Process Matters:
Human Nature, Democracy, and a Call for Rediscovering Wisdom

by

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Table of Contents

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> As there is a degree of depravity in mankind [sic] which requires a certain degree of circumspection and distrust, so there are other qualities in human nature which justify a certain portion of esteem and confidence. Republican government presupposes the existence of these qualities in a higher degree than any other form. James Madison, Federalist Papers #55

One of the ongoing tensions regarding democracy revolves around the capacity of humans to govern themselves. Since the ancient Greeks first began our evolving experiment with democracy, and particularly since the American Founders attempted to design a nation based on it, the question of whether human nature was fit for democracy or not has been a critical issue, with many proponents and doubters. In *Ecology of Democracy*, David Mathews wrote, "The problems of democracy itself are enduring because they are rooted in human nature. The challenge of combating those problems, however, changes constantly because of the circumstances democracy faces vary almost day to day."[1] With the advent of the internet age—which some believe has led to a "post-fact society"[2]—and recent events such as Brexit and the rise of Donald Trump, the question of the viability of democracy seems to be once again rising to critical levels.[3] This essay relies on two key influences – a year-long deep dive into the quickly expanding literature on social psychology and brain science and a 10 year career directing a locally situated center, the Colorado State University Center for Public Deliberation (CPD), focused on supporting deliberative democracy[4]—to fashion a contemporary answer to that question. As Madison argued in the Federalists papers, humans seem to have the potential for both what democracy needs to thrive and what can ultimately render democracy untenable. The question, therefore, is what can be done to bring out more of the former and less of the latter? Similar to the project of the Founders, what mechanisms can be employed to best tap into the good of human nature and avoid the bad? There are two broad potential applications, one focused on education (how do we better equip people to be effective citizens?) and the other on process (how do we better design ways for citizens to perform their duties?). In this essay, I focus primarily on process design, but also offer some closing suggestions for education based on the argument I develop. My overall goal is to summarize the quickly expanding research on social psychology in order to derive insights that can help deliberative practitioners and others passionate about improving our communities do their work better.

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[1] Mathews, 2014, p. 175.

[2] Manjoo, 2008.

[3] With the Trump candidacy and Brexit, a number of articles have been published questioning the viability of democracy, such as Andrew Sullivan's, "Democracies end when they become too democratic" (2016). Penman's "Is Trump the beginning of the end for democracy," (2015), Frum's "The Seven Broken Guardrails of Democracy" (2016), and Schnuerer's "The end of democracy as we know it" (2016).

[4] I founded the Colorado State University Center for Public Deliberation in 2006. It serves as an impartial resource for the northern Colorado community. I train undergraduate students to serve as facilitators, and then design and run events working with city and county government and local organizations. For more information, visit www.cpd.colostate.edu.

Research on social psychology strongly supports a broad series of findings that reveal that humans are clearly motivated reasoners with a "directional bias toward reinforcing our pre-existing views."[5] Simply put, our brains are wired to think in ways that make us feel better about ourselves and the positions we hold. In particular, as detailed in David DiSalvo's *What Makes Our Brain Happy and Why You Should Do the Opposite*, our brains crave certainty ("I know I am right"), and they have many, many tricks to deliver what we crave.[6] This simple truth impacts what information and sources we expose ourselves to, what groups we associate with, how we interpret new evidence, what stories we develop to make sense of our world, how we respond to corrections and those that disagree with us, how we make decisions, and what we remember. All these quirks of human nature can combine to fuel polarization and create a toxic political atmosphere, particularly when opposing sides fall victim to its powers, as often happens with a two-party system in a society awash in social media. The good news is that while these unfortunate quirks are certainly troubling and present significant obstacles for democracy, they are not insurmountable, and there are other much more positive aspects of human nature that can alternatively be tapped into.

The fundamental problem is that the currently dominant ways we engage our citizens primarily activate the worst impulses of human nature and fail to tap into the better ones. The principal argument of this essay is that most of the basic trappings of public engagement at both the national and local level – features such as winner-take-all elections, party politics, public hearings and citizen comment time, social media interaction, the narrowcasting partisan media, advocacy and interest groups, etc.—all work to trigger the most detrimental forms of motivated reasoning, leading to very low quality political communication, polarization, and distrust.

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These trends are particularly damaging when we recognize that many of the problems we face nationally and locally are wicked problems. Wicked problems are defined as problems that cannot be solved through science, primarily because they involve inherent competing values that must be worked through and carefully negotiated. They are systemic, complex, and enduring.[7] They exude uncertainty and complexity, two things our brains abhor. Tackling them well calls for effective communication, creativity, and collaboration across multiple perspectives in order to

[5] Nyhan and Reifler, 2010, p. 307.
[6] DiSalvo, 2011.
[7] For introductions to wicked problems, see Carcasson 2013a and 2013b. The term was introduced in an 1972 article by Rittel and Webber.

support the constant shared learning, experimentation, and coordinated action required.[8] Unfortunately, an overly-adversarial atmosphere of polarization and distrust are devastating to the already challenging work of addressing wicked problems.

Fortunately, alternatives do exist. Deliberative methods are gaining traction, particularly at the local level, and this essay shows that many of the basic components of deliberative engagement can work very well to either avoid activating or to reduce the impact of detrimental motivated reasoning while making room for the more beneficial features of human nature.

This essay proceeds as follows (warning: it will be a bit of an emotional rollercoaster, but I promise it ends on a hopeful note). Part 1 reviews the research on the prevalence of detrimental motivated reasoning and its negative impact on public discourse. Once everyone is thoroughly depressed, Part 2 will provide the flip side of the story, and examine research on some key positive features of human nature that can potentially support a vibrant democracy. Part 3 shifts the focus to examining how we currently do public engagement, seen through the lens of what we know about human nature. Part 4 then makes the case for deliberative engagement as an alternative. I close with a series of insights sparked by the analysis designed to inform practitioners of deliberative engagement and proponents of genuine democracy. Most importantly, I call for a concerted effort among educators, scholars, and practitioners to champion a new form of motivated reasoning focused on the rediscovery and cultivation of wisdom, particularly due to its de-polarizing nature and fit with the prevalence of wicked problems.

A brief note about the style of this essay. I wanted to write to a general audience, while also providing clear links to the academic sources related to the claims made throughout the paper. As to not overwhelm the casual reader, I primarily put sources in the footnotes. I am particularly interested in exposing practitioners to many of the concepts that are utilized in the social psychology research. To facilitate that, I italicize each term, and Table 1 provides a quick overview of the terms with a page number of when they are first mentioned. One of the key advantages of the internet is the ease of learning more about these terms, so I encourage people to simply google them to learn even more.

PART 1: DETRIMENTAL MOTIVATED REASONING AND ITS IMPACTS

Although the prevalence of motivated reasoning has just in the past 60 years become a clear concern of social psychologists, the assumption that the human brain is a flawed and biased tool is not new. Most famously, Francis Bacon in 1620 had this to say about it:

> The human understanding when it has once adopted an opinion (either as being the received opinion or as being agreeable to itself) draws all things else to support and agree with it. And though there be a greater number and weight of instances to be found on the

[8] David Mathews' *Ecology of Democracy* (2014) makes a strong case for the importance of learning, experimentation, and coordinated action to support democracy, and the critical role of deliberation within that learning process. In the conclusion, Mathews writes, "Learning by and in a community is more than acquiring and disseminating information. It is more than evaluating civic efforts. It is a mindset about change and progress, an attitude that is open to experimentation and reflective in the face of failure. 'If at first you don't succeed, try, try, again.' And if you do succeed, raise the bar and aim higher. Public learning is a political mindset that makes for a democratic culture" (p. 115).

> other side, yet these it either neglects and despises, or else by some distinction sets aside and rejects; in order that by this great and pernicious predetermination the authority of its former conclusions may remain inviolate.[9]

The impact of detrimental motivated reasoning—at individual and group levels—on democracy is monumental. The Founders were certainly wary of the dangers of factions and mass democracy, and were therefore very careful to design government structures to defend against the worst aspects and hopefully elevate the best. Indeed, the assumption was that the many safeguards against mass direct democracy they employed would hold back the impacts of motivated reasoning. They believed that the Senate and Supreme Court in particular would be a bastion of high quality deliberation and argument safe from the whims of the masses and their factions, and hoped political parties would not develop. Over the years many of the safeguards have eroded, more forms of direct democracy have risen, and the development of mass media and the internet have clearly increased the power of the masses.[10] In a very different 21st century, with new knowledge concerning the workings of our brains and new game-changing communication technologies, it is past time to rethink the mechanisms of democracy and how they react to human nature.

In a very different 21st century, with new knowledge concerning the workings of our brains and new game-changing communication technologies, it is past time to rethink the mechanisms of democracy and how they react to human nature.

Early in the 20th century, most scholars assumed humans were rather rational, with the exception being situations or personalities that allowed emotions to overrun things.[11] Leon Festinger challenged that with cognitive dissonance theory, and in particular argued that we naturally wanted to avoid dissonance,[12] which arises when our actions are in conflict with our beliefs, or our beliefs are in tension with each other. He understood that our brains preferred balance, and so our brains employed a variety of mostly subconscious moves to provide us that feeling of balance or rightness. Since then, an incredible medley of terms and concepts (Table 1) have been developed and explored that all point to essentially the same argument: we are highly motivated reasoners, often to our detriment. We think in ways that are influenced by other key goals beyond the impulse to be correct, logical, or objectively rational.[13] We particularly have a need for consistency and certainty—and thus an aversion to ambiguity, uncertainty, and challenge—which essentially means we are motivated to support positions we already

[9] Bacon, 1620, Aphorism 44, Book 1.

[10] See Rauch (2016) for an argument about how our democratic mechanisms have slowly evolved over the years. The title of his *The Atlantic* article – "How American Politics Went Insane" – should give you a sense of his perspective.

[11] Curti, 1953.

[12] Festinger, 1957.

[13] Some researchers argue that the question is not whether we are rational or not, explaining that we are all rational in terms of doing things for good reasons to us. Their focus, then, is how we reason, and what motivates us. The assumption that we are primarily motivated by accuracy has certainly been questioned, but the fact that we are motivated to protect our current views is not necessarily irrational. As Herbert Simon, who introduced the term "bounded rationality" to open up the conversation about different ways we can be rational and how we are impacted by limited information, wrote, "virtually all human behavior is rational. People usually have reasons for what they do" (quoted in Lupia, McCubbins, & Poppin, 2000, p. 10).

hold, decisions we have made, and groups to which we are devoted. Now, this motivation is not necessarily dominant or irresistible—there are certainly ways to develop better habits and design better mechanisms to overcome these motivations—but they are clearly a basic feature of a strong majority of humans that must be taken into account in any attempts to improve how our democratic communities and institutions function.

It should also be noted that motivated reasoning is not always problematic. Many scholars, for example, argue that many of us are also motivated by "accuracy," and that an ongoing tension clearly exists between accuracy and other motivations (such as defending existing opinions, our tribes, or our own self-concept).[14] My focus in Part 1, however, is on the problematic forms of motivated reasoning, and I'll return to the others later. After I review how these quirks impact individuals, I explore what I call the "negative interactive effects" that occur when two individuals that now have strong blinders on for opposing perspectives attempt to interact, causing polarization and magnifying the impact of detrimental motivated reasoning.

One last quick note before we begin. One reason these flaws of human nature are so powerful is because no one thinks they are susceptible to them, while other people certainly are. This is called *illusion of objectivity* or *naïve realism*.[15] So as you read, try to overcome the simple assumption that this is something that only happens to other people—particularly those with political beliefs different than you.

Table 1: Key Concepts from Social Psychology

[14] Lundgren & Prislin (1998) compared accuracy and directional goals, with directional goals either being defensive or focused on impression management. Lodge and Taber (2000) also used the categories of accuracy goals and directional goals ("which motivate them to justify a specific, preselected conclusion" (p. 186). In 2006, Taber & Lodge framed them as accuracy and partisan.

[15] Illusion of objectivity in Pyszczynki & Greenberg, 1987. Naïve realism, according to Hoggan (2016) is the built in bias that we are not biased" (p. 30). Also see Ross & Ward, 1995.

Features of Detrimental Motivated Reasoning

This section will walk through five ways in which motivated reasoning negatively impacts our thinking, arranged somewhat in chronological order:

A. What and who we expose ourselves to
B. How we interpret new evidence and respond to counterarguments
C. How we make attributions and tell stories
D. How we make decisions
E. What we remember

Each of these five areas are important to democratic engagement, and has a connected literature concerning the impact of motivated reasoning.

What and who we expose ourselves to

Perhaps the strongest impact of motivated reasoning is where we actually focus our attention. In the 21st century, we have the world at our fingertips with the internet, and thousands of media options with which to connect. Unfortunately, the research shows that we generally choose to seek out information that supports our positions and avoid sources that may challenge us. As Cordelia Fine put it in *A Mind of its Own,* "The problem is that we behave like a smart lawyer searching for evidence to bolster his client's case, rather than a jury searching for the truth."[16] The key academic term relevant here is *selective exposure*.[17] Selective exposure manifests itself in several ways, including who you talk about political to, where you generally receive your news from, what stories or links you choose, what evidence you seek out, and what search terms you use. The internet truly has made all of these steps much more susceptible to bias, making it easier and easier for people to fall victim to selective exposure, often without even realizing it. People naturally prefer to gather with the likeminded, but the internet magnifies that impulse, creating what has been called "echo chambers," "cyber-ghettos," or "information cocoons."[18] Internet applications like Google and Facebook can even support selective exposure without their users being aware, as their algorithms work to provide you the stories and information you most often seek out, therefore automatically providing you more of what you want and filtering away opposing views. If you tend to click the conservative sources after

> *"when we want to believe something, we ask ourselves, 'Can I believe it?' Then…we search for supporting evidence, and if we find even a single piece of pseudo-evidence, we can stop thinking.… In contrast, when we don't want to believe something, we ask ourselves, 'Must I believe it?' Then we search for contrary evidence, and if we find a single reason to doubt the claim, we can dismiss it" Jonathan Haidt and Tom Gilovich*

[16] Fine, 2006, p. 13.
[17] For some key sources on selective exposure, see Festinger, 1957; Prior, 2003; Ditto & Lopez, 1992; Frey, 1986; Fischer & Greitemeyer, 2010.
[18] Echo chambers is from DiFonzo, 2011, among many others. Cyber-ghettos is a term used by Johnson, Bichard, & Zhang, 2009. Information cocoons is used by Sunstein, 2006.

searching, they will tend to give you more and more conservative sources. As explained by David McRaney, "Your opinions are the result of years of paying attention to information that confirmed what you believed, while ignoring information that challenged your preconceived notions." As a result, we all see the world through a filter that "distorts your active pursuit of facts."[19]

A particular danger of selective exposure is the increased confidence that comes from perceived information gathering, primarily because the selective exposure is so subconscious. So the primary impact of additional research is often more biased perspectives and polarization. The point bears repeating, considering the goal of the "informed citizen" is still held high by so many. The reality is, the more informed someone thinks they are, typically the more misinformed they actually are, with a dangerous side effect of significant confidence about their level of knowledge ("I researched this for several days!").[20] In turn, people with the most confidence in their opinions tend to be more likely to speak up, post on social media, and attend public meetings, meaning most of the loudest voices can often be the most misinformed, all the while perceiving themselves to be particularly well informed and growing more and more frustrated with "ignorant" others. A popular internet meme has captured this phenomenon (Figure 1). Interestingly, the true source of the quote is in doubt, as an online "Quote investigator" explains that three forms of the quote exist: "The problem with the world is that the intelligent people are full of doubts, while the stupid ones are full of confidence," "The whole problem with the world is that fools and fanatics are always so certain of themselves, but wiser people so full of doubts," and "The trouble with the world is that the stupid are cocksure and the intelligent full of doubt," with initial sources including the philosopher Bertrand Russell, Nobel Prize-winning poet W. B. Yeats, and the writer Charles Bukowski.[21] All of them may have initially been exposed to the idea from Proverbs 12:23, which reads: "The prudent keep their knowledge to themselves, but a fool's heart blurts out folly." I return to this concept multiple times, so I'll deem it the *Russell effect* for easy reference.

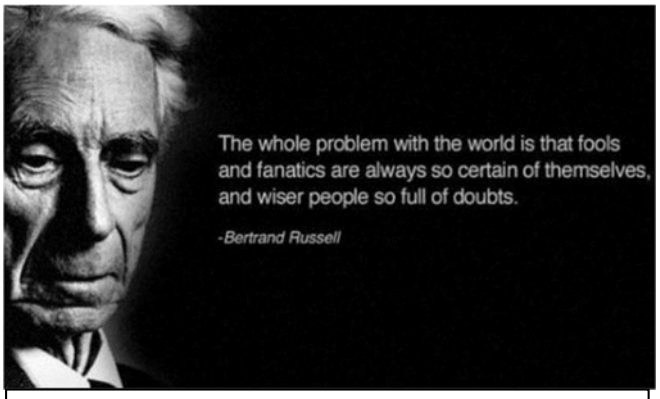

Figure 1

Another issue within this area of motivated reasoning is tied to the concepts of *primacy effect* and *anchoring*.[22] Our brains are significantly affected by what we are exposed to first. Our first impressions are powerful, and subsequent thoughts are based in comparison to those initial thoughts to a greater extent than they rationally should be. These effects are perhaps most obvious in group settings. If an initial speaker at a meeting is strongly in favor of an idea, and we don't have a strong opinion, our brains inherently seek out additional reasons to support the idea, especially if we like the speaker or they are in a position of authority.[23] These impulses are tied to the pursuit of certainty. We prefer consensus

[19] McRaney, 2012, pp. 27-28.
[20] Johnston, 1996.
[21] Link to the quote investigator story is: http://quoteinvestigator.com/2015/03/04/self-doubt/
[22] Primacy effect (Nickerson,1998, p. 187), anchoring (Tversky & Kahneman, 1974);).
[23] Cialdini, 2001.

and simplicity, so we tend to avoid dissent or considering counter arguments if we don't have to. We are also lazy cognitively, so if we can make a decision with the available evidence rather than seeking out more, we'll take it. Someone's initial exposure to a new issue online can have similar disproportionate effects. This effect is particularly powerful when that exposure is from an important leader or person in power. In the end, the initial comments or ideas that we are exposed to first carry far too much weight. Primacy effect often combines with selective exposure. Since people tend to expose themselves to sources they agree with, their first exposure to new issues is normally biased due to selective exposure, and then that bias is only strengthened due to the primacy effect.

How we interpret new evidence

A second key area connected to detrimental motivated reasoning is how people interpret new evidence. Once we decide what to focus on, we are once again rather biased in how we make sense of the new information. Jonathan Haidt, author of *The Righteous Mind: Why Good People are Divided by Politics and Religion*, captures the overall research well in this excerpt:

> The social psychologist Tom Gilovich studies the cognitive mechanism of strange beliefs. His simple formulation is that when we *want* to believe something, we ask ourselves, '*Can* I believe it?' Then…we search for supporting evidence, and if we find even a single piece of pseudo-evidence, we can stop thinking. We now have permission to believe. We have a justification, in case anyone asks. In contrast, when we *don't* want to believe something, we ask ourselves, '*Must* I believe it?' Then we search for contrary evidence, and if we find a single reason to doubt the claim, we can dismiss it. You only need one key to unlock the handcuffs of *must*.[24]

The key term in this section is *confirmation bias*, perhaps the most powerful and well known form of motivated reasoning.[25] As explained in an extensive literature review of confirmation bias:

> A great deal of empirical evidence supports the idea that the confirmation bias is extensive and strong and that it appears in many guises. The evidence also supports the view that once one has taken a position on an issue, one's primary purpose becomes that of defending or justifying that position.[26]

Additional terms include *defensive processing, biased assimilation, motivated skepticism, familiarity bias, prior attitude effect, stereotype preservation bias,* and *self-serving bias*.[27] These concepts can all be considered a part of our ideological immune system: "a coordinated system of psychological defenses against evidence that contradicts our entrenched views."[28] Simply put, our brains work hard to confirm what we already believe, and have very different rules for processing supportive information compared to disconfirming information. We are very easy on evidence that fits our worldview, accepting it without criticism, and very hard on evidence that challenges us. Of course, people that disagree with us do the

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[24] Haidt, 2012, p. 98. Relevant passage in Gilovich, 1991, p. 84.

[25] Key sources I relied on for confirmation bias beyond Haidt (2012) include Lord, Ross, & Lepper, 1979; Schulz-Hardt & Moscovici, 2000; Kunda, 1990; Molden & Higgins, 2005; Nyhan & Reifler, 2010; Edwards & Smith, 1996.

[26] Nickerson,1998, pp.177.

[27] Defensive processing – Nyhan & Reifler, 2010; familiarity bias (Herbert, 201, p. 4); prior attitude effect (Taber & Lodge, 2006); stereotype preservation bias, Johnston, 1996.

[28] Snelson quoted in Lilienfeld, Ammirati, & Landfield, 2009, p. 392.

exact opposite, causing polarization. Said differently, we compare the best possible argument of our view and the worst possible argument for theirs, while they flip it. George W. Bush captured this phenomenon perfectly in his speech after the murder of police officers in Dallas in July 2016: "Too often we judge other groups by their worst examples, while judging ourselves by our best intentions."[29] Yes, when opposing sides both do this, it obviously leads to polarization, but it is a false, highly exaggerated polarization, because if each side had fairer conceptions of each other's views, the gap would be significantly smaller.[30]

"Too often we judge other groups by their worst examples, while judging ourselves by our best intentions." George W. Bush

Confirmation bias tends to have an inherent connection with credibility as well. We assume a source that provides information is more credible merely because they offer arguments with which we agree. The logical train here is telling. We believe we are particularly smart and our opinions are better than others (this is called *egoism*, a simple heuristic[31]). People who make arguments we already hold are therefore perceived to be particularly smart as well (which is why similarity is a powerful persuasive appeal[32]). Therefore we assume their arguments are stronger than they appear on their own (i.e. their argument impacts their perceived credibility which in turn impacts our evaluation of their argument quality). The circular reasoning is often not consciously noticed. Alternatively, of course, those that offer arguments we don't like go through the opposite process and are seen as *less* credible, therefore we more easily *dismiss* their claims. In other words, our assumptions about credibility are biased, and therefore only increase our confirmation bias.

Research also shows that we actually spend less time processing information that we agree with—because we accept it uncritically—and more time processing information that challenges us. This has been labeled a *disconfirmation effect*.[33] As explained by Edwards and Smith, "arguments incompatible with prior beliefs are scrutinized longer, subjected to more extensive refutational analyses, and consequently are judged to be weaker than arguments compatible with prior beliefs."[34] Molden and Higgins add that participants not only spend more time refuting the evidence, but also "spontaneously generate more alternate hypotheses about why it might be unreliable."[35] So if we aren't avoiding or ignoring counterevidence, we are focused on refuting it by any means necessary.

The scariest data about how we interpret evidence revolves around the idea that when directly challenged with solid information, rather than yielding to the information, we often get further entrenched in our position, particularly if that position is critical to our self-image or world view. This

[29] The speech occurred on July 12, 2016. Text of the speech is available at http://time.com/4403510/george-w-bush-speech-dallas-shooting-memorial-service/.
[30] See Graham, Nosek, & Haidt, 2012, for research on the exaggerated stereotypes between liberals and conservatives. Both sides exaggerate the extremity of the other side, though liberals were the least accurate.
[31] Jones & Nisbett, 1971; Miller & Ross, 1975.
[32] Cialdini. 2001.
[33] Cook & Lewandowsky,2011.
[34] Edwards and Smith, 1996.
[35] Molden & Higgins, 2005, p. 299.

backfire effect[36] directly goes against the assumption that more knowle dge or information will bring people together. The classic study in this area was by Lord, Ross, and Lepper.[37] They showed that providing additional information in a polarized environment, even when that information is balanced, led to more polarization. Essentially, each side accepted the parts of the new information that matched their perspective, and ignored, dismissed, or refuted the other arguments. Both sides therefore interpreted the new balanced data they read as predominately confirming their perspective, leading to more polarization. So once again, additional information—the quest for the informed citizen—is clearly not enough. Being more informed too often simply means more misinformed. And those that are most misinformed often fight strongly and loudly to defend their perspective (the Russell effect). All this research works to confirm Festinger's "seminal observation": "the more committed we are to a belief, the harder it is to relinquish, even in the face of overwhelming contradictory evidence."[38]

"Denialists are usually not deterred by the extreme isolation of their theories, but rather see it as the indication of their intellectual courage against the dominant orthodoxy and the accompanying political correctness, often comparing themselves to Galileo."
Diethelm and McKee

New areas of research called "*denialism*" and "*debunking*" have recently developed to try to understand why it is so difficult to push people off misconceived beliefs, particularly when the evidence is strongly opposed. Denialists refuse to yield to the evidence, and actually see their dogmatism positively. As explained by Diethelm and McKee, "Denialists are usually not deterred by the extreme isolation of their theories, but rather see it as the indication of their intellectual courage against the dominant orthodo xy and the accompanying political correctness, often comparing themselves to Galileo."[39] Bottom line, counterarguments rarely work and often backfire, particularly when delivered by people we disagree with, and especially when they insult us as part of the argument. Unfortunately, that seems to be the primary tactic utilized on Facebook, Twitter, and message boards during political disagreements.

[36] Cook & Lewandowsky, 2011. Also see Lodge & Taber, 2000 and Nyhan & Reifler, 2010.
[37] Lord, Ross, and Lepper, 1979.
[38] Burton, 2009, p. 12.
[39] Diethelm and McKee, 2009, p. 3

Figure 2: Headlines after House Benghazi Report

The impact of confirmation bias and the backfire effect can be so strong, that some are arguing that with polarized issues, facts can become essentially irrelevant (i.e. the "post-fact society"[40]). Data serves only as ammunition for previously decided positions, rather than inputs for decision-making. As the old joke goes, people use facts like a drunk uses a lightpost, for support rather than illumination. If the evidence fits, attack with it. If it doesn't, ignore it. Each side cherry picks their own facts and simply talks past each other. Not only that, but new evidence is often seen through such a biased lens, that a single fact or event can easily been seen as evidence for completely different arguments. Facts may be facts, but the interpretation of those facts leave plenty of wiggle room. I write this a few days after FBI Director Comer announced that he would not bring charges against Hillary Clinton on her email issue. The reaction to this "fact" varied quite widely. For her supporters, it was proof that she was innocent and the entire investigation was a politically motivated sham. For her opponents, on the other hand, Comer's decision was clear evidence that Hillary was so corrupt that she was above the law and even the FBI was either powerless against her or part of her conspiracy. In sum, a decision by a neutral body after months of detailed research was used by both sides as further evidence of their prior interpretation. Similar experiences happen after other events such as the release of the House Benghazi report. The incredibly distinct headlines from various news sources was even further evidence of this fact (Figure 2).[41]

Research on cults shows that this backfire effect can lead to very surprising reactions to clear refutations of core beliefs. Cults built on the assumption of the end of the world was happening on a specific date are actually strengthened when that date comes and goes without incident. The members simply utilize the new evidence as proof of a different story ("clearly our faith and devotion has been rewarded!").[42]

A final note about conspiracies is necessary here. Research on the rhetorical power of conspiracies clearly show how a theory can easily overwhelm data and counterarguments. One particular reason for this power is that any evidence used to challenge a conspiracy can be explained away by that

[40] Manjoo, 2008.
[41] Screen grab Paul Dughi's article "Is it any wonder people think media is biased" on Medium. Available online at https://medium.com/thoughts-on-journalism/is-it-any-wonder-people-think-media-is-biased-2a6c59e9906#.a20t31e4t.
[42] Example from Cialdini, 2001, pp. 105-111, summarizing research from Festinger, Riecken, Schachter, 1964 (a book entitled W*hen Prophecy Failsi).*

conspiracy. “That is exactly what someone covering up a conspiracy would say!” As our political system polarizes, more and more conspiracy theories will arise, further undercutting the power of evidence and debate.[43]

When selective exposure and confirmation bias are combined, the impact can be dangerous. Once we make a decision, we seek out evidence to support it, and either avoid evidence that challenges it, or, if we can’t avoid it, we process it in such biased ways that it works to simply further confirm our perspective anyway. We accept confirming evidence without testing it, and we are overly critical of opposing evidence. We judge someone’s credibility based on whether they agree with us or not. And the fact that those we disagree with are doing the exact opposite, the more we both “research,” the more we naturally polarize. When we apply all this to a two party system—where most people have essentially already decided which side is right and which is wrong on almost every issue—it is devastating for the quality of public talk.

How we make attributions and tell stories

This section overlaps with the previous (it connects with how we interpret new information), but warrants separate consideration. The basic argument here is that humans are natural story tellers, and cognitively we process stories in very different ways than the textbook assumptions of rationality and science. As rhetorical theorist Walter Fisher taught us, we judge stories primarily by how they fit together internally (do they make sense on their own) and how they match our current values and beliefs externally (obviously influenced by confirmation bias). Fisher labeled these as coherence and fidelity. As a result, stories are incredibly powerful sources for motivated reasoning. Fisher argued persuasively that we seem to be born with this sort of narrative rationality, while we tend to have to learn the more systematic form of rationality and reasoning Fisher described as the “Rational World Paradigm.”[44] Tied to our preference for certainty, we like our stories to be simple. In particular, we like archetypal stories of good versus evil, unsurprisingly casting ourselves and our tribes in the positive role, and our opponents as the evil villains (and often with clear victims that need to be saved). As DiSalvio wrote, “Storytelling is powerful medicine for the mind. One of the reasons stories appeal to us (books, on TV, or otherwise) is that they link together shards of meaning that eventually yield even greater meaning. In other words, stories make sense of the world. Making sense of the world makes our brains happy.”[45] For years I have used classic Disney films in talks and lectures as examples that tap into this inherent need for a simple story. Classic Disney films almost all have a clear villain that has obvious evil intensions (to the viewer, perhaps not the other characters at first) and no redeeming characteristics.

Figure 3: Disney Villains

[43] Stewart, Smith, & Denton, 2007. Chapter 13 focuses on the rhetoric of conspiracies.
[44] Fisher, 1987.
[45] DiSalvo, 2011, pp. 60-1.

Their values are perverse and their tactics manipulative, therefore they present a simple story for us to enjoy. Figure 3 shows a slide I often share during presentations with a collection of Disney villains we love to hate. The problem, I argue, is that this teaches our children that most issues can be understood through the lens of a simple good versus evil narrative. We solve our problems by identifying the villain and vanquishing them. One side is right, the other wrong. As my children grow older, and watch less Disney and more super hero, Star Wars movies, and blockbusters like *Avatar*, the narratives remain remarkably similar.

In terms of work in social psychology, one of the most researched concepts relevant here is focused on how people make *attributions,* particularly attributions of responsibility. An attribution is a particular answer to the question "what caused the observed behavior and its consequences?"[46] In its most basic form, an attribution is an argument concerning where the responsibility lies for an action or phenomena. The most representative anecdotes are perhaps the homeless and addicts. Are they personally responsible for their situation, or are they victims of circumstances outside of their control? Attributions at times masquerade as empirical observations—and indeed attributions can be more or less supported by evidence—but are often nothing more than exercises in mind-reading, or, as Fritz Heider, an early pioneer in attribution research, described it: "naïve psychology."[47] Most often, attributors simply consider whatever they see, and attempt to postulate (rationally or irrationally) backward in time, often making numerous mistakes along the way. The issue of poverty—the topic of my dissertation that first exposed me to attribution research—is perhaps the most extensively examined issue within attribution research. Millions have been tested, polled, and interviewed concerning how they explain poverty. In addition, hundreds of books have been written by scholars from a variety of ideological perspectives attempting to explain empirically or rationally the phenomenon of poverty.[48] Within every explanation are explicit or implicit attributions of responsibility.

The most basic distinction made in the literature is between external/environmental and dispositional/individual attributions. External attributions place responsibility or credit outside the individual, whereas dispositional attributions place responsibility or credit on the individual. The former focuses on structure, the latter on agency. Blaming the poor for their poverty, therefore, is a dispositional attribution, and blaming society, inequality, racism, or poor schools are external attributions. Such attributions can essentially dictate whether someone supports or opposes numerous policies, because an attribution of responsibility will inherently lead to a particular treatment (is it their responsibility to help themselves, or do they deserve outside help?). Most importantly for our purposes, research in social-psychology has revealed the existence of *egoism*, an *actor-observer effect*, or *self-serving bias*.[49] Basically they all point to an inherent trait that leads individuals to attribute positive events dispositionally and negative events environmentally when they happen to them or someone in their tribe,

[46] Jones, 1971, p. ix.
[47] Heider, 1958.
[48] I'll spare you the massive list of books here from my earlier research, but if you are interested, see endnotes 40 and 41 of chapter 1 of my dissertation (Carcasson, 2004).
[49] Egoism and actor-observer effect from Jones & Nisbett, 1971, and self-serving bias from Larson, 1977, p. 430.

and vice versa when they happen to other people.[50] In other words, when good things happen to us or our side, we assume our effort, skills, or virtue caused them to happen. When bad things happen, it wasn't our fault. On the flip side, when good things happen to people we disagree with, we assume they were lucky or corrupt, while when bad things happen, they were to blame and deserve the consequences. This form of motivated thinking is critical to a wide range of issues such a poverty, crime, substance abuse, education, racial conflict, partisan politics, etc. Basically, any issue that involves success and failure, our brains work to take credit for the success, explain away the failure for our side, and the opposite for competing tribes ("Yes, the economy improved when Obama was in office, but he didn't have anything to do with it."). Such moves fit our narratives very easily and make our brains happy, and lead to polarization when some of us rely on environmental attributions, and others on individual ones.

Here again the internet makes a basic human impulse much worse by providing a mechanism for the expansive dissemination of extraordinary examples with simplistic narratives attached to fuel outrage that quickly goes viral. The internet simply provides some basic random facts, and our brains turn them into powerful stories that make perfect sense to us.

Another term social psychologists use to explain narrative based motivated reasoning is *illusory correlation.*[51] This phenomenon is directly related to how we interpret new evidence. Illusory correlation occurs when we assume a correlation where none exists.[52] Two variables that are not necessarily connected are assumed to be linked, primarily because it fits a story we want to be real. It is a key feature of conspiracy theories, as simple coincidences become key explanatory facts. As Michael Shermer, author of the *Believing Brain*, argued, our brains naturally look for and find patterns, and then infuse those patterns with meaning.[53] This phenomenon is also critical to stereotype formation and solidification. A specific instance of a behavior (such as someone abusing the food stamp system in line at the grocery store) can be utilized cognitively to support a much broader stereotype about food stamp users. The basic point here is that exceptions to the rule and outliers can often be reinterpreted as clear proof of theories and stories we tell ourselves. Here again the internet makes a basic human impulse much worse by providing a mechanism for the expansive dissemination of extraordinary examples with simplistic narratives attached to fuel outrage that quickly goes viral. The internet simply provides some basic random facts, and our brains turn them into powerful stories that make perfect sense to us.

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[50] Perhaps the most obvious example of this phenomenon occurs to those in the teaching profession. Students tend to believe they always earn their good grades through intelligence or hard work, and bad grades are the fault of a difficult or unfair test. For their peers, however, those same students believe that those good grades were due to easy tests, while bad grades were due to those students lack of intelligence or effort.

[51] Nisbett & Ross, 1980; Chapman, 1967.

[52] Nickerson (1998); also see Kurtz & Garfield (1978).

[53] Shermer, 2012. See also Gilovich, 1991, who wrote, ""We are predisposed to see order, pattern, and meaning in the world, and we find randomness, chaos, and meaninglessness unsatisfying. Human nature abhors a lack of predictability and the absence of meaning. As a consequence, we tend to 'see' order where there is none, and we spot meaningful patterns where only the vagaries of chance are operating" (p. 9).

One last point to make here concerning our propensity to tell simplistic stories to our benefit is our inherent negativity. Evolutionary psychologists point to our *negativity bias*, that we are drawn to the negative story more than the positive one:

> Over eons of human evolution, we as a species learned to focus on the negative, because if we didn't, we died. It was essential to stay alert to the dangers and threats in our world – predators, poisons, competitors in the tribe…. This tendency became deeply engrained in our psyche, where it remains. But negativity isn't always effective in our lives today—at least not in the life-saving manner it once was. Indeed, the opposite is often true. We often get hung up on meaningless negative events and details in life, and that distracts us from the real business of life, including being happy.[54]

Diamandis and Kotler focus on the impacts of this ingrained negativity in *Abundance: The Future Is Better Than You Think*:

> Every second, an avalanche of data pours in through our senses. To process this deluge, the brain is continuously sifting and sorting information, trying to tease apart the critical from the casual. And since nothing is more critical to the brain than survival, the first filter most of this incoming information encounters is the amygdala…. It's our early warning system, an organ always on high alert, whose job is to find anything in our environment that could threaten survival. Anxious under normal conditions, once stimulated, the amygdala becomes hypervigilant. Then our focus tightens and our fight-or-flight response turns on. Heart rate speeds up, nerves fire faster, eyes dilate for improved vision, the skin cools as blood moves toward our muscles for faster reaction times. Cognitively, our pattern-recognition system scours our memories, hunting for similar situations (to help ID the threat) and potential solutions (to help neutralize the threat). But so potent is this response that once turned on, it's almost impossible to shut off, and this is a problem in the modern world. These days, we are saturated with information. We have millions of news outlets competing for our mind share. And how do they compete? By vying for the amygdala's attention. The old newspaper saw 'If it bleeds, it leads' works because the first stop all incoming information encounters is an organ already primed to look for danger. We're feeding a fiend. Pick up the Washington Post and compare the number of positive to negative stories. If your experiment goes anything like mine, you'll find that over 90 percent of the articles are pessimistic. Quite simply, good news doesn't catch our attention. Bad news sells because the amygdala is always looking for something to fear.

They end out arguing that this negativity has a triple penalty: (a) it is hard to be optimistic because our brains are negative by design, (b) media knows this and feeds us even more negativity, and (c) that heightened negativity drowns out prosocial behaviors like empathy and compassion that are also hardwired into our brains, just not as strongly as the amygdala.[55]

How we make decisions

[54] Herbert, 2010, p. 9.
[55] Diamandis & Kotler,2014, pp. 32-34.

This section covers quite a bit of ground connected to the impact of motivated reasoning on decision-making. It is divided into three different key arguments: (a) we prefer to rely on automatic, heuristic thinking rather than expending cognitive resources, (b) we make decisions to support our self-identity, and (c) we make decisions to support our own tribes.

The idea that we overly rely on heuristics is a common argument across several cognitive theories that focus on the "dual process" brain.[56] Heuristics are basically simple decision rules we rely on as to not have to think too hard. The Elaboration Likelihood Model outlines that people tend to rely on peripheral processing that is primarily heuristic based in most cases, only turning to cognitive processing if there is sufficient motivation and ability to process the new information. So we judge arguments by simple rules such as credibility or popularity of the source or even length or font of text. Nobel prize winning economist Daniel Kahneman laid out a similar argument focusing on the distinction between what he called System 1 and System 2:

> System 1 operates automatically and quickly, with little or no effort and no sense of voluntary control. System 2 allocates attention to the effortful mental activities that demand it, including complex computations. The operations of System 2 are often associates with the subjective experience of agency, choice, and concentration.[57]

Jonathan Haidt's work relies heavily on the System 1/System 2 distinction, arguing that System 1 represents an automatic "point and shoot" camera, while System 2 to is a more effortful manual mode.

System 1 is also impacted by the *availability bias,* or what Kahneman has called *WYSIATI* (what you see is all there is).[58] Since the decision process is automatic, it overemphasizes what is present and observable, and does not consider other relevant factors. As a result, framing effects are particularly powerful, giving professional persuaders easy opportunities to manipulate by what they make available or visible.

Both Haidt and Heath and Heath utilize the metaphor of the elephant and the rider to depict this split, warning of the long term weakness of the cognitive rider (System 2) when pitted against the impulsive, emotional elephant (System 1). As Haidt wrote, "The rider is skilled at fabricating post hoc explanations for whatever the elephant has just done, and it is good at finding reasons to justify whatever the elephant wants to do next"[59] All these theorists make similar arguments, including that we tend to be cognitive misers (we prefer not to think if we don't have to), and that while relying on heuristics is necessary to some extent (we can't think through every issue, basically because the rider can't fight the elephant too often, it is too exhausting), it unfortunately often leads to bad decisions. Many of the aspects of motivated reasoning reviewed in early sections could be understood as the application of simple heuristics such as "I am usually right" or "I trust my gut reaction."

Haidt in particular argued that even when we do utilize System 2, it is often in service to a decision that has already been made by System 1. One of the primary takeways from his book (the title

[56] Herbert, 2010, p. 11.
[57] Kahneman, 2011, p. 21.
[58] Availability heuristic in Schwarz, et al, 1991; and WYSIATI in Kahneman, 2011.
[59] Haidt, 2012, p. 54. Heath & Heath, 2010.

of one of its sections) was: *Intuitions come first, strategic reasoning second*.[60] This process, like many other aspects of motivated reasoning, is generally subconscious. We assume we are objectively reasoning to a decision, but often, he argues, the reasoning comes after the decision, and is likely reliant on confirmation bias and selective exposure. As he put it, the tail tends to wag the dog. Once again, evidence doesn't change minds.

This reliance on heuristics is also connected to our craving of certainty and avoidance of ambiguity. With difficult issues, turning to cognitive thinking exposes us to high levels of ambiguity and cognitive stress. Since we prefer certainty or *cognitive closure*,[61] we tend to either rely on simpler heuristics as a short cut, or we attempt to "offload" tough decisions. We may offload them to experts,[62] to chance (i.e. a flip of the coin[63]), to strict rules like automatic sentencing or "zero-tolerance" policies,[64] or to an alternative decision making mechanism such as voting. In a political context, it is easy to imagine some of the basic heuristic rules Republicans or Democrats may rely on. Political ideologies are essentially a set of often loosely related heuristic rules. The problem is that most public problems are wicked problems that are defined in particular by multiple underlying values and tensions that defy heuristic thinking. Any decision will automatically cut across many different typical heuristics. Struggling with competing heuristics has a heavy cognitive cost, however, so is often avoided. Indeed, at Tetlock argued, "Decision-makers generally find trade-offs unpleasant and use a variety of tactics to avoid confronting them….Trade-offs are unpleasant, in part, for purely cognitive reasons"[65] We much prefer to rely on dominant heuristics or values, allowing them to dominate any competing claims and settle the manner efficiently. We see this often with talk about individual rights serving as conversation enders due to their trump-like status in argument.[66]

A second key aspect of motivated reasoning and decision-making is tied to our self-identity. Simply put, we want to think highly of ourselves and support our past decisions, and therefore, as David McRaney, author of *You Are Not Smart* wrote, we have "evolved mental mechanisms designed to make you feel awesome about yourself."[67] Most people, in a mathematical impossibility, perceive themselves to be above average thinkers. This is known as *illusory superiority* or the *Lake Wobegon effect*, named after Garrison Keillor's fictional community "where all the women are strong, all the men are good looking, and all the children are above average." Our "vain brain," Cordelia Fine wrote, "embellishes, enhances, and aggrandizes you….The vain brain misguidedly thinks you invincible, invulnerable, and omnipotent."[68] Bottom line, admitting you are wrong means taking a self-esteem hit our minds are loath

[60] Haidt, 2012. Shermer, 2012, makes essentially the same argument, arguing beliefs come first, and explanations for those beliefs follow.
[61] Kruglanski & Webster, 1996.
[62] Disalvo, 2011, p. 151.
[63] My older daughter used to struggle with small decisions (like what to order at a restaurant). For awhile, we made sure we had a coin with her to flip to help her finally "decide." Though a part of the process was that if she was disappointed with the results of the flip, she could veto and go the other way.
[64] Schwartz and Sharpe, 2011, argue that the move toward automatic sentencing and zero-tolerance is a dangerous move that takes away judgment.
[65] Tetlock, 1986, p. 819.
[66] Greene, 2013, p. 302. Also see Glendon, 1991.
[67] McRaney, 2012, p. xv.
[68] Fine, 2006, p. 4.

to allow. This bias is particularly powerful when our worldviews or identities are directly challenged. Debunkers have termed this the *worldview backfire effect*, and explain that it is "strongest among those whose ideology was central to their self-worth."[69] Fine concurs, arguing that "The bigger the potential threat, the more self-protective the vain brain becomes."[70]

The final key aspect tied to decision making extends the self-serving bias to the group level. Here the work of Joshua Greene is particularly insightful.[71] Like Haidt, Greene relies on evolutionary psychology to explain how humans evolved not to be selfish, but rather to be "groupish" (Haidt's term). Throughout history, being selfish often led to be kicked out of groups, but being cooperative at the group level allowed our groups to flourish. This dedication to tribe, both theorists argue, is deeply ingrained in how our brains work. It fuels our confirmation bias, as we will give our group the benefit of the doubt. While the shift away from selfish individualism is nice, an important downside of our tribal tendencies is that our tribal support is often fueled by simplistic "us versus them" distinctions. As Kenneth Burke taught us, identification with any group is a two-way street. We can't seem to define our group without also defining an other, which sparks a corresponding bias against that other and can lead to justifying horrific actions.[72]

The power of our tribe over us can be significant, as research on *similarity bias*, *social proof*, *group think*, and *conformity* attest.[73] The famous Asch studies showed that when our own perception is pitted against group consensus, the group often wins, even when we can clearly perceive the right answer. Politically, when forced to choose between our tribe and clear objective evidence that shows our tribe is wrong, we often again go with the group.[74] The cognitive impact is simply less, and there are always ways to discount the evidence. This power of conformity is particularly strong in group discussions when an initial consensus forms. Playing devil's advocate, providing a dissenting view, and/or challenging friends can be very difficult (without, I should mention, a facilitator to help).[75] Scholars have even argued that close ties can lead to *synchronized anxiety*: "the tendency to become 'infected' by the emotions, thoughts, and behaviors of others."[76]

What we remember

The final area to explore in terms of the detrimental impacts of motivated reasoning focused on our memory. The research here is again scientifically strong but nonetheless likely surprising to many. We have really bad memories, and our memories are inherently biased toward our perspectives. Just like we pick and choose sources and evidence, our brains automatically pick and choose (and forget) memories, because "Memory is one of the ego's greatest allies."[77] The *availability bias* argues that we over rely on what is available to us, and research on memory shows that our brains primarily make

[69] Cook & Lewandowsky, 2011, p. 4.
[70] Fine, 2006, p. 8
[71] Greene, 2003.
[72] Burke, 1973.
[73] Similarity bias in Schulz-Hardt & Moscovici, 2000; Social proof (Cialdini, 2001, chapter 4); group think (Janis, 1982); conformity (Larrick, Mannes, & Soll, 2012).
[74] Greene (2013) shared an extended example of this focused on climate change on pages 91-92.
[75] Kaner, et al, 2014.
[76] DiSalvio, 2011, p. 166.
[77] Fine, 2006, p. 11.

available the memories that support our perspectives. Our memory is egotistical, so we overemphasize the positive impacts of our own role, and forget our failures.[78] Going beyond selective recall, scholars have argued that "directional outcome motivation can also lead to the reconstruction of previous memories."[79] Meaning our brains can even simply make up new memories if necessary. As DiSalvio argued, we crave certainty and the feeling of being right, and "we rely on memory to buttress those feelings."[80]

Bottom line, we are motivated rememberers, despite the evidence that our memories are rather poor. This impact is increased due to the perceived importance of "personal experience" over research in many people's eyes. The impact of our poor memories can be particularly damaging in a "post-fact" society that privileges personal experience over credible data. We are overloaded with so much data this is coming at us, it seems reasonable to over-emphasize our own experiences.

Negative Interaction Effects: The Combined Impacts of Individual Motivated Reasoning

This review of the key detrimental aspects of motivated reasoning reveals a challenging situation for those of us devoted to improving our communities through enhancing the quality of public discourse. In this section, I want to explore some of the broader implications of motivated reasoning to our political culture. The bottom line here is that there is a rather direct relationship between these quirks of human nature and the quality of our public talk. The social psychology research primarily focuses on the individual level, but when these individuals interact with each other based on the opinions their brains have led them to—particularly when an individual with biased blinders developed over many years interacts with an individual from an opposing perspective with equally biased blinders—the impact can be exponential. I use the term *negative interaction effects* to identify this impact. Kathryn Schulz, author of *On Being Wrong*,[81] perhaps captured this the best when she explained the "series of unfortunate assumptions" that occur when people who are sure they are right interact with others that disagree. She explained that first people make an "ignorance assumption." They assume the conflict is due to the other side simply not knowing what they know. Once that assumption is disproven—and those opposing show they are sufficiently informed—then people make an "idiot assumption." They have the information, but they simply are not very bright, or are too stubborn to admit they are wrong and yield to the evidence. When that assumption is disproven—they appear to be sufficiently intelligent—then people escalate to the "evil assumption." The assumption here is that they know the truth, they know "we" are right, but choose to be manipulative due to their hidden questionable motives. It is this final move that has dire consequences for community and democracy. With the first two assumptions, communication lines stay open and the conversations so critical to democracy continue. Once we cross over to the "evil assumption" (and I would argue "evil" is too strong a term, the key move here is to assume negative ulterior motives and thus manipulative communication), because then the justification for conversation ends. There is no reason to talk to someone who is not being honest about their intentions and can't be

[78] Schulz, 2010.
[79] Molden & Higgins, 2005, p. 299.
[80] DiSalvio, 2011, p. 17.
[81] Schulz, 2010.

trusted. Of course, once we make the assumption that "they" are evil/racist/sexist/close-minded, etc., they aren't all that interested in talking to us either.

Two additional key concepts to consider here are *reporting bias* and *knowledge bias*. Knowledge bias occurs when someone is biased due to the information they have been exposed to. This bias is more subconscious. People who grew up as fans of Texas A&M, like my children, are certainly biased toward the Aggies, but that bias is likely because they hear all the wonderful things about A&M and all the worst things about the University of Texas. Fixing knowledge bias, therefore, primarily requires more information delivered in the right way (people will still be resistant to change, especially if the knowledge bias supports part of their identity, i.e. they see themselves as Aggies). Nonetheless, a much lesser charge is being levied on the individual (they don't know or they are misinformed).

Reporting bias, on the other hand, represents bias that is more conscious and purposeful. People have information on different sides of a controversy, but decide to report in a biased way. It doesn't necessarily mean lying, but clearly represents manipulation. An example may be a salesperson intent on making a sale, thus providing a customer with all the pros of the product, but actively hiding the cons that they know exist. Once we make the shift to assuming reporting bias, the game changes. We move to Schulz's "evil assumption." The mere assumption of reporting bias—without any true or purposeful manipulation—can significantly undercut relationships, and false polarization can often lead to that assumption, even when not warranted.

Even if the assumption of reporting bias is unwarranted, it allows people to dismiss arguments from the other side as manipulative or strategic "code words." They believe that data is still clearly on their side, it is just that the other side is playing a different game than "whoever has the best argument wins." It seems logical to them to dismiss any evidence the other side presents. Of course, once we perceive the game has changed, we can either start playing the new game (fight fire with fire), stop playing the game and go home (avoid political discussion), or try to improve the rules of the game (what those of us working to improve democracy focus on). I would argue that the most common reaction is likely to stop playing the game. Going back to Festinger, avoidance is certainly the easiest way to deal with cognitive dissonance. So we live by rules like "don't talk about politics at the kitchen table" or "avoid Uncle Rico at Thanksgiving." We unfriend people that are too political on Facebook, and we avoid conventional politics like many millennials have chosen to do.[82] This avoidance may come in other forms as well. In an argument for perhaps a future paper, I believe in some ways scientists may be scientists in part because it allows them to avoid the messiness of politics and the cognitive dissonance that inevitably arises with wicked problems. Our brains crave certainty, and the world of science and academia provides a way to organize the world in more certain terms, primarily by focusing on empirical issues and implementing strict guidelines for the kind of questions we can ask and the methods we use. A similar phenomenon could be occurring in the world of business, where people can assume the bottom line is all that matters, the market inherently makes all decisions, and that it is "just business." Unfortunately for our communities, we lose a lot of critical minds to these potential avoidance mechanisms.

[82] Long, 2002; Longo, 2004.

For others—particularly pundits, activists, and other political operatives—fighting fire with fire becomes their chosen path. They enjoy the conflict and strategy, and get caught up in the good versus evil narrative, which often becomes a key part of their self-image. Unfortunately, fighting fire with fire—or questionable persuasive tactic with questionable persuasive tactic—creates a spiral of cynicism. The assumption of reporting bias is no longer unwarranted; it is politics as usual, basically expected. James Hoggan, in a chapter in which he interviewed Roger Conner, defined this spiral as an advocacy trap:

> People don't start out as enemies—it happens in stages. When people disagree with us, we first question their views, but eventually we question their motives and intentions. When they persist in their disagreements with us, we start to perceive them as aggressors. When they criticize our cause or condemn our reasoning, our defense mechanisms kick in. We are offended and start to get angry. When both sides in an argument draw their stance from the perceived behavior of the other, people eventually start treating each other as not just wrong, but as wrongdoer, and then as enemies. Once that happens, it is almost impossible to do anything over a sustained period of time other than futilely push one another….Once the trap is set, breaking the circle of blame is extraordinarily difficult.[83]

And once the "other side" uses—or even appears to use—a manipulative tactic, that simply cements our assumption of their depravity, further justifying our use of similar tactics and attacks on their character. People become hyper-vigilant, looking for any chance to disparage the other side and highlight missteps or perceived contradictions, a task made very easy by social media. The harms of polarization on the quality of conversation are serious. Recently David Blankenhorn listed the following as the major harms of polarization: 1. It produces policy gridlock. 2. It degrades our public discussion. 3. It likely contributes to inequality. 4. It segregates us. 5. It undermines trust. 6. It thwarts empathy. 7. It weakens our intellects. 8. It lowers the caliber of our citizenship**.** Overall, the impact of polarization on democratic community is clear.

Going back to the Russell effect (Figure 1), we now have a situation where the loudest voices are those that have chosen to fight fire with fire, and are therefore often the most one-sided and biased. Many—including Russell—may assume that these loudmouths are uneducated and uninformed "fools," but research shows the opposite. Political "sophisticates" – those most involved and informed about politics—are often the *most* susceptible to the polarizing effects of motivated reasoning.[84] So, once again, the problem is not the uninformed, it is the misinformed—who think

Many may assume that these loudmouths are uneducated and uninformed "fools," but research shows the opposite. Political "sophisticates" – those most involved and informed about politics—are often the most susceptible to the polarizing effects of motivated reasoning. So, once again, the problem is not the uninformed, it is the misinformed—who think they are well informed—and their volume.

[83] Hoggan, 2016, pp. 17-18.
[84] Mutz, 2006**,** Taber and Lodge, 2006; Johnson, Bichard, & Zhang, 2009.

they are well informed—and their volume. And due to the game of politics, many of these loudest voices are not simply impacted by subconscious bias, but are rather actively involved in the "willful manifestation of mistaken beliefs."[85] They truly see the other party as a dangerous enemy that must be defeate d, rather than political adversaries.[86] Haidt has even argued that political partisanship may be addicting:

> Like rats that cannot stop pressing a button, partisans may be simply unable to stop believing weird things. The partisan brain has been reinforced so many times for performing mental contortions that free it from unwanted beliefs. Extreme partisanship may be literally addictive.[87]

Add to that mix the simple fact that the media thrives on the polarization and cashes in on confirmation bias. As explained by McRaney:

> Punditry is an industry built on confirmation bias. Rush Limbaugh and Keith Olbermann, Glenn Beck and Arianna Huffington, Rachel Maddow and Ann Coulter—these people provide fuel for beliefs, they pre-filter the world to match existing worldviews. If their filter is like your filter, you love them. If it isn't, you hate them. You watch them not for information, but for confirmation.[88]

Figure 4: False Polarization

False polarization is a function of:

[individually developed subconscious biases]
X
[negative interaction effects]
X
[the Russell effect]
X
[purposeful partisan manipulation and the vicious cycle of backlash]
X
[media focus on conflict]

In conclusion, I offer a formula to help explain the polarization and show how exaggerated it can be (Figure 4). Due to the many quirks of human nature, people individually develop strong biases that support their perspective. People on the opposing side do as well, creating a significant gap. When they interact poorly—as they often do—that gap increases, and trust and respect erode. Then the Russell effect leads to the most polarized being the most vocal. Add in political operatives' intent on taking advantage of the quirks, and media focused on the conflict, and that polarization falsifies even more. So our false polarization is caused by subconscious biases multiplied by negative interaction effects multiplied by the Russell effect multiplied by partisan manipulation multiplied by media focus on conflict. And all of this is subject to a negative feedback loop that spirals downward.

In *Ecology of Democracy*, David Mathews highlights seven systemic problems of self-rule that represent the problems *of* democracy that we must address if we are to make progress on the problems *in* democracy that

[85] Lewandowsky, et al, 2012, p. 109.
[86] Pew Research Center, 2016.
[87] Haidt, 2012, p. 103.
[88] McRaney, 2012, p. 29.

are so often the subject of political talk. I argue here that each of those systemic problems—lack of engagement, divisiveness, hasty reactions fueled b y misinformation and emotional biases, lack of efficacy, lack of coordinated action and shared purpose, lack of shared learning, and mutual distrust between the public and institutions[89]—are either caused or exacerbated by the false polarization I outlined here.

Conclusion to Part 1

In Part 1, I reviewed the literature in social psychology focused on the workings of our brains, particularly as they attempt to deal with tough decisions and polarized issues. The research shows that individually we often struggle with subconscious biases, and then those biases can exponentially expand when exposed to negative interaction effects, the Russell effect, partisan politics, and a sensationalist media. Working together, they over-exaggerate the level of polarization, which only feeds the polarization even more (Figure 4). One final quick note is warranted before I shift gears and attempt to bring us back from the brink of giving up on democracy and the human race. While I argue that much polarization is exaggerated and that political actors often contribute unnecessarily to that polarization, I do concede that outrage and activism is at times necessary and justified. While I argue generally for centrist politics, that does not mean both sides are equally right, and we simply all need to get along and agree to disagree. Indeed, my closing argument in this essay will be for the need for wisdom, which calls for a stronger sense of judgment across perspectives, not an unfettered openmindedness that deems everyone's opinion as equally valid. Said differently, one side could certainly have better ideas than the other. The problem is with all the noise, overpolarization, and unfair questioning of motives, we struggle to tell the difference.

PART 2: LOOKING ON THE BRIGHT SIDE OF HUMAN NATURE

There's a dark and a troubled side of life;
There's a bright and a sunny side, too;
Tho' we meet with the darkness and strife,
The sunny side we also may view.[90]

Despite all the doom and gloom reviewed in part 1, all hope is certainly not lost for democracy. Fortunately, along with all the quirks and inherent biases also come a strong collection of basic features that provide hope and promise. This section reviews a few of these important features, focusing on four key arguments: (a) the negative impulses are powerful but not overwhelming, (b) humans are naturally social and empathetic, (c) humans are naturally pragmatic, innovative, and creative, and, (d) humans naturally strive for mastery and excellence, and happiness can be inherently tied to community and doing difficult things well. These four features provide critical resources that can be tapped into as we work to improve the quality of our democratic communities.

[89] Mathews, 2014, pp. 2-4.
[90] Lyrics from "Keep on the Sunny Side," written by Ada Blenkhorn.

Argument 1: The negative impulses are powerful but not overwhelming

One of the challenges of writing this essay was to not fall victim to motivated reasoning myself. I wanted to make the argument that the human brain has these bad quirks that make it harder for us to talk to each other about tough issues, but I didn't want to simply cherry pick the evidence to make my case. This section, therefore, represents me pushing back on Section 1 a bit. It is true that the human brain has a multitude of quirks that support biased thinking, but those quirks are not necessarily overwhelming. Overall, people tend toward bias, but not completely, and certainly not all people. From a social scientific perspective, while the evidence of these biases is significant, there were some mixed results with many of the claims. The research also shows that in some situations, people do certainly change their minds and yield to the evidence or sound reasoning (of course, this is much more likely with good process, which is the ultimate point of this essay).[91] Researchers often discussed the tension between reasoning motivated for accuracy and reasoning motivated for bias or partisanship, and while the latter was stronger overall, the former did exist (though I argue later that "accuracy" is not a sufficient alternative motivation).

The research also shows that different aspects of personality impact the potential for bias. Some individuals naturally have a *need for cognition*[92] or less of a need for *cognitive closure*, and therefore appreciate living in tension with uncertainty. They are often the most creative problem solvers (and, I would guess, deliberative practitioners).[93] Others can certainly build cognitive habits that help them manage their inherent biases, which is the point of critical thinking programs and should be a primary goal of all educational efforts. The problem, however, as the Russell effect implies, people with such skills do not tend to engage as much.

Most importantly for our purposes, the literature provides a number of suggestions for how to avoid or reduce the prevalence of detrimental motivated reasoning. The social psychology research I examined in Part 1 primarily focuses on empirical claims of what actually happens, as most social science is designed to do (i.e. focuses on what *is*, not what *could* or *should* be). A few of the researchers, however, did share some insights on when the negative effects were more or less likely to occur, thus highlighting what could potentially be done to avoid or decrease the negative impacts through better process. Some researchers are even trying to actively convince the field of the importance of moving from diagnosis to treatment.[94] They highlight the "existence of a normative—descriptive gap" and work to raise "the question of how the gap might be closed."[95] The anti-bias research focuses on two broad perspectives: (1) debiasing by modifying the decision maker (e.g., through education) and (2) debiasing

[91] Kuklinski et al. 2000; Gilens 2001; Ditto and Lopez, 1992; Nyhan & Reifler, 2010; Festinger, 1957; Taber & Lodge, 2006.
[92] Cacioppo & Petty, 1982; Kruglanski & Webster, 1996.
[93] Kruglanski, et al, 2002.
[94] Milkman, Chugh, & Bazerman (2009), for example, argued, "We propose that the time has come to move the study of biases in judgment and decision making beyond description and toward the development of improvement strategies" (p. 379). Lilienfeld, Ammirati, & Landfield, (2009) wrote an article titled ,"Giving Debiasing Away: Can Psychological Research on Correcting Cognitive Errors Promote Human Welfare? In it, they wrote, "We argue that research on combating extreme confirmation bias should be among psychological science's most pressing priorities." (p. 390). Larrick (2004) has a chapter on debiasing in the *Blackwell Handbook of Judgment and Decision Making*. I agree with them all.
[95] Larrick, 2004, p. 316.

by modifying the environment (e.g., through good process).[96] Since this paper is focused on process design, I primarily consider the latter. Ten of the most important insights I drew from the literature are listed on Table 2. The first two are focused more on instructions to give to individuals to decrease the likelihood and impact of detrimental motivated reasoning. The third and fourth focus on ways to interact when attempting to debunk (correct a misconception). The final six all involve essentially working to create positive rather than negative interaction effects. Overall, there is a recognition in the literature that since many of these biases are natural and subconscious, that debiasing essentially "requires intervention."[97] As we will focus on later, deliberative practice can in some ways be framed as the art of intervening for the purpose of either debiasing or preventing the development of bias in the first place.

In an article titled, "Giving Debiasing Away: Can Psychological Research on Correcting Cognitive Errors Promote Human Welfare?," one of the few articles really focused on using insights from social psychology to reduce rather than simply identify bias, the authors emphasized the need to delay decision-making, slow down, and reflect (#1).[98] For many researchers, this suggestion is closely tied to the need to switch to System 2 when dealing with controversial, polarized issues. We know we can't go to this well too often, but we can train ourselves when things are polarized, to step back and switch to the manual mode.

Table 2: Suggestions for Avoiding or Reducing Detrimental Motivated Reasoning from Social Psychology

1. Have people delay decision making, slow down, and reflect.
2. Ask people to consider multiple possibilities, especially counterarguments or why they "might" be wrong
3. When attempting to debunk, do not simply attack the belief, but provide a viable alternative.
4. When attempting to debunk or correct, allow the person to save face. Don't attack their identity.
5. Engage people earlier in the process, before a decision has been made.
6. Spark genuine, non-hostile interaction between diverse individuals.
7. Support dissent, devil's advocates, and the expression of minority views
8. Create situations where people are accountable for their position, and have to explain it clearly.
9. Create a climate where doubt and uncertainty are welcome and deemed appropriate.
10. Help develop trust and respect, particularly through real relationships.

A key function of switching to the manual mode connects with #2: Ask people to consider multiple possibilities, especially counterarguments or why they "might" be wrong. The research showed that while asking people to be "unbiased" didn't work to reduce bias, asking them to specifically consider opposing views did. The likely reason is people don't see themselves as biased, so that instruction didn't change behavior.[99] Soll, Milkman, & Payne wrote, "We all know at some level that it helps to look at problems from multiple perspectives. Yet people frequently do not do this when making decisions. It is perhaps no surprise, therefore, that one of the most successful

[96] Soll, Milkman, & Payne, 2016; Larrick, 2004.
[97] Larrick ,2004, p. 318.
[98] Lilienfeld, Ammirati, & Landfield, 2009, p. 393.
[99] Lord, Lepper, & Preston (1984); Mussweiler, Strack, & Pfeiffer (2000); and Arkes (1981) all argued that considering an opposing perspective was an effective heuristic for preventing judgment biases.

debiasing techniques for tackling narrow thinking is to instruct people to look at a problem they face in another way."[100] Connected to considering alternatives, when people were explicitly asked to consider reasons why they might be wrong or fail, bias effects were reduced.[101]

Suggestions 3 and 4 are primarily derived from *The Debunking Handbook*, which is focused on identifying techniques to utilize when clear falsehoods and misconceptions are being fiercely held. The handbook in particular questions the typical "myth busting" technique of pointing out errors. In most cases, that would simply reinforce the error, primarily because it repeats the error, and those that want to believe the error will focus on the repetition, not the refutation. To properly debunk, the error needs to be de-emphasized, and a viable alternative emphasized. The truth needs to replace the error, we can't simply challenge the error. Similarly, when attempting to debunk, we must avoid triggering self-defense mechanisms, especially if the belief is connected to their worldview. As the handbook author Stephan Lewandowsky explained, "The first thing is to make people affirm their beliefs. Affirm that they are not idiots, that they're not dumb, that they're not crazy—they don't feel attacked. And then try to present the information in a way that's less conflicting with [their] worldview."[102]

The remaining six suggestions all point toward groups processes and how people interact. Larrick recognized that one limitation of much of the research on motivated reasoning was that it was performed on individuals in isolation, which leads to an underestimation of the potential to improve decision-making through groups.[103] Said differently, process matters. Suggestion 5 (Engage people earlier in the process, before a decision has been made) is connected to the idea of shifting public debates "upstream" to the problem defining stage. Such a move has multiple impacts on the conversation. The primary impact is people have not made up their minds yet, so they don't enter the conversation intent on defending that position, thereby avoiding many of the features of motivated reasoning. As outlined by Frey: "Prior to a decision, people should be relatively unbiased in their seeking and evaluation of information. Once the decision has been made, however, selectivity sets in."[104] When the conversation focuses on the problem rather than specific solutions to the problem, common ground is much easier to find. People more naturally are focused on their interests (which are often broadly supported across perspectives), rather than fighting about specific positions. This distinction between interests and positions, and the need to shift conflict to the former, is a key insight from conflict resolution scholars.[105]

Suggestion 6 (Spark genuine, non-hostile interaction between diverse individuals) is rather obvious, but I nonetheless felt the need to include it explicitly. I would argue this is one of the most important needs in our communities, but it doesn't happen naturally, and we rarely seem to attempt to create opportunities for it. Haidt had two extended thoughts connecting psychology and interaction that are worth providing here in some detail:

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[100] Soll, Milkman, & Payne, 2016
[101] Koriat, Lichtenstein, & Fischoff, 1980.
[102] Stephan Lewandowsky quoted in Locke, 2014.
[103] Larrick, 2004, 318.
[104] Frey, 1986, p. 44.
[105] Moving from positions to interests is a key suggestion in Ury and Fisher's bestselling book, *Getting to Yes* (1991).

> The main way that we change our mind on moral issues is by interacting with other people. We are terrible at seeking evidence that challenges our own beliefs, but other people do us this favor, just as we are quite good at finding errors in other people's beliefs. When discussions are hostile, the odds of change are slight. The elephant leans away from the opponent, and the rider works frantically to rebut the opponent's charges. But there is affection, admiration, or a desire to please the other person, then the elephant leans *toward* that person and the rider tries to find the truth in the other person's arguments. The elephant may not often change its direction in response to objections from its own rider, but it is easily steered by the mere presence of friendly elephants (that's the social persuasion link in the social intuitionist model) or by good arguments given to it by the riders of those friendly elephants (that's the reasoned persuasion link).[106]

Later in the book, he continues:

> what I am saying is we must be wary of any *individual's* ability to reason. We should see each individual as being limited, like a neuron. A neuron is really good at one thing: summing up the stimulation coming into its dendrites to 'decide' whether to fire a pulse along its axon. A neuron by itself isn't very smart. But if you put neurons together in the right way you get a brain; you get an emergent system that is much smarter and more flexible than a single neuron. In the same way, each individual reasoner is really good at one thing: finding evidence to support the position he or she already holds, usually for intuitive reasons. We should not expect individuals to produce good, open-minded, truth-seeking reasoning, particularly when self-interest or reputational concerns are in play. *But if you put individuals together in the right way* [emphasis added], such that some individuals can use their reasoning powers to disconfirm the claims of others, and all individuals feel some common bond or shared fate that allows them to interact civilly, you can create a group that ends up producing good reasoning as an emergent property of the social system. This is why it's so important to have intellectual and ideological diversity within any group or institution whose goal is to find truth (such as an intelligence agency or a community of scientists) or to produce good public policy (such as a legislature or advisory board).[107]

The case for diversity is clearly made often and in many ways, but the importance of true, productive interaction to counter the detrimental quirks of human nature likely cannot be emphasized enough.

The importance of supporting dissent, devil's advocates, and the expression of minority views (suggestion 7) is clear in any decision-making process.[108] Like suggestions 1 and 2, they

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[106] Haidt, 2012, p. 80.

[107] Haidt, 2012, p. 105.

[108] Some connected insights from the research include: "One of the basic premises here is that individuals exposed to persistent minority views are actually better decision makers in that they attend to more aspects of the situation and they examine and reexamine premises." (Nemeth, 1986, p. 28). Janis's work on group think (1982) highlighted the importance of devil's advocates. The importance of dissent was highlighted in Schulz-Hardt & Moscovici (2000).

all tend to slows things down, complicate them, and invite conflict, but could lead to paralysis through analysis. But not allowing dissent and closing off conversation too quickly can lead to even worse results. Sam Kaner's diamond of participatory decision making (Figure 5), a key tool used often by the CPD,[109] captures this tension beautifully, highlighting the importance of needing to encourage divergent thought early, but ultimately needing to support convergent thinking. Good processes encourage enough dissent, but not too much. Good process lies in the balance.

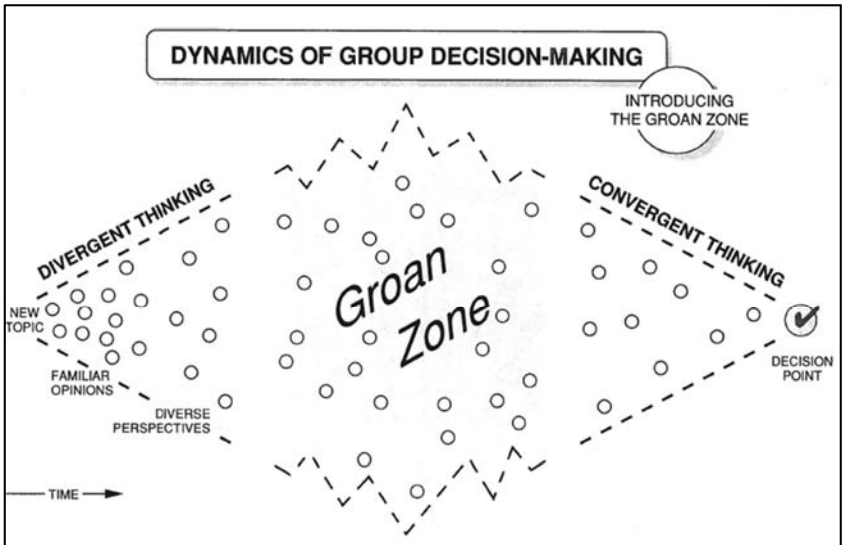

Figure 5: Sam Kaner's Diamond of Participatory Decision-Making

Encouraging accountability (suggestion 8) seems simple enough, but is obviously a situation where the internet is impacting negatively, particularly on websites or message boards that allow user names unconnected to their real names. Many wonderful things have come from social media, but the loss of accountability and the incentives to be first, rather than to be right, is very damaging to our public conversations. It certainly contributes to the development of the post-fact society, which essentially could be reframed as the post-accountability society. What the research shows here is that in these experiments testing for motivated thinking, if the subjects knew they had to defend their position publically, and explain it to other, in certain situations they were more careful with their thinking, and took fewer shortcuts and made fewer assumptions. Part of this is because they were also motivated by maintaining their self-image, and adding accountability to the process is connected to the goal of projecting a self-image of a thoughtful person.[110]

Suggestion 9 – creating a culture where doubt is seen as a virtue and people are comfortable with uncertainty – is a critical need for our 21st century communities. Scholars working to build up a response to the problems of motivated reasoning see doubt, or the "awareness of one's fallibilities and a sense of humility concerning the limits of one's knowledge" as key features of the wisdom we need to develop.[111] Lord, Lepper, & Preston (1984) share a colorful quote from Judge Learned Hand, who borrowed insight from Oliver Cromwell's 1650 plea to the Church of Scotland:

[109] Kaner, et al, 2014. See Carcasson, 2013b, for an application to deliberative engagement.
[110] Johnston, 1996; Tetlock, 1983; Tetlock & Kim, 1987; Larrick, 2004; Lerner & Tetlock, 1999.
[111] Lilienfeld, Ammirati, & Landfield, 2009, p. 395. They cite Meacham, 1990 with the quotation. Doubt is also revered in the wisdom literature.

> "I beseech ye in the bowels of Christ, think that ye may be mistaken." I should like to have that written over the portals of every church, every school, and every courthouse, and, may I say, of every legislative body in the United States.[112]

Blankenhorn explained that "the concern that my views may not be entirely correct" was "the true friend of wisdom and (along with empathy, to which it's related) the greatest enemy of polarization."[113] Schulz's *On Being Wrong* also makes a strong case for rethinking the dominant negative view of wrongness. And as I will argue in the conclusion, wisdom is clearly connected to this notion of accepting uncertainty and supporting humility.[114]

The final suggestion – working to develop trust and respect – in a way represents the culmination of the others. You can't just instill trust and respect, it must be developed over time. I would argue that the more suggestions 1-9 are followed, the more our communities will develop a sense of trust and respect. Unfortunately, it is clear that most of the public processes we rely on unfortunately do the opposite.

Before I close this review of suggestions, I'll share a few quick additional insights about what the researchers argued does not work very well to treat bias. Most important was the simple fact that *providing instructions for people to not be biased didn't seem to do much.* Again, people do not think *they* are biased, they think other people are.[115] So such instructions tend to fall on deaf ears. This one should be pretty obvious by now, but bears repeating. *Don't rely on evidence and information to change minds*.[116] The *Debunking Handbook* in particular specifically states that the "information deficit model" that assumes more information will reduce misconceptions is simply wrong.[117] Those appeal to the rider, but the elephant is usually in control. As Haidt explained: "if you want to change someone's mind about a moral or political issue, talk to the elephant first. If you ask people to believe something that violates their intuitions, they will devote their efforts to finding the escape hatch—a reason to doubt your argument or conclusion. They will almost always succeed."[118] James Hoggan summarized this wisdom as,

"Smashing heads doesn't open minds."
James Hoggan

[112] Lord, Lepper, & Preston, 1984, p. 1231.
[113] Blankenhorn, 2016.
[114] Robert Sternberg (1990) defines a wise person by their relationship with doubt, writing, "The wise person is one who appreciates the fallibility of knowledge. He or she balances knowledge, on the one hand, with doubting, on the other, thereby avoids the extremes of too-confident knowing and of too-cautious doubting" (p. 6). Peter Senge wrote, "The real distinction between wisdom and the types of intelligence that abound in modern society comes from not knowing the answers. Wisdom manifests in humility rather than arrogance" (Briskin, et al, 2009, p. ix). Briskin, et al (2009) highlight the "suspension of certainty' as a key stance for preparing for collective wisdom to arise (p. 37).
[115] Arkes (1981) maintained that psychoeducational methods by themselves are ''absolutely worthless'' (p. 326), largely because people are typically oblivious to cognitive influences on their judgments. In contrast, others believe that psychoeducational programs may often be efficacious (quoted in Lilienfeld, Ammirati, & Landfield, 2009,
[116] Nyhan & Reifler, 2010.
[117] Cook & Lewandowsky, 2011, p. 2.
[118] Haidt, 2012, p. 59.

"Smashing heads doesn't open minds."[119] You first have to make space for the evidence and knowledge to matter, facts on their own are very unpersuasive to the motivated mind.

Argument 2: Humans are naturally social and empathetic

Many economists believe humans are primarily self-interested and individualistic, focused on their own advancement and survival. Organizing a democracy around that assumption would be exceedingly difficult and rather depressing. The good news is that significant evidence exists that humans are actually much more naturally social. The importance of belonging is a key feature of Maslow's hierarchy, and as reviewed earlier, Haidt argues that we are actually more "groupish" and tribal, and we can be remarkably cooperative, sacrificial, and empathetic to our tribe. DiSalvio wrote, "the truth is that our brains are not wired for complete independence. We are instead an exceptionally social species wired for *interdependence*. Ours is an existence of influence and counterinfluence—and none of us live on one-way streets."[120] Later, he added, "As a social animal, we have a deeply rooted desire to belong to a social group—a preferred tribe, if you will."[121] The key question, therefore, is who is included in your "preferred tribe," and who is defined as the other? Some group defining barriers are more obvious than others (such as skin color, ethnicity or religion), but humans make powerful ties in many other ways (sports teams, geography, alma maters, occupations, political party, etc.). It seems clear that our social nature has many potential positives and negatives, which means we can work to devise systems and processes to extend the former and reduce the latter. It also means than many of the divisions that polarize us are primarily symbolic or communicative, and therefore can be changed.

One example I share in class when discussing the importance and rather arbitrary nature of the power of belonging and group identity is from my Texas A&M days. For four years I lived in Walton Hall. The dorm was "ramp style," meaning there were 13 different ramps, each with an outside door and stairs that went up 4 floors, with 4 rooms per floor. There were no horizontal hallways, so to go from second floor of E ramp to F ramp, so you would go downstairs, exit, and reenter the next ramp and go up. I lived in E ramp, and it was a preferred group for me. I knew it was better than the other ramps, and we competed against them. And it didn't matter if you were black, Hispanic, or white, or what home town you came from, or your favorite pro football team, or your religion, you were an E ramper, and you were with us now. We actually had E ramp tshirts made. But of course, I also believed Walton Hall was particularly better than the other dorms, so in some cases it didn't matter what Ramp you lived in, as long as you were from Walton Hall. They were also a preferred group for me. We had Walton Hall t-shirts, and we had Walton Hall songs. Of course, at A&M, those that lived in one of the four non-air conditioned dorms that were left in the 1990s bonded, and we knew we were the ones truly living the A&M experience. So sometimes it didn't matter that much if you were from Walton, Puryear, Hart, or Law Hall – and I still remember those four names – as long as you were a "non-air" dorm guy. We had a bond. You were tougher than the wimps that needed AC. Of course, we were all Aggies, especially on game day, and who cares where you lived, as long as you weren't a damn Longhorn. And, yes, I still have lots of Aggie shirts and still sing Aggie songs. That being said, Texans in general have a lot of state

[119] Hoggan, 2016, p. 4.
[120] DiSalvo, 2011, p. 150.
[121] DiSalvio, 2011, p. 153.

pride, so Aggie, Longhorn, Red Raider, who cares, just don't mess with Texas (that slogan is on a shirt I wore often at A&M). Then again, Texans are a patriotic bunch, and the United States is the best country in the world. So of course on Fourth of July being a Texan is not as important as being an American. Lastly, many of us realize that we are all in this world together, and, wow, those pictures from space really showed how fragile a world we have. We realized the importance of considering ourselves global citizens. The point, which I imagine is clear, is that groups matter, and they make powerful impacts on our reasoning, but they are often contrived and sometimes can be easily adjusted. Unfortunately, many of our groups are somewhat defined or brought together by attacking "the other," which provides some of the power in a negative way.

Research also shows that we are inherently empathetic. The concept has received significant focus lately. Both Aristotle and Adam Smith focused on empathy in their work (Aristotle using the term "pity," and Smith "sentiment"),[122] establishing it as a key feature in human nature. Some argue that we must develop a sense of "global empathy" in order to match our global connectiveness now, while others caution about focusing too much on empathy, primarily because it seems too limited to people that are similar to us.[123] This debate cannot be resolved here, but bears consideration by deliberative practitioners. Regardless of the extent, it is clear that humans have a natural empathy for others that creates important potential for community life if properly tapped. One way of thinking about this is to consider the typical reaction to a natural disaster. Humans often rise up and band together to help the unfortunate, driven by powerful inherent forces.

Another key point that several scholars have made is that despite what many may assume now due to its center stage focus on media, the world is actually less violent and conflict-laden now than ever. Greene explained:

> Contrary to popular lamentation, humans are getting better and better at getting along. Violence has declined over the course of human history, including recent history, and participation in modern market economies, far from turning us into selfish bean counters, has expanded the scope of human kindness. Nevertheless, we have plenty of room for improvement.[124]

Peter Diamandis and Steven Kotler echo a similar theme in their book titled *Abundance: The Future Is Better Than You Think*, as well as Steven Pinker in *Better Angels of Our Nature*, and include multiple data filled charts to support the argument. Concerns about and examples of terrorism fill our television screens and social media threads, but the reality is that the human race has slowly and surely become more connected, emphatic, and peaceful. *Abundance* makes similar arguments about poverty, health, energy, etc.

A final point for this section turns to insights from the positive psychology movement that has recently developed. Psychology has traditionally focused on the pathologies of the human mind, but a refreshing trend lately has been to focus more on trying to understand positive features. In a move

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[122] Aristotle, *Rhetoric* (1991), and Adam Smith, *The Theory of Moral Sentiments* (1984).

[123] Jeremy Rifkin, *The Empathic Civilization* (2009) argues for global empathy. Paul Bloom (2013) argues against it in "The Baby in the Well: The Case Against Empathy," Many books on empathy have been published lately (see a long list by Steven Pinker in *Better Angels of our Nature* (2011), p. 571.

[124] Greene, 2013, p. 13. Argument is also made by Steven Pinker is *Better Angels of Our Nature* (2011).

similar to appreciative inquiry, rather than focusing on solving the problems, these psychologists identify positive traits and seek to encourage their expansion (i.e. how do we get more of a good thing rather than less of a bad thing). In books like *The Compassionate Instinct: The Science of Human Goodness* and *Born to be Good: The Science of a Meaningful Life*, concepts like "Jen" are explored:

> *Jen* is felt in that deeply satisfying moment when you bring out the goodness in others….Most centrally, it is founded on the study of emotions such as compassion, gratitude, awe, embarrassment, and amusement, emotions that transpire between people bringing the good in each other to completion. . . . For the individual, new studies are finding that a high *jen* ratio, a devotion to bringing the good in others to completion, is the path to the meaningful life.[125]

And positive psychology is no sham "self-help book" discipline, but rather relies heavily on neuroscience and academic methodologies, as one argument from *Born to be Good* exemplifies: "New neuroscience suggests we are wired for *jen*: when we give to others, or act cooperatively, reward centers of the brain (such as the nucleus accumbens, a region dense with dopamine receptors) hum with activity. Giving may enhance self-interest more than receiving."[126] Overall, the question is how do we tap into these positive features? And to what extent do our current public engagement process do so?

Argument 3: Humans are naturally pragmatic, innovative, and creative

Obviously what holds humans apart from any other species is their ingenuity and ability to create new tools to address difficult problems. The pace of change in human life even in my lifetime is remarkable, and thankfully many of the basic trends of life, as detailed in *Abundance*, are showing the positive impacts of many of our creative inventions. The simple point to be made here, however, is that humans, when given the time, opportunity, and proper motivation are clearly capable of incredible creativity and innovation. Recent research also emphasizes the importance of connectivity, which is sparked by diverse groups working together.[127] The question, again, is how well do we tap into that creativity? The sad truth is that polarization and simple "good versus evil" frames can severely limit creativity. Simply vanquishing evil requires no real creativity, or at minimum misplaces it by focusing on trying to make the other side look bad. As more and more of us abandon our simple frames and confront the realities of the issues we face, however, our natural creativity will be indispensable. So I ask again, do our political processes tap into and nurture this creativity and innovation? I fear the zero-sum game of politics often squelches innovation and creativity. If the "other side" devises an ingenious solution to a tough problem, too often it must be attacked and undercut, rather than praised and supported.

Argument 4: Humans naturally strive for mastery and excellence

This final argument was sparked initially by Aristotle, and then more recently by the work on Daniel Pink in his book *Drive: The Surprising Truth about what Motivates Us*, as well as Mihaly Csikszentmihalyi's *Flow*.[128] They all argue that humans inherently seek mastery and excellence, and that

[125] Keltner, Marsh, Smith, 2010, p.5.
[126] Keltner, Marsh, Smith, 2010, p.6.
[127] Johnson, 2011.
[128] Pink, 2009; Csikszentmihályi, 1990.

we are actually at our happiest when doing difficult things well. This seems to me to be a profound truth that is rarely recognized and provides great potential for community building. While the impulses to reason in biased ways, fear others, and gather in like-minded groups are certainty powerful and perhaps more basic, this drive toward excellence can potentially overcome all the negative quirks we examined in the first section of this essay. Building on Maslow's notion of "self-actualization,"[129] as well as Aristotle's focus on happiness as the ultimate goal of humans, I am intrigued how we can tap into these positive impulses to serve democracy and our communities. More on that later.

Conclusion to Part 2: The Positive Possibilities of Human Nature

The four arguments outlined here are clearly not an exhaustive list of positive features of human nature, but rather a few key aspects that I believe exemplify critical areas of potential for supporting our communities and rethinking process design for public engagement. The dominant issue is that, unfortunately, many of these features seem to be secondary to those explored in the first section, or are generally only potentially activated when those are not. Think in terms of Maslow's hierarchy of needs. Our base needs are stronger, and dominant when felt. But when satisfied—when we do not need to focus on shelter, food, security, etc.—we can focus on higher order needs like esteem and self-actualization. The key, therefore, will be finding ways to avoid activating or to mitigate the impacts of the detrimental features of motivated reasoning, in order to make more room for the positive features to flourish. My answer, of course, will be that process matters.

PART 3: PUBLIC ENGAGEMENT AND HUMAN NATURE – THE CURRENT SITUATION

Parts 1 and 2 have summarized some key research findings on the problems and positive potentials of motivated reasoning and human nature. Part 3 reviews the current public engagement processes employed at the local and national levels. Essentially, how do people engage politically currently, and what tendencies of the human mind do those processes activate and not activate? The prognosis is very grim and telling. Process matters, and most of our processes are harmful. Our political systems overwhelmingly activate detrimental motivated reasoning and spark negative interaction effects to the extent that the positive potentials are rarely reached.

The overall argument is in this section is rather simple: a very high percentage (I would say in the 90-95% range) of our public processes designed to gather input or support public engagement essentially spark detrimental motivated reasoning and exacerbate negative impact effects, and rarely tap into the positive potentials. I can confidently say that my 20 years of experience being a close observer of public discourse unfortunately fully support the insights I draw in this section. I would go as far as saying it would be difficult to purposefully design mechanisms more poorly. This argument concurs with insights from Tina Nabatchi and Matt Leighninger's *Public Participation for 21st Century Democracy*. There they highlight the growing animosity between the public and government officials,

[129] Maslow, 1943.

especially as the public gets a hold of more and more communication tools to interact with others and voice their dissatisfaction. Expressing their concern with the quality of current public processes, Nabatchi and Leighninger write:

> The official, conventional processes and structures for public participation are almost completely useless for overcoming this divide between citizens and government; in fact, they seem to be making matters worse. In large part, that is because the infrastructure for participation is inefficient and outdated; it does not recognize citizen capacity and it limits our collective problem-solving potential.[130]

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They make useful distinctions between conventional, thin, and thick participation that are relevant here. Conventional participation such as public hearings and citizen comment time involves "older forms of engagement that were developed to uphold order, accountability, and transparency….intended to provide citizens with checks on government power." Thin participation, such on online engagement, polls, surveys, and open houses, "activates people as individuals rather than in groups." [131] These two forms are dominant, and exceedingly problematic as I will establish below. Thick participation, which corresponds to deliberative engagement processes I focus on in Part 4, is unfortunately rare. This report certainly supports Nabatchi and Leighninger call for thicker participation.

To support these bold claims, I'll walk through many of the dominant forms of engagement. Due to space constraints, I only offer short paragraphs here to make my point, not extensively researched analysis (each of these topics certainly merit deeper analysis). I'll move from more national aspects toward more local. My argument is not that we need to stop all these mechanisms, because many have positive impacts as well, but when viewed through the lens of the social psychology research, the problems are clear and warrant attention.

Our two-party system. Despite our Founders wishes, our political system quickly evolved into a two party system. It has worked well in many senses, and I don't have the space to examine the pros and cons of parties here, but I will state that a two party system clearly activates many of the problematic features of motivated reasoning. Essentially, it defines two dominant tribes, and thereby sparks selective exposure and confirmation bias on overdrive. The typical egoism that impacts attributional analysis (I cause good things to happen, and bad things are their fault), is multiplied tenfold. Each party now has media stations that preach to their respective choirs, utilize direct mail and email lists to communicate directly with them, and seem to primarily rely on messages full of scare tactics about the other party to motivate. Recent Pew Foundation research on the level of polarization, anger, and outright hate between

[130] Nabatchi & Leighninger, 2015, pp. 3-4.
[131] Nabatchi & Leighninger, 2015, p. 21 and p. 17.

the parties is unprecedented, and the 2016 election will only make things worse.[132] I still maintain much of this polarization is exaggerated and manufactured (Figure 4), but nonetheless the perception of this much polarization becomes a self-fulfilling prophecy and continues to reproduce itself.

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Campaigns, referenda, and elections. As has become clear for many after Brexit, voting processes can easily fall prey to the dangers of motivated reasoning and become sharp evidence of our "post fact society." Campaigns are attempts to motivate people to vote for your side or against the other, so they have limited alternatives, obvious sides, and most people involved in them have made their decision early in the process (especially if the vote is tied to party). As a result, the dominant messages are designed to fuel simplistic motivated reasoning and activate basic heuristics rather than quality reasoning. The ends of winning the election justify multiple questionable means. Referenda are particularly susceptible to manipulation, as 30 second spot ads and direct mailers funded by unclear sources can make ridiculous claims in order to attempt to sway voters. Many people erroneously believe that voting is the apex of democracy, the essential act. Deliberative practitioners certainly believe voting is important, perhaps even the base responsibility of citizenship, but they also recognize the democracy is much more than just a mechanism for making decisions, and that when democracy is defined by voting—which sparks some of the most egregious examples of poor communication—democracy is in trouble. Essentially, communication tied to parties or campaigns is inherently a zero-sum game. Anything good for one side is inherently bad for the other. Win-wins rarely exist, therefore collaboration is discouraged, and pure conflict is the norm. Each side doesn't want anything good to happen when the other side is in charge, and each side tries to take credit for any good news and blame the other for the bad news (egoism writ large). Since humans are more in tune to negativity, both sides often go negative, basically reducing trust in everyone and all institutions. The few that love the "fight fire with fire game" revel in the game, the rest of us suffer.

Political think tanks. Generally, many distinguish between politics and science, with the latter having an elevated level of trust and respect tied to accuracy and rigor. Unfortunately, with the development of politically oriented think tanks and the influence of the internet, the line between politics and science has significantly blurred in recent decades, contributing to the development of the post-fact society and the anti-intellectualism it fuels. From a motivated reasoning perspective—particularly in terms of how people are looking for any example of pseudo-science to justify their preset view and any example of counterevidence to dismiss an opposing claim—political think tanks fuel confirmation bias.

[132] Pew Research Center, 2016.

They essentially muddy the water, diminishing the value of all research, making it easier to dismiss evidence that goes against your perspective, even if that evidence didn't originate at a politically motivated think tank.[133] "Consider the source" becomes an excuse to dismiss what you want to dismiss.

The media. Obviously volumes and volumes have been written on the impact of the media on democracy, but I simply want to make a couple quick points here. The main concern is that the media likely deals with a different form of motivated reasoning, one affected by the need for selling newspapers, drawing viewers, and attracting clicks. This assumption is not purely cynical. In fairness, they do have to make money to do their work. Unfortunately, that motivation is often disconnected from a motivation for accuracy or even supporting sound democratic talk. We know that negativity sells, as does conflict and theater. Focusing on elections as horse races, fights, or battles only multiplies the effects of motivated reasoning by highlighting the opposing candidates as adversaries. Frames focused on cooperation, collaboration, and deliberative discussion simply do not sell well. As Jon Stewart so eloquently claimed in his takedown of Crossfire, the political media are hurting America (not that his show didn't have its own negative impacts in its own way).[134] Similar to the impact of Think Tanks (and likely connected to them), the blurring of the line between the media and political operatives have further damaged their role in our democracy. For many, the media is now just part of the system that feeds selective exposure and confirmation bias. And now that the parties seem to have their own supportive media, the line doesn't even seem to exist at times.

Interest groups and lobbyists. Washington, D.C. and many state capitals are awash with professional persuaders focused on gaining support for their policies and organizations. In some ways, this is democratic, as organizations that have more members and more dues should have more influence, and the line between a lobbyist and a dedicated vocal, caring citizen is rather gray. Of course, if we venture into the impact of money and actual corruption, it is a different story, but I digress. That being said, the problem with interest groups is they are inherently likely to be rather narrow persuaders. They are doing all they can to frame things in a very persuasive way to get their point of view accepted, and they are often very skilled. They don't necessarily research to find an answer, they research to find evidence of a pre-chosen point of view. As Peter Levine has argued, the proliferation of interest and advocacy groups have also undercut local communities by taking away focus from the public good. Individuals now join narrow groups based far away to advocate for them, rather than learn to deliberate with their neighbors.[135]

Congressional deliberations and legislative debate. In some cases, the deliberation in committees can be of quality, and at times a debate on the floor may be insightful. Generally, though congressional bodies at the national and state level rarely truly serve as deliberative bodies. I imagine

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[133] Pielke's (2007) *The Honest Broker: Making Sense of Science in Policy and Politics* provides an interesting argument to consider the interplay between politics and science. He in particular warns against the typical role of the scientist seeking to be a "pure scientist" with no interest in impacting decisions, as that role is typically seen much more as an "stealth issue advocate" that erodes the trust in science. Overall, he argues for the need for more "honest broker of policy alternatives." He defines the defining characteristics of that role as one that "an effort to expand (or at least clarify) the scope of choice for decision-making in a way that allows for decision-maker to reduce choice based on his or her own preferences or values" (pp. 2-3).

[134] For a video of Stewart's appearance on *Crossfire:* https://www.youtube.com/watch?v=aFQFB5YpDZE

[135] Levine, 2014, p. 113.

few would argue that the politicians enter the chambers intent of having a robust conversation to identify what position has the most merit, dedicated to the rule of "best argument wins." Depending on how cynical you may be, politicians are clearly influenced by a number of motivations beyond the best argument, such as party loyalty, constituent service, fundraising needs, lobbyist pressures, ideological purity, etc. Not all of these motivations are bad, some are simply a part of the game they have to play, but the bottom line is that the motivation to allow the best argument to win may not have much influence against that list. Debates about specific legislation also tend to activate poor motivated reasoning, primarily because they again have very constrained choices (yes or no), and are often tied to specific tribes. Once someone has made their initial decision to support or oppose legislation, their brains will work to polarize rather quickly. Since legislation is often basically a specific idea to address a problem, the conversation is very limited. It doesn't spark broad conversations about the problem and ways to address it, but rather arguments for and against that specific idea. In a world of wicked problems, no one solution will be perfect, thereby almost all legislation will be susceptible to pretty strong attacks. The typical process to push critical legislation through involves mobilizing bias and pushing for the needed majority. This process is also clearly zero-sum, and sparks poor communication. If I am pushing for legislation, I must activate my base and capture enough moderates in the middle. Not only do I not even bother attempting to speak with those that disagree with me, but I also rely on tactics that will often attack or ridicule them in order to appeal to my most relevant audiences. Again, the communication inherently fuels polarization and negativity. Rather than being examples of a quality deliberative body of our best and brightest in action to show the general public how it is done, congressional debates are often protracted, manipulative, zero-sum campaigns influenced by numerous questionable motives. Not quite what the Founders imagined.

Political debates. I'll actually dispense with these rather quickly. Most political debates are not truly debates, but rather joint press conferences.[136] Participants often have talking points together beforehand, and are adept at turning whatever question asked into an opportunity to share a talking point. Debates turn into spectacles, with whichever candidate who deployed the sharpest sound bit declared the winner, or the one that had an obvious flub the loser. At the local level, these debates can be more substantive, and indeed the CPD has designed local candidate debates focused on specific issues that we feel did contribute positively to the public discussion. But generally, the debate is simply more of the same for campaigns. Candidates talk past each other, and audience members agree with what they already accepted.

Social media political engagement (particularly Facebook, Twitter, and message boards tied to newspaper or blog articles). Much has been written about the impact of social media on politics, and, again, an extended analysis cannot be offered here. I do recognize that much good can come from social media. It allows people to organize and connect, to not rely on the broader media, gives many people voice, etc. For our purposes, however, it also very clearly exacerbates the problems of motivated reasoning. Selective exposure and confirmation bias once again runs quite amuck online. Millions of

[136] Oddly enough, I couldn't remember where I first heard this argument (see the description of "sleeper effect" from earlier). This summer I am rewatching *West Wing* with my children, and President Bartlett just made the same argument. I don't think that is the original source, but I thought I would share.

online users are essentially searching for evidence of their rightness and the opposing side's wrongness, ready to like, share, and retweet as proof. As someone with a rather bipartisan mix of friends and Twitter follows, my social media experience, especially after major events, is rather surreal. Every single event strengthens the polarization, because each side cherry picks evidence and conjures up alternative narratives. Many clearly are forwarding articles whose titles fit their purposes, but seemingly have not read (and not so rarely they end out being parody articles that nonetheless spark outrage even though completely and obviously fake[137]). They highlight the worst examples and blunders of the other side, often out of context. They rely on simple attributions of negative ulterior motives to justify their own manipulative tactics. Many forward memes or claims that have already been debunked as utter nonsense. But, of course, correcting or debunking those tend to only backfire, as the research attests. The internet allows the most potent but rare outlier example to serve as the basic representative anecdote for particular positions. Everyone has their good characters and their evil characters pre-selected, and everyday actions are quickly interpreted and presented to support those roles. Conspiracy theories thrive, opposing views are unfriended, and, ultimately, due to the Russell effect, the fools and fanatics are the loudest and most frequent posters, and the wise sit idly by with their doubts, perhaps often beginning messages, but rarely hitting the "post" button.[138]

> *The problem is that such a process [citizen comment time] allows for the expression of individual opinions, but not the interaction or learning that is critical to democratic decision-making. It too often simply allows citizens to express the weak results of their selective exposure and confirmation bias—or if simply repeating talking points, someone else's.*

Public comment and public hearings. In many communities, the primary form of public engagement for local issues is some form of public hearing or meeting of councils or boards. The engagement typically involves a body with authority in some sort of elevated dais, and a microphone or two in the audience. At times, there are rules that each participant must sign up before the meeting to speak and everyone has a certain time frame to speak (often the microphones have yellow and red lights that go off at 3 minutes or so). In most cases, the council or school board is not allowed to respond during the comments—I assume they don't want arguments that go back and forth during each participant that could get out of hand—so the council or decision-making body holds their comments, if they have any, until after everyone has spoken. For controversial issues, the line to speak could be very long, and groups often mobilize their members to come speak, potentially providing them with talking points. I've also seen participants coordinate in a chain to overcome the three-minute

[137] As I worked on finishing this paper, a friend was tagged in a posted article from the website "Freewoodpress," clearly a parody site in the Onion vein. The article was about Chick-fil-A President Dan Cathy announcing "We Don't Like The Blacks Either," hoping for a bump in sales similar to the one when their anti-gay views were announced. Several comments on the post expressed outrage toward Chik-fil-a, even after I posted that it was a parody.

[138] At the risk of self-anointing myself as wise, I am certainly guilty of this. I often try to insert myself into polarized internet discussions, but often stop short of clicking send. During the process of this project, however, I have decided to be more vocal and active in social media, hoping to push back on the Russell effect.

limit, with each speaker passing off a longer speech to the next in line to complete a longer message. Standing up and speaking at a public meeting is a key democratic behavior, and I even have Norman Rockwell's painting of such a scene on the wall of my office. That being said, through the lens of motivated reasoning, it is an incredibly limited and problematic process design. Like voting, it should be seen as a base behavior, not the key form of engagement. The problem is that such a process allows for the expression of individual opinions, but not the interaction or learning that is critical to democratic decision-making. It too often simply allows citizens to basically express the weak results of their selective exposure and confirmation bias—or if simply repeating talking points, someone else's. For controversial issues, speaker after speaker seem to throw out evidence and claims with considerable force and certainty, but it is exceedingly unclear if anyone is actually listening. Those in line are reviewing their notes, and many who speak promptly exit. Soon after, others in the audience react positively to those that agree with them, negatively to those that disagree. Each individual leaves certain that the night proved they were right and those that disagree with them are wrong. Once again, more information simply means more misinformed and polarized opinions. The decision-makers, who hopefully came in with a good sense of both sides, are exposed to long lines of one sided diatribes, which only harms their opinion of the "general public" and their view of public engagement.

Public hearings are similar in format. An additional problem with public hearings is that they are typically held too late in the process. The public is only notified or sufficiently motivated to attend when a decision is near. By that point, the issue has been narrowed to a yes or no proposition, the battle lines are drawn, and the winners and losers are clear (and, generally, only the losers attend to fight back, so many public hearings are just exhibitions in citizen rage). In other words, they are a breeding ground for detrimental motivated reasoning.

Expert panels. Another favorite of local officials or civic organizers is the expert panel. Every Saturday morning across the country thousands of these meetings likely occur, arranged by city council members, the League of Women Voters, public libraries, universities, local newspapers, or advocacy groups. They typically involve a panel of perhaps 3-5 experts giving some form of talk about a common subject. The public is in the audience, mostly listening, but often get some Q&A time at the end (again, walking up to that microphone to appeal to those in authority in the front of the room). These panels can be very informative, but they can still also simply feed motivated reasoning. Some panels are biased from the beginning (they were designed to support a specific argument), which obviously can be problematic. But many are designed—well or not so well—to be "balanced" with representatives from different perspectives pitted against each other. The problem is that the participants tend to be focused either on supporting their position (if advocates), or just stating established facts (if they are scientists), or some mix of both. Both can be useful forms of information, but not so much in a polarized environment. I've watched several dozens of these expert panels over the years, and I feel they simply put too much of a burden on the audience to make sense of the conversation. They often become a contest of sources (Panelist #1: "Several studies say marijuana is addictive and a problem to society." Panelist #2: "But these studies I have say it isn't."). Such disconnected discussion forces the audience to either choose who to believe (and we know they will tend to choose the person who agrees with their previous position) or become frustrated as they realize that that even experts don't seem to know

anything conclusive. In the end, many of these panels simply increase the polarization as people remember the points they want to remember, and dismiss and forget the rest. Unless there is a strong moderator or facilitator that can redirect the conversation and have the participants truly interact and work through the issues, and not just perform pitted battles of opposing evidence, the more informed tend to become the more misinformed at these panels.

Letters to the editors and emails to policymakers. Another treasured form of free speech and public engagement is the letter to the editor or the quintessential act of "contact your congressperson" or "city council." Once again, I support this form of engagement generally, but we must also consider their severe limitations when considered through the lens of motivated reasoning. Similar to public comment, this form of engagement allows for the individual expression of opinions. It rarely allows for interaction, listening, or the refinement of opinion. And as we know from the Russell effect, the loudest voices—the ones most likely to send a letter to the editor, walk up to that microphone, or email a policymaker—are often the ones the most biased. People that see both sides (or multiple sides) and are struggling to figure out the right way to balance competing values tend not to participate or express themselves. So the pages of our local paper include multiple examples of opposing sides again lobbing facts, claims, and insults past each other, each completely certain of their infallibility. Many of these letters or emails contain very questionable factual claims, and at times are simply repeating talking points or suggested appeals from advocacy groups.[139] The impact is similar to online message boards and public comment, the forces of motivated reasoning either turn the noise into support for everyone's prechosen viewpoint, or frustrate those without an opinion to avoid that section of the newspaper and turn to sports, fashion, or the comics.

Summary of the dominant forms of public engagement. As this relatively quick but intense review has shown, examining our typical public engagement processes through the lens of motivated reasoning raises significant concerns. Many connections were made to the detrimental forms of motivated reasoning, while very few were made to the positive features examined in Part 2. A vast majority of our processes represent outdated conventional or thin forms of participation.[140] Our current processes do not seem to spark quality reasoning, innovation, creativity, empathy, or excellence. The actions suggested by the research to overcome motivated reasoning (Table 2) do not seem to fit or are otherwise not followed significantly. Across the formats, some key recurring features stand out. They cater to those that already have their mind made up. They are primarily about expressing opinions, not listening or working together to solve problems. They focus on reacting to limited options (most often just 2 options or yes or no to one option), and tend to overemphasize government solutions. They focus on citizens as spectators, customers, voters, or activists, but not as collaborative problem solvers, producers, or co-creators.[141] As a result of all this, public officials and experts can become very

[139] At times, the city of Fort Collins provides me with all the emails sent to city council on a controversial issue to help them make sense of a topic. I often see the same email cut and pasted multiple times, and those are often the most biased and manipulative.

[140] Nabatchi & Leighninger, 2015.

[141] Leah Sprain and I (2010) focused on the citizen as collaborative problem solver. David Mathews (2015) argues for the citizen as producer, not consumer. Harry Boyte (2012) focuses on the role of citizens as "co-creators."

frustrated with public engagement, primarily because it primarily means people yelling at them from narrow and often misinformed perspectives.

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At the CPD, we often use a simply typology that distinguishes between adversarial, expert, and deliberative methods of engagement.[142] My basic talk introducing the typology introduces wicked problems, and then focuses on the fact that the expert and adversarial models—the two currently dominant models—are particularly problematic when employed to address wicked problems. With these sort of problems, the flaws of adversarial and expert models are only heightened. Adversarial talk essentially sparks detrimental motivated reasoning, resulting in polarization and distrust. Expert talk is too limited, struggling with values generally and value dilemmas in particular. And as we have established with the refutation of the "information deficit model," in an adversarial context the data that experts provide only tends to polarize anyway.

Most of the public engagement processes reviewed in Part 3 spark either adversarial or expert talk, or a mix of the two. Very few are deliberative or interactive. Unfortunately, while both models are a necessary part of our political communication system—we couldn't survive without them—they are woefully insufficient on their own, and often trigger motivated reasoning and thus fuel false polarization and detachment. In Part 4, however, I turn to the deliberative perspective, and make the argument for its critical importance in changing these negative dynamics. I argue both for the need to build capacity for deliberative engagement as an alternative (i.e. add more deliberative events to the public toolbox), as well as arguing for the importance of utilizing deliberative processes to help make sense out of the noise emanating from the adversarial and expert dominated communication. Most of our current processes encourage and publicize mostly biased expressions of poorly formed opinions (adversarial) or specific, often cherry-picked empirical claims based on research (expert). Both provide tons of data that we know most people utilize in a biased way. The good news is all this data has great potential, both the adversarial public data (which includes information on values, passions, concerns, and ideas) and the expert data (which includes information on what works, what doesn't, what has evidentiary support and what doesn't, and what may be possible). The question we turn to in Part 4 is, what can we do with it all?

[142] I review the adversarial, expert, and deliberative models in Carcasson 2013a.

PART 4: THE CASE FOR DELIBERATIVE ENGAGEMENT

In this final section, I examine the key components of deliberative engagement through the lens of Part 1 and 2, and with the hope of establishing a clear mandate for an alternative to the processes reviewed in Part 3. I write assuming readers are already familiar with the deliberative democracy movement,[143] so I'll jump right in with the analysis. I'll focus on nine key components to deliberative process design (Table 3), and consider how they activate, avoid, or mitigate the detrimental features of motivated reasoning and bring out the positives. My argument is that deliberative process design is very well suited to serve these functions—indeed, much deliberative design was created precisely to do this work. And while the costs in terms of funds, time, and necessary capacity for deliberative engagement remain high, the potential for deliberative engagement to make sense of the noise is a massive benefit that has perhaps been undervalued in the literature.

Table 3: Key Components to Deliberative Engagement

- Overall wicked problem frame
- Deliberative issue analysis
- Deliberative naming and framing
- Ground rules or community agreements.
- Small, diverse group discussions.
- Trained deliberative facilitators and notetakers
- Processes designed to spark interaction and learning
- Deliberative reporting
- Sparking collaborative action

In order to make this section manageable, I focus on key features of deliberative process design utilized at the CPD, which uses the popular National Issues Forum (NIF) format as our base model, but also utilizes a broad toolkit of deliberative techniques learned over the years at conferences and workshops such as the National Coalition for Dialogue and Deliberation, the Deliberative Democracy Consortium, and the University Network for Collaborative Governance, as well as trainings with International Association of Public Participation, Institute for Participatory Management and Planning, and Public Agenda. The overarching structure for this analysis follows the deliberative inquiry model Leah Sprain and I developed based on our work at the CPD (Figure 6).[144]

Overall wicked problem frame. I would argue that a critical component to deliberative engagement is the overall mindset of seeing problems through the lens of wicked problems. The mindset is focused on the seeing problems as involving competing underlying values that require working through to better understand and therefore call for either tough choices and tradeoffs or innovation to transcend the tensions. Another key part of this mindset is that the wickedness is inherent to the problem, not the people. The wicked problems mindset allows us to assume that a high majority of people are actually reasonable (at least from their perspective) and are acting and thinking based on their values (not negative values or hidden ulterior motives). Our differences are not caused by some of us having good values and some bad values, but rather that we rank our values in different

[143] For a quick review of key aspects, see Carcasson & Sprain (2010), available online at http://cpd.colostate.edu/resources/cpd-publications/. The website for the National Coalition for Dialogue and Deliberation (www.ncdd.org) is also a wonderful resource, especially their getting started links. Books like Gastil and Levine's (2005) *The Deliberative Democracy Handbook* and Nabatchi, Gastil, Weiksner, & Leighninger's *Democracy in Motion* (2012) provide excellent overviews.

[144] Carcasson & Sprain, 2016.

ways, causing conflict. That conflict then becomes exaggerated when we falsely assume those that disagree with us reject our values to follow negative motives. As a result, when participants understand and accept the wicked problem frame, the polarization process can be undercut and detrimental motivated reasoning lessened. People seek to understand where opposing views are coming from, rather than defaulting to the simple good v. evil assumption. Derek Barker highlights the importance of "mutual understanding" as an ideal for how citizens should interact within a deliberative system, precisely because "It does not resolve differences so much as enable communication across them."[145] Through mutual understanding people may even begin to consider how the values they prioritize are inherently in tension with others they also care about (we can't seem to have more freedom without more inequality or less safety).

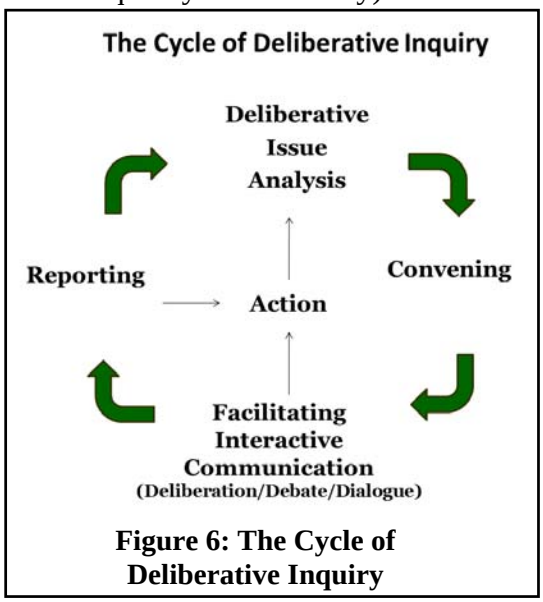

Figure 6: The Cycle of Deliberative Inquiry

Another potential impact of the wicked problem frame is reducing the craving for certainty, thus connecting to the need to support a climate where doubt and uncertainty are welcome (#9 on Table 2). Wicked problems are not solvable, but require an ongoing conversation. Competing values will always be in conflict, and finding better and better ways to negotiate or transcend them is the ultimate goal. Such a perspective calls for skills and habits that help us work through value pluralism and disagreement more productively, and build what Barker called "a shared and habituated civic culture of mutual understanding of differences."[146] This perspective connects well with John Dewey's participatory vision of democracy as a mode of associated living,[147] rather than simply a voting mechanism or rule by the majority.

Deliberative issue analysis. The first step of deliberative inquiry (Figure 6) is deliberative issue analysis. This essentially involves broad research from an impartial source that incorporates both public sources (activist groups, websites, surveys, message boards, etc.) and expert sources (academic articles and government resources, etc.). It is influenced by the ethic of passionate impartiality, a concept we developed at the CPD to recognize the tensions between our impartial role, our commitment to "small d" democratic values of equality and inclusion, and the epistemic values of sound information and reasoning. Deliberative issue analysis therefore works to make sense of the noise developed by the traditional forms of public engagement, filtering, translating, and fact checking as it goes, working to provide clearer "maps" of the issue that attempt to honor both broad voices and concerns about information quality. Such processes connect to Pielke's honest brokers of information, Condit's emphatic critics, and Fischer's post-empirical policy analysts.[148] We will never get these maps perfect,

[145] Barker, 2015, p. 14.
[146] Barker, 2015, p. 1.
[147] Dewey, 1916, p. 87.
[148] Pielke, 2007; Condit, 1993; Fischer, 2003, 2009. Condit's article was particular impactful to my transition from a rhetorical critic to a deliberative practitioner, particularly this passage: "The empathic critic's final role is to locate pieces

but we will certainly help people see issues better. This filtering process specifically works to address some of the key problems of motivated reasoning, as misinformation and manipulative claims can be tackled, dominant voices dominate less, and less frequently heard voices are amplified. Being heard becomes less of a function of your volume or status, and more about your argument. The Russell effect is diminished. Granted, applying these filters fairly and supporting the capacity for quality deliberative issue analysis is not easy, but theoretically at this point hopefully the purpose and value is clear. The more this is done, the better we will get at it.

Deliberative naming and framing. The Kettering Foundation and the NIF process rely in particular on deliberative naming and framing processes.[149] It involves first naming issues in a way that a broad audience can see their concerns reflected, and can help form some broad common ground for the conversation. In many cases, the name may be a question such as "What can we do about youth violence?" People may have very different perspectives on youth violence, and may assume very different root causes, but can agree that something needs to be done. As Public Agenda's Will Friedman argued, framing for deliberation is very different than framing for persuasion. Advocates utilize frames to win people over to their point of view, whereas deliberative practitioners develop frames to spark genuine conversation.[150]

The next step after naming is framing. Providing a structure to spark deliberation on the topic. The NIF model tends to rely on constructing three approaches to the issue that allow participants to consider a broad range of possible responses as well as their inherent tradeoffs. As David Mathews wrote, "Unless people are aware of the tensions, they tend to ignore them….Presenting the tensions up front makes clear what is really at issue and required deliberating."[151] These framings are constructed within the wicked problem frame, meaning there is no "silver bullet" that will solve the problem. Each approach supports certain key values, while performing less well with others (i.e. increasing public safety but likely sacrificing privacy and harming some families). Each approach includes key facts and arguments from the deliberative issue analysis, so essentially present an "issue map" developed out of the noise produced by adversarial and expert processes.

The discussion guides or conversation starters developed out of the framing process are critical tools for avoiding or reducing detrimental motivated reasoning. Participants at deliberative events are not simply asked for their opinions, they are asked to respond to prepared material (which were often developed based on the public's expressed opinions through other venues). These discussion guides work on multiple levels. First and foremost, they give participants something to react to that at least attempts to fairly represent broad perspectives and includes concerns about quality, rather than relying

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of common ground among various voices and to discover options for those compromises necessary for co-existence. This critical approach places the scholar in a distinctive position. The scholar, as a skilled empath, is responsible for finding options that maximize multiple values and interests. The role of the empathic critic might be mistaken for the role of expert or of interest group representative, and it is neither. A good empath will discover good options, and will help others to see those as good option, but ultimately, the parties or the people must and will decide. The critic is at most a creative facilitator who draws deeply on all of her or his intellectual, emotional, and literary skills in order to get all parties to understand each other more genuinely and to negotiate in good faith rather than righteous self-interest" (p. 189).

[149] Kettering Foundation, 2011; Mathews, 2014, Ch. 8.

[150] Friedman, 2007.

[151] Mathews, 2014, p. 91.

on speakers or participants to provide the data (which, again, can be severely biased). So selective exposure is limited, memory is not relied on, and the WYSIATI effect avoided. By fairly including perspectives, most participants should see their perspective represented, therefore feel hear and respected. At the same time, the frame supports dissenting voices and the expression of minority views, critical to controlling bias and avoiding group think. Second, frames attempt to move the issue back upstream a bit, to where people can more broadly consider the problem, and be open about possibilities for treatments. By getting away from specific proposals, confirmation bias can be lessened. People don't feel as much of a need to clearly defend a specific position they have previously assumed. Third, the author of the framework, ideally, is a trusted, impartial source, limiting the source effects and providing a base of trust. Fourth, the framing is realistic about the problem, but avoids the extreme optimism, negativity, exaggerations, or logical fallacies of material framed by political actors. No simplistic good v. evil narratives to spark polarization. No wishful thinking. No magic bullets. No devil's figures to blame. Fifth, deliberative framings often include a broad range of potential actors, including government, non-profits, businesses, individuals, etc. It thus sparks creativity and supports possibilities, shifting the focus from what should "they" do to what can "we" do. Sixth, deliberative framings often try to move away from progressive-conservative framings and specific Democratic or Republican proposals. The evolutionary need to defend your chosen tribe is thereby complicated, and lessened. Basically, looking back at the suggestions built from research for debiasing and depolarizing (Table 2), quality deliberative issue framing potentially hits every single one.

Ground rules or community agreements. Most deliberative processes begin with either the explanation of ground rules to govern the conversations, or a process to co-create those ground rules. Basic features often include to focus on listening, to not dominate the conversation, and to treat others with respect. One of our favorites at the CPD is "It's ok to disagree, but do so with curiosity, not hostility." This rule works to set the stage were uncertainty and disagreement is ok, hopefully calming anxious brains just a bit. The social psychology research questioned the value of instructions like "be impartial," but I believe ground rules work differently. They are creating a particular group environment, not simply asking individuals to act differently on their own. And their behavior will be on display in the group, not on their own in a laboratory. Extreme dogmatism during a deliberative discussion is clearly out of place, and often self-regulated by other participants. Overall, the ground rules allow deliberative facilitators a chance to establish a more productive environment which ideally both encourages more prosocial behaviors from participants and opens up space for the facilitator to intervene as necessary in the conversation, working to avoid or lessen detrimental group behaviors.

Small, diverse group discussions. The hallmark of deliberative engagement is the small group discussion. Rather than 100 people in the room observing a panel speaking from up front or walking up to a microphone one by one, participants are split into separate groups, often, at least for the CPD, at round tables of 8 or so. Deliberative practitioners work hard to have diverse, representative audiences (the "convening" step in Figure 5), and then to spread that diversity across the tables (i.e. not letting people sit with their own choir). These small groups spark genuine interaction. People get to hear each other's stories from the original source as they are face to face. And when someone is justifying their position in front of a diverse group—rather than in front of their tribe—they inherently have to moderate

their position so that their arguments are reasonable to a broader range of perspectives (in other words, they have to be accountable to their positions, as suggested in Table 2). Said differently, people tend to speak in ways that they are more likely to be heard, relying on broader, more pro-social appeals. Of course, bringing diverse perspectives together can be dangerous, and the possibility of further polarization can happen. But several components of deliberative engagement (such as the framing, ground rules, the facilitator, etc.) work together to lessen that likelihood and increase the possibility of new connections and depolarization. Certainly one of the most gratifying experiences in my 10 years of running the CPD is seeing and hearing stories from my students about people that were sure those they disagreed with were unreasonable or corrupt, only to have those perceptions wiped out in a two hour session. False polarization is revealed and dissipated. Kettering research tends to show that people may not change their own minds all that much in a deliberative forum, but what does change is their perception of other people (i.e. false polarization is falsifiedx). This is one of the reasons I often use a meme from Jon Stewart which has him holding a sign that says, "I disagree with you, but I'm pretty sure you're not Hitler." The shift small diverse groups often spark basically involve the undoing of misconceptions of negative motives (or Schulz's third assumption of evil). The shift back to accepting disagreement but not assuming negative motives can be critical to democracy because it reopens the possibility of conversation.

Once of the most important aspects of small diverse groups is the possibility of creating new connections and relationships between people that don't often interact. Once again, deliberative practitioners likely have many examples of people from opposing sides coming together, having a genuine conversation perhaps for the first time, and transforming their view of the other. Even for very polarized issues, sustained dialogue processes have been shown to transform people. In particular, research by Stewart and Shamsi on Sustained Dialogue Processes highlight the power of stories: "Powerful personal stories often lead participants to reflect deeply on their own assumptions. With repeated exposure, profound transformations in assumptions, beliefs and behaviours can occur."[152] Stories, in other words, are tools that can cause great harm, as summarized earlier with our impulse for simplistic "good v. evil' narratives, or provide critical transformations. The format and process likely dictates what sorts of stories are shared, or perhaps more importantly, the extent to people listen to each other's stories. Small diverse groups with ample time is the best environment for the former.

Trained deliberative facilitators and notetakers. The presence of a skilled deliberative facilitator is another exceptionally significant deliberative component, one that brings everything together and can make necessary adjustments to the other components on the fly. They can be critical to helping people have the difficult conversations democracy requires. They essentially assist in improving the quality of individual and group thinking. Their task is not to contribute as an individual, but to elevate the quality of the conversation by helping people articulate their thoughts better, by sparking interaction and self-reflection, by challenging assumptions or unfair attacks, and by surfacing common values and interests as well as key tensions, etc. In a previous report,[153] I explored the ten key responsibilities of the deliberative facilitator (Table 4), but in a way they can be re-framed as basically ways to avoid or

[152] Stewart & Shamsi, 2015, p. 160.
[153] Carcasson, 2015.

minimize the impact of detrimental motivated reasoning and thereby allowing the positive features of human nature to rise up.

Deliberative events also often employ notetakers or scribes with each group. They can be critical to not only capturing insights from the discussion for future analysis, but also for helping the participants feel heard and appreciated. Knowing someone is taking notes, and in many cases those notes will be part of a future report, increases the sense of accountability for the discussion.

Table 4: Responsibilities of the Deliberative Facilitator

1. Remains impartial about the subject of the forum.
2. Allows the participants to own the process and topic as much as possible
3. Keeps the deliberation on track in terms of time and subject matter.
4. Manages the group well by maintaining a safe environment, encouraging everyone to join in the conversation, and ensuring no one dominates.
5. Models and encourages democratic attitudes and skills, particularly listening.
6. Does not take on an "expert" role with the subject matter, and seeks to support the appropriate role for quality data in the discussion.
7. Helps participants manage several deliberative tensions, seeking the ideal balance between, for example, idealism v. realism, complexity v. simplicity, depth v. breadth, etc.
8. Helps participants identify the values and underlining interests that can serve as common ground across their perspectives.
9. Helps participants develop mutual understanding and consider a broad range of views, particularly the drawbacks of their perspective and the benefits of opposing views.
10. Helps participants identify and work through key tensions within and between their perspectives, working toward public judgment.

Processes designed to spark interaction and learning. At the CPD, each event is designed specifically for the situation at hand. A broad number of variables are considered, such as the time available, the degree of conflict, the level of public understanding (or misunderstandings) about the issue, the stage in the policy cycle, the current and potential engagement of various stakeholders, etc. National Coalition for Dialogue and Deliberation materials lay out four "streams of engagement" to help organize process design elements depending on the goals of the process: exploration, conflict transformation, decision-making, or collaborative action.[154] Each calls for different ways of engaging. CPD processes are often planned to the minute, with each facilitator following a carefully outlined facilitation guide. Some processes are very structured and specific (so each table does the same thing, such as asking the same questions within the same time frame) and sometimes the processes are much more open and adjustable by facilitators and/or their table. Each process has a mix of discussion, brainstorming, reacting to questions or information, polling, writing, etc. What all this means is that deliberative process designers have a number of tools to utilize to design processes to best spark the sort of conversations and thinking needed for the situation at hand. And in many cases, the processes are essentially designed to avoid activating detrimental motivated reasoning and tap into the positive potentials, and I hope this report sparked even deeper consideration of designing processes with social psychology in mind.

[154] NCDD Resource Guide on Public Engagement, available at http://www.ncdd.org/files/NCDD2010_Resource_Guide.pdf.

Deliberative reporting. Deliberative events tend to produce high volumes of data in various forms (notes from table discussions, wireless clicker polling, worksheets and surveys, facilitator debriefs, etc.). Deliberative reporting (left side of figure 5) is therefore focused on making sense of this new data. It is also a very rich and unique form of data, because rather than being more of the typical collection of individual (and generally biased) opinions we receive from traditional public engagement, it represents more nuanced opinions gathered as people reacted to deliberatively framed material and interacted with diverse audiences. As Daniel Yankelovich's research on moving from opinion polling to public judgment and Jim Fishkin's research on deliberative polling shows,[155] people's viewpoints can change quite a bit when exposed to deliberative components. Deliberative practitioners would argue that these changes are caused by participants refining their positions, particularly correcting misconceptions of opposing views and complicating simplistic value assumptions (shifting from good v. evil to multiple competing values). The analysis and reporting of data from deliberative events therefore can provide key insights to both help design the next event to improve the conversation even more, or to facilitate a more robust and collaborative move to action.

Sparking collaborative action. The final component to consider is the move to action. Action is inherently a part of deliberative engagement, as deliberation basically means deciding together what to do. With deliberative practice, action is considered very broadly.[156] Connected to concepts like democratic or collaborative governance, deliberation seeks to spark collaborative action from a broad range of stakeholders, including public, private, and non-profit sources, as well as individuals.[157] Public policy changes may be involved, but only along with many other possibilities. As a result, "consensus" is rarely necessary or even particularly a target. The impact on decision-making is that deliberative action is much less of a zero-sum, winner take all game. People may come together, especially from across multiple positions, and decide to act, but without the pressure of consensus or an all-encompassing final zero-sum vote, participants are much more free to think out loud, listen to others, refine their opinions, and be creative. As research on deliberative processes have shown, they can work to (re)socialize people and create broader, more democratic identities that support more "community- and citizen-centred activities."[158] They can, in other words, recalibrate our tribes in important ways, and help us develop the trust and respect so critical to debiasing (see Table 2, #10).

Summary of Deliberative Components – Igniting the Positives. Initially, as I started writing this section, I anticipated including a chart that had the ten insights from Table 2 of what works to reduce detrimental motivated reasoning, and list the components of deliberative practice that works to fulfill those suggestions. I abandoned it because in most of the cases, most of the components seemed to help address each of the suggestions. Similarly, I thought about matching up specific cognitive deficiencies, like confirmation bias or illusory correlation, with components, but once again the one to one relationship didn't seem right. Bottom line, it is the combination of many of these components that work together to either avoid or lessen the impacts of many forms of motivated reasoning. And in many cases,

[155] Yankelovich, 1991, and Fishkin, 2009.
[156] Table 1 in McCoy & Scully (2002) includes a list of kinds of change relevant to deliberative engagement.
[157] Carcasson & Sprain, 2015.
[158] Knobloch & Gastil, 2015, p. 196.

I would argue that it is more about not triggering these human quirks rather than lessening their impacts. People are not made to feel defensive, so they don't feel the need to fight back. People are asked to weigh in on broader issues that don't have specific policy responses to them, so they are more open to explore and think out loud. They are not given the comfort of a like-minded choir to spark simplistic thinking, but are also provided with ground rules, a smaller group, and a facilitator to help them deal with the difficulty of wicked problems, groan zones, and diverse groups. In other words, in the spirit of Heath and Heath's call to "shape the path" and Thaler and Sunstein support of "nudges,"[159] we do not have to retrain our brains and wait for evolution to take its course, it may just take designing processes that avoid pushing the bad buttons. Process matters.

An essential added bonus to not activating detrimental motivated reasoning is that we are much more likely to see the rather natural activation of the positive potentials. This argument is also connected with Charles Lindblom's argument in *Inquiry and Change*. The book is an appeal to rethink our processes of social inquiry on tough issues, particularly in terms of the role of social science. Lindblom was principally concerned with improving our conversations by removing what the impairments:

> Improving the quality of inquiry by citizens and functionaries does not rest on improbable or improbably successful positive efforts to promote better probing….It rests on what might be called negative reforms—reducing impairment, getting the monkey of impairment off the citizen's back. Societies do not need to urge citizens to probe; they need only to permit them to do so. They need only to reduce the disincentives to probe, the diversions and obfuscations that muddle or dampen probing, the misinformation and indoctrinations that misdirect it, and the intimidations and coercions that block it.[160]

Lindblom assumed, rightly I believe, that if we simply lower the impairments, the quality of thinking will inherently rise. I imagine all deliberative practitioners have plenty of examples of participants rising up and exhibiting quality reasoning, empathy, pragmatism, creativity, and a drive for mastery. And we have seen people clearly exhibit a satisfaction and sense of happiness from the hard work a deliberative process expected and received from them. Addressing wicked problems clearly needs all the attributes to be exhibited often by many, and the creativity made possible by multiple small, diverse groups thinking well together in genuine ways is likely our best hope. Thankfully, research—as well as my own personal 10 year experience—has shown that deliberative engagement actually works as a self-reinforcing experience that inherently increases our deliberative faith.[161] In other words, the more we do it, the easier it will be.

CONCLUSION: A CALL FOR REDISCOVERING WISDOM

The goal of this project was to summarize the quickly expanding research on social psychology in order to derive insights about human nature that can help deliberative practitioners and others passionate about improving our communities do their work better. This project was inspired by the

[159] Heath & Heath, 2010, and Thaler & Sunstein, 2009.
[160] Lindblom, 1999, p. 230.
[161] Burkhalter, Gastil and Kelshaw, 2002; Knobloch & Gastil, 2015.

enduring question of whether humans have the capacity to govern themselves and how we can increase that capacity. My answer, as you can imagine, is: process matters. Right now, unfortunately, the processes we rely on are not only insufficient, they are counterproductive. Dangerously counterproductive. They seem to bring out the worst in human nature while rarely tapping into the best. Tackling wicked problems well is exceedingly difficult in the best of situations, and we rely on processes that produce extraordinarily toxic situations more and more, particularly at the national level (i.e. the presidential campaign of 2016). The good news, and I promised to end with the good news, is that we know how to do better, and more and more of us are working to transform our processes, especially at the local level.

In this conclusion, I hope to accomplish three things. First, I summarize the insights derived from my analysis, with an eye toward future research possibilities. Second, I make the case for rediscovering wisdom and elevating its pursuit as the overarching rationale for democratic living and the many corresponding institutions relevant therein. We don't seem to talk about wisdom all that much anymore, even on college campuses, but I believe that is a mistake. Lastly, I briefly explore the implications of this call to deliberative practitioners, our educational systems, our research universities, and the study and performance of leadership.

Process Matters

The ongoing experience of the presidential campaign of 2016 lends more and more evidence to the argument that perhaps humans cannot govern themselves. Part 1 of this project provides even more credence to those concerns. Some of the sobering insights from Part 1 include:

- The brain is particularly wired to defend current positions and utilizes many tools and tricks to protect itself from opposing perspectives. In many ways, the brain is a very reluctant learner, which is exceedingly problematic in a world that requires constant shared learning.
- The threat of a post-fact society is real. Numerous theories argued and studies showed that evidence doesn't hold up well against current beliefs and passions, regardless of its quality or the sophistication of the recipient. Particularly in a polarized environment, facts are becoming more and more irrelevant. This is exceedingly dangerous to democracy and warrants much more focused analysis. Bottom line, the traditional "information deficit model" that assumed that we merely had to inform the public and better decisions would follow has been refuted. The question now is, what's next?
- While the information on detrimental motivated reasoning is concerning, the negative interaction effects caused by bad processes once we have our blinders on are considerably worse. Two key insights in particular call for further study. The first involves what I called the Russell effect (Figure 1), that argues that not only are the loudest voices often the most biased and simplistic, but that individuals that see more complexity—i.e. see the world through the lens of wicked problems—are often silent. Changing this dynamic needs to be a key goal of education and process design. The second concerns the vicious cycle of polarization, or what Conner calls the

advocacy trap.[162] It does seem like polarization begets more polarization, with the internet, political parties, and the media all happily greasing the wheels.

Not everything in Part 1 was disheartening. Some of the insights were a mixed message, particularly when combined with information from Part 2:

- The polarization we are currently experiencing is likely greatly exaggerated and rather manufactured. As Figure 4 on page 24 highlights, I contend that false polarization is a function of: [individually developed subconscious biases] X [negative interaction effects] X [the Russell effect] X [purposeful partisan manipulation and the vicious cycle of backlash] X [media focus on conflict]. Even though it is exaggerated, however, it has real consequences and will only get worse and worse if untreated.
- We are groupish, not individualistic. And while our groupishness can fuel polarization and bias, it can also stimulate collaboration, passion, and empathy. Which form of groupishness dominates depends somewhat on process.
- We are naturally storytellers, and stories can have a powerful impact on us. And while they can also fuel polarization and bias, they at times can lead to powerful transformations that bring people together. The quality of our stories and how we share them with each other is a critical variable to the viability of democracy. We need better, more complex stories and fewer simple ones, and we need to listen to each other's stories, not just recite them to ourselves.

In Part 2, I shifted gears to focus on the good news. What are the positive aspects of human nature that provide potential to help our communities function well, particularly as they face wicked problems. I outlined four arguments:

- The negative impulses are powerful, but not overwhelming. Process matters. The social psychology research provides many suggestions for reducing the impacts of detrimental reasoning (Table 2 on page 27).
- Humans are naturally social and empathetic. Tackling wicked problems requires interaction, and the good news is that we are naturally interactive. The question is how can we tap into that impulse in more productive ways.
- Humans are naturally pragmatic, innovative, and creative. Also critically important to tackling wicked problems and the shared learning that must occur. And once again, the question is how do we better tap into these wells of ingenuity?
- Humans naturally strive for mastery and excellence. I'll return to this soon, as I believe this may hold the key to supporting the argument for making the pursuit of wisdom our driving force.

Part 3 can unfortunately be summarized rather quickly. Most of our current processes tied to political talk and community decision making are, as I said at the beginning of this conclusion, dangerously counterproductive. I'm not sure if this is because we haven't adapted to changing realities (like the internet), if they are purposefully designed this way by forces that benefit from them, or if Americans just don't get process[163]—likely some of all three and more—but clearly it is past time to rethink many

[162] Discussed in Hoggan, 2016, pp. 17-18.

[163] One of my favorite early memories from my work with the CPD was when a Dutch man approached me after a process, shook my hand, and told me I was one of the few Americans he has met that seemed to understand process.

of the mechanisms of our democracy in light of our new knowledge of human nature and the game-changing nature of the internet. The analysis revealed that most of the processes supported or sparked adversarial tactics, and primarily allowed for the expression of individual perspectives. Both fuel detrimental motivated reasoning and polarization.

Part 4 then provided a review of the key components of deliberative practice (Table 3). Clearly, unlike the review of the dominant conventional or thin means of engagement summarized in Part 3, many of the components provide strong responses to the research in Parts 1 and 2. Viewed through the lens of human nature, deliberative engagement earns very high marks. When utilized well, the various components work together to:

- Primarily avoid triggering detrimental motivated reasoning.
- Undo the past effects of detrimental motivated reasoning and false polarization.
- Support a virtuous, self-reinforcing cycle of positive interaction effects, rather than a vicious cycle of polarization.
- Provide an environment to support shared learning.
- Provide an avenue to tap into the key positive aspects of human nature such as creativity, empathy, and mastery.
- Build the trust and respect so critical to managing motivated reasoning and tackling wicked problems

In addition, a critical but often underappreciated value of deliberative processes is helping us make sense of the raw data produced by partisans and scientists. The ability for deliberative processes to bring out the best from adversarial and expert processes, and mitigate the worst, must be highlighted more. Deliberative engagement do not *replace* adversarial and expert models, they help transform them. When all these insights are considered together as a whole, I return again to the sober reality that process matters. Do humans have the potential for self-rule? Certainly, if we give them a chance. Let's work to give them that chance.

The Pursuit of Wisdom as Overarching Rationale for Democratic Living

As I pondered the implications of my deep dive into social psychology over the last year, I kept on returning to the importance of wisdom and judgment, and their odd absence from public or academic discussion in my opinion. Wisdom and judgment were key terms in my graduate school days as I studied classical rhetoric and engaged works by Plato, Aristotle, Isocrates, Cicero, and Quintilian as they struggled with the inherent tensions of burgeoning democracies and republics. The idea of *phronesis*, or practical wisdom¸ was a centerpiece of my graduate education, and I eagerly read modern scholars like Eugene Garver, Robert Beiner, and Alasdair MacIntyre.[164] After I earned my Ph.D. and shifted my work to deliberative engagement, however, I haven't run across the terms very often (other than some discussion of the idea of the "wisdom of crowds"). This report has inspired me to return to my rhetorical roots, and make the call for the usefulness of the terms. Perhaps they are perceived to be too academic or pretentious, but I'll argue those perceptions need to be proven wrong.

[164] Garver, 2005; Beiner, 1983; MacIntyre, 1984.

I've recently discovered there is a growing literature on wisdom beyond my experience with classical rhetoric,[165] so I know what my next deep dive will be. For the purposes of this conclusion, I'll rely on my past work and make some more basic connections. Most importantly, some key aspects of wisdom and judgment fit very well with the realities of wicked problems and deliberative engagement. Robert Beiner, for example, situates judgment as a critical ideal middle ground between a nihilistic and individualist openmindedness and a simplistic and dogmatic rules-based closemindedness. Real life requires us to muddle through the middle ground here, and wisdom gives us a way to think about that. In other words, wisdom accepts the inevitability of uncertainty, and the need for an ongoing process of interaction and conversation centered on shared learning. Perhaps most relevant to this report, wisdom can be easily brought to service in the quest to avoid detrimental motivated reasoning and tapping into the positive potentials of human nature.

In the context of motivated reasoning, I was intrigued how researchers primarily made a split between our brain's partisan motivations (protecting current views and worldviews) and accuracy motivations. Connecting these motivations to my typology of adversarial, expert, and deliberative processes, it is clear that adversarial processes are associated with the partisan brain, and the motivation to defend current views and beliefs of certainty and infallibility. The problems here are clear. Expert viewpoints are connected to the objective brain, and the motivation to be accurate. The problem here is that the quest for certainty remains, and when the objective brain dominates, it is too narrow and empirical, unable to handle the complexities of wicked problems. As I argued earlier, scientists seem to have been able to train themselves so that their accuracy motivation was stronger than their partisan motivations, but that still seems necessary but ultimately insufficient for our needs. Accuracy is a sufficient motivation for science, not so much for democracy and wicked problems. This seems particularly true once we realize the frailty of facts in the face of motivated reasoning.

So my argument is that we need to develop a third option, tied to the motivation to be wise. Deliberative viewpoints fit well with the wise brain. And while the wise brain is perhaps not as natural as the others, it can represent an ideal to inspire us, and does have some inherent connections with the positive aspects of human nature explored in Part 2. The human fascination with mastery is particularly promising. What if more and more people decide that pursuing wisdom was their purpose? Particularly if helping their diverse communities tackle wicked problems was a key part of that? What if more and more of us derive happiness from doing the hard work of democracy well? What if being wise—accepting uncertainty and complexity, working through tough choices, listening to those we disagree with and wanting to learn more and more—were the dominant signs of respect and admiration? What if our school systems were organized around wisdom? Our research universities? What if our public processes were? And as our brains continue to evolve, habits geared toward the pursuit of wisdom can certainly become more established.

I also believe explicitly elevating the "wise citizen" as the ideal image of citizenship in the 21st century has considerable merit. Four quick points here. First of all, we need to replace the goal of the "informed" citizen. It clearly isn't sufficient based on the impacts of selective exposure and

[165] See Sternberg & Jordan (2005) and Sternberg (1990) for useful anthologies.

confirmation bias. More informed too often simply means more misinformed today. I feel the wise citizen is a suitable replacement. Second, the social psychology literature utilized a number of terms as analogies for how our brains prefer to work. In many cases, the "partisan lawyer" seems to overwhelm the "objective scientist." As I argued above, however, partisan and accuracy goals are too limited. We need wise citizens to drive good process and help us make sense of the raw data produced by all the partisan lawyers and objective scientists. A third argument to support the case for the wise citizen connects to the work Jennifer Mercieca. She is concerned with the current dominance of the "partisan" identity which she actually dates back to 1832 and William Marcy's creation of the popular aphorism "to the victor belongs the spoils of the enemy."[166] The problem with the partisan being the dominant perspective, Mercieca argues, is that it supports a "winner take all" perspective that leads to seeing opposing sides as enemies, which has numerous detrimental impacts (primarily, I would argue, by activating negative motivated reasoning and polarization). She argues for the need to shift away from the partisan as the primary image, and back to the citizen. I believe that wisdom is critical to such an image of the citizen.

Lastly, in the literature on engagement and public participation, the terms used to represent the public are also often too narrow to adequately represent our needs. Citizens are primarily seen as customers, taxpayers, voters, or, if you are cynical, political pawns or objects of manipulation. Deliberative scholars, alternatively, call on citizens to be producers, co-creators, and collaborative problem solvers.[167] Based on my experiences with my student facilitators, particularly when talking to them after they graduate, I would argue that facilitation skills are critical to producing, co-creating, and solving problems collaboratively. All citizens need to be able to shift gears and serve as facilitators when necessary. To focus on the process, not just their individual contribution. When I speak to graduating seniors in my department, I emphasize that as communication studies graduates they should not attempt to sell themselves based on being good communicators, but rather by having the motivation and the skills to elevate the communication around them. The wise citizen would have similar skills. These are high expectations, yes, but necessary for 21st century democracy to function. Overall, I believe the ideal of the wise citizen can best encapsulate the critical deliberative aspects of citizenship.

Implications

To close this essay, I briefly consider the implications of my analysis and the ideal of the wise citizen to our key institutions, again with an eye toward potential future research. For deliberative practitioners, I hope the review of key terms and impacts from the social psychology literature helps them improve their practices, sparking even more creativity concerning how to avoid the bad and bring out the good in human nature. Primarily, I imagine, the research was likely more confirming of assumptions they already had rather than extensive new knowledge. Nonetheless, I know these insights will lead to tweaks in how we at the CPD explain our practice, develop discussion guides, train our facilitators, and design processes moving forward. And it will certainly motivate us even more to attract broad audiences and insure ample time for them to interact.

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[166] Mercieca, 2016.

[167] As noted earlier, Leah Sprain and I (2010) focused on the citizen as collaborative problem solver. David Mathews (2015) argues for the citizen as producer, not consumer. Harry Boyte (2012) focuses on the role of citizens as "co-creators."

While I focused on the process side of debiasing in this project, the educational side certainly warrants further examination. The role of schools and universities are critical to the pursuit of the wise citizen. I only offer a few thoughts here. The degree to which teachers or students are aware of the prevalence of motivated reasoning is unclear. I had heard of a few of the terms over the years, but am not sure how mainstream they are. Many schools teach critical thinking, and perhaps warn of certain fallacies, but I doubt they are emphasized enough. Critical thinking also seems to focus too much on the individual level. As I've argued elsewhere, our schools and universities seem much more oriented to teaching the skills of expertise or advocacy.[168] If the ideal of the wise citizen takes root, this could certainly change. Embracing uncertainty can be difficult for schools, but surely John Dewey's philosophy of education can be an invaluable resource. As the internet reduces the need for simple knowledge acquisition, schools should have more time to teach process. As our students are inundated with noise from all directions, being able to process that data and learn how to make better decisions under conditions of uncertainty will become paramount. Facilitation, conflict management, listening, participatory decision-making, and collaborative problem solving skills all need to become required subjects throughout years of schooling. As an added bonus, these skills and habits are just as valuable in the marketplace as they are in the public square.

The implications to expertise and research are primarily tied to reacting to the post-fact society and the deterioration of the ideal of the informed citizen. Universities can no longer just focus on the production of new knowledge or the deconstruction of ideologies. Simply adding more knowledge into a polarized environment is unproductive, and deconstruction without reconstruction is equally concerning. The alternative has been offered by scholars such as Nicholas Maxwell in his *From Knowledge to Wisdom,* and connects to Plieke's notion of experts as "honest brokers of information."[169] It also clearly connects with John Dewey's philosophy, particularly his argument about the need to abandon science's quest for certainty. As summarized by Alison Kadlec:

> Dewey never claimed that he was offering us the key to solving all our problems, nor did he suggest that all problems are solvable. Rather, in seeking to rehabilitate critical reflection as a matter of lived experience, Dewey made nothing more than the rather modest claim that, in a dynamic and unstable world, such an approach is all we have to go on and so we must make the most of it. Rather than attempting to overcome uncertainty, Dewey suggests that our best shot is producing and sustaining intelligent conduct begins with the abandonment of our demands for certainty.[170]

The goal of 21st century universities must be to provide capacity for the interdisciplinary pursuit of wisdom, particularly by helping to elevate the quality of engagement and communication. One of the primary tensions for wise communities to struggle with is the appropriate role of experts and expertise. Right now, the conversations are too disconnected. Some fear a technocratic society dominated by experts, while others lament the post-fact society and the anti-intellectualism it brings. Few seem to be

[168] Carcasson, 2013a.
[169] Maxwell, 2007; Pielke, 2007.
[170] Kadlec, 2007, p. 24.

working through the middle ground. In the meantime, our public discourse is deteriorating quickly. Our communities are starving for the help, and universities are well suited to provide it.[171]

Lastly, I believe this report holds particular relevance for civic leaders and the study of leadership. Ideally, our leaders would abandon their partisanship and take up the mantle of wise leadership. Unfortunately, I doubt that outcome is possible at the national level. The partisanship of our political parties is simply far too engrained. I was in grad school when Bill Clinton attempted to take on the role of a facilitative leader and host a national conversation on race. It failed because he was the leader of a national party, and could not avoid the politicization of the issue. Barack Obama entered the presidency talking about process and participation, but soon partisanship seemed to take over. Indeed, I would argue that many of the suggestions explored in this conclusion could be highly relevant at the local level, less useful at the state level, and sadly rather inconsequential at the national level. The forces for adversarial politics are simply too strong and the traditions too engrained.

Our leaders must work to improve our political environment, not take advantage of it.

At the local level, however, possibilities abound. Cities are becoming more and more innovative and collaborative, primarily because they can't just play a political game, they have to address real problems. The partisan narrative is not as dominant, and the potential for the dominant tribe to be the city as a whole rather than divisions within the city is real. Following Chrislip and O'Malley's work on collaborative leadership and Peter Levine's argument in *We Are the Ones We've Been Waiting For*, however, I do believe that a broad range of civic leaders—just not necessarily political leaders—will be the key players in pursuit of the wise communities. As David Mathews argued, we need leaderful communities.[172] And one of the key tasks of these new leaders will be elevating the quality of communication in their communities so we can bring out the best in human nature and avoid the worst. Our leaders must work to improve our political environment, not take advantage of it. I do believe as more and more cities become deliberative and wise, more and more people will be exposed to a genuine alternative, and they will start demanding it at higher and higher levels. As that happens, the Russell effect could be overturned. Being loud, brash, and simplistic will be shunned and ridiculed. And those that are thoughtful, at ease with uncertainty, and deliberate—i.e. wise—will be more and more comfortable speaking up. And most importantly, more and more citizens will make the critical realization that process matters.

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[171] For the last five years, I have been a part of the Kettering Foundations Center for Public Life program, which works to start centers like the CPD at other universities.

[172] Chrislip & O'Malley, 2013; Levine, 2014; David Mathews, 2016.

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