases had roughly equivalent deliberative designs; if anything, the medical marijuana case had *stronger* deliberative features (Knobloch *et al.* 2013).

Classical theories of small group behaviour might provide the best explanation of variance across the two CIR cases. The nature of the arguments expressed both by witness

testimony and the panelists themselves was probably the key, with the balance of persuasive arguments tilting strongly in one direction only in the mandatory minimum sentencing case (see Meyers 1989). A related structurational account would argue that a content analysis of the valence of the arguments made, and the sequencing of those arguments, might explain why only the sentencing panel arrived at a cross-cultural consensus (see Poole *et al.* 1982). Also, it could be that those arguments that carried the day employed particularly strong narratives (Hastie *et al.* 1983; Black 2008; Jones 2014). Whatever combination of these explanations proves most powerful, it appears that deliberative designs provide the conditions under which opinion change *can* occur across cultural lines, but the nature of the talk itself is the key to what transpires.

These results also have broader implications for the utility of cultural cognitive mapping as a theoretical tool. The relative absence of the strong hierarchical-collectivist scores in the US population and the CIR context presented an interesting contrast with their strong representation among the National Issues Forums policy choices. This suggests the wisdom of steering clear of both Wildavsky's (1991) triangular conception of cultural differences and any notion of collapsing cultural difference back into a one-dimensional contrast between hierarchical individualists and egalitarian collectivists (see also Grendstad 2003; Gastil *et al.* 2011). A two-dimensional cultural grid may ultimately prove unduly simplified, but in the name of parsimony, its present shape appears sufficiently robust to provide valuable theoretical insight.

The ease with which the citizen panelists in the CIR moved toward a common point of view on the mandatory sentencing issue suggests that cultural cognitive theory requires a more nuanced account of when cultural biasing occurs in deliberation. As noted earlier in this article, the cultural theory that preceded it has always presumed that one's views are conditional on one's location within a diverse social and institutional context (Rayner 1992; Swedlow 2014). In that view, it is unsurprising that people can converge, particularly in a deliberative social setting (Bellamy *et al.* 2014; Ney and Verweij 2014).

Cultural cognition stresses the power of cues and signals from cultural elites (e.g. Kahan *et al.* 2010). A deliberative event like the CIR places before lay citizens both culturally identifiable policy advocates and neutral policy experts, who may establish a norm that permits a more fluid view of which policy positions one orientation dictates. Moreover, the CIR process makes the citizen panelists themselves the most important persons in the room; after all, they are the authors of the issue guide that will be sent to every registered voter (Knobloch *et al.* 2013). That may make the panelists regard one another as having sufficient expertise to serve as cultural representatives on the particular issue under discussion. Thus, if one panelist shifts her position, others sharing the same cultural orientation may follow.

Finally, our research has demonstrated how deliberative democratic theory can benefit from juxtaposition with other empirical theories. Doing so should not only improve the precision of deliberative theory, but it should also lead to practical innovations in the design of public meetings (Nabatchi *et al.* 2012). After all, theories such as cultural cognition do more than test deliberative concepts and practices; they also indirectly reveal where the practice of public policy deliberation requires refinement. This critical interplay of theory, research, and practice meshes with the spirit of democratic deliberation itself. Thus, we hope to see a steady advance in the practical application of refined empirical versions of deliberative democratic theory applied to the most challenging policy questions the public must face.

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NOTES

[1] Critics have questioned the substantive significance and dimensionality of earlier survey-based operationalizations of cultural orientations (Sjöberg 1996; Marris *et al.* 1998), but the scales developed by Kahan *et al.* (2007) have provided both explanatory and predictive power on a wide range of policy views (Gastil *et al.* 2011). A recent meta-analysis by Xue *et al.* (2014) validated the psychometric strength of newer cultural cognition scales, which are the same ones used in this article. It also merits noting that cultural cognition's cultural grid deviates significantly from Douglas' Grid-Group theory (Kahan 2012; Swedlow 2014).

[2] Cultural orientations constrain deliberation not so much by prescribing particular policy choices but by favouring particular arguments or justifications (Kahan *et al.* 2011; Lachapelle *et al.* 2014). Nonetheless, policy options can become framed in sufficiently static ways that one can distinguish the options themselves along cultural lines within a given historical-cultural context (Wildavsky and Dake 1990; Jenkins-Smith *et al.* 2014).

[3] The survey has a response rate of 42 per cent, using the RR3 metric, which estimates what proportion of contacts with unknown dispositions were, in fact, eligible for the survey. Full specification of these formulas is available at http://www.aapor.org. Because this study uses multiple surveys of different populations using the same items, for the sake of comparison we opted to use averaged item scores, rather than standardized scales or factor scores. This can result in an imbalance of distributions along both cultural dimensions, with the 'midpoint' being the simple scale midpoint. There *is* no objective middle of either dimension, as actual obtained scores always depend on the phrasing of the items that represent the dimensions. Appendix B provides a complete listing of the survey items used.

[4] On average, each coder found only 7.5 choices (4.9 per cent of the total pool of 154 choices) that they could not place on the scale for a given cultural dimension. These non-codes, which we treated as missing data, were spread across coders such that there were at least two codings for every one of the choices. The non-codes did not appear to be trans-cultural or 'clumsy' policy solutions (Verweij *et al.* 2006), but simply randomly distributed coding difficulties.

[5] RR3 response rate was 9 per cent.

[6] These amount to RR1 response rates of 98 per cent and 75 per cent, respectively; see http://www.aapor.org.

[7] Although incidental to this study, the judgement of these deliberative panelists differed from that of the Oregon electorate. The mandatory minimums measure passed with 57 per cent of the vote, and the marijuana dispensary proposal garnered only 44 per cent of the final vote.

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APPENDIX A: CULTURAL CODING INSTRUCTIONS FOR NATIONAL ISSUES FORUMS DISCUSSION GUIDES

You will read a series of *issue choices* in National Issues Forums booklets. Each *choice* will embody certain values, express certain beliefs, and take a particular viewpoint – a vision for how people should behave, which policies government should adopt, and reasons why we have certain social problems. Your job is to determine what kind of belief system (or 'cultural orientation' or 'worldview') each of these *choices* represents. The way we think about worldview sees people as having different beliefs about hierarchism versus egalitarianism and individualism versus collectivism.

Hierarchism versus egalitarianism: This dimension of cultural orientation measures the degree to which a person believes in the necessity and virtuousness of having a clearly differentiated social hierarchy. Persons with a *hierarchical* orientation expect resources, opportunities, and social esteem to be very different depending on someone's background, intelligence, occupation, achievements, and social class. In this view, hierarchies are natural, inevitable, and good for society. An *egalitarian*, by contrast, hopes to create a society in which nobody is excluded from an opportunity or social role because of their background – their sex, race, age, or occupation. In this view, equality is the ideal state of affairs, and hierarchies usually reflect discrimination and unequal opportunities.

Individualism versus collectivism: This dimension of cultural orientation measures the degree to which a person believes society works best when individuals are left to fend for themselves. Those with an *individualistic* orientation expect individuals to compete with each other for scarce resources but spend much of their lives as private, separate people. Individualists work for their own good – and often that of their immediate family, but they think society is always worse off when government, organizations, or even private citizens tell each other how to live and what to think. By contrast, those with a collectivist (or

'communitarian') worldview assume that individuals naturally need to work together and cooperate to have successful lives. People must depend on each other and build a sense of community and solidarity. In this view, it is normal for people to have responsibilities to one another and for communities or governments to set up rules for how people should behave and speak to one another.

You will code each choice using the following scales:

Code	Individualism vs. Collectivism	Code	Hierarchism vs. Egalitarianism
I2	Strongly/clearly individualist	H2	Strongly/clearly hierarchical
I1	Leans toward individualist	H1	Leans toward hierarchical
IC	An even mix of both	HE	An even mix of both
C1	Leans toward collectivist	E1	Leans toward egalitarian
C2	Strongly/clearly collectivist	E2	Strongly/clearly egalitarian

APPENDIX B: CULTURAL COGNITION STATEMENTS USED IN SURVEYS

Collectivism – Individualism

1. The government interferes far too much in our everyday lives.
2. It's not the government's business to try to protect people from themselves.
3. The government should stop telling people how to live their lives.
4. Sometimes government needs to make laws that keep people from hurting themselves. (Reversed)
5. The government should do more to advance society's goals, even if that means limiting the freedom and choices of individuals. (Reversed)
6. Government should put limits on the choices individuals can make so they don't get in the way of what's good for society. (Reversed)

Egalitarianism – Hierarchism

1. We have gone too far in pushing equal rights in this country.
2. It seems like blacks, women, homosexuals and other groups don't want equal rights, they want special rights just for them.
3. Society as a whole has become too soft and feminine.
4. Our society would be better off if the distribution of wealth was more equal. (Reversed)
5. We need to dramatically reduce inequalities between the rich and the poor, whites and people of colour, and men and women. (Reversed)
6. Discrimination against minorities is still a very serious problem in our society. (Reversed)