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## Motivated Reasoning, Political Information, and Information Literacy Education

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## **Motivated Reasoning, Political Information, and Information Literacy Education**

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*Research in psychology and political science has identified motivated reasoning as a set of biases that inhibit one’s ability to process political information objectively. This research has important implications for the information literacy movement’s aims of fostering lifelong learning and informed citizenship. This essay argues that information literacy education should broaden its scope to include more than just knowledge of information and its sources; it should also include knowledge of how people interact with information, particularly the ways that motivated reasoning can influence citizens’ interactions with political information.*

The Pew Research Center’s recent report “Political Polarization and Media Habits” depicts an American public that is gradually edging toward ideological extremes, a shift that is driven at least in part by the public’s habits of consuming political information. The study finds that “those with the most consistent ideological views on the left and right have information streams that are distinct from those with more mixed political views – and very distinct from each other.”<sup>1</sup> By selecting sources of political news that tend to confirm their existing positions, consumers of the media reinforce both their initial convictions on political matters and their distrust of those who view the issues differently. According to a companion Pew study, the result is an increase in partisan antipathy and a diminished capacity to seek compromise.<sup>2</sup>

The problem above is rooted in poorly grounded information choices. As such, it is the sort of problem that information literacy education has the potential to address, but only if information literacy

scholars and practitioners turn their attention to the factors that motivate such choices. An area of research that promises to shed light on such questions is the work being done in psychology, political science, and related fields on *motivated reasoning*, a frequently unnoticed tendency (a) to avoid or dismiss new information that challenges existing beliefs and (b) to readily accept new information that appears to conform with prior beliefs.<sup>3</sup> Motivated reasoning has disconcerting consequences for how people use information to learn, particularly in their lives as citizens.

To provide a clearer sense of how research into motivated reasoning should inform information literacy theory and practice, I will consider the implications of the following theses:

1. An essential outcome of information literacy education should be enhancing students' ability to learn from political information in their lives as citizens.
2. Motivated reasoning is a prevalent obstacle to the objective processing of political information.
3. Information literacy education should broaden its scope to include more than just knowledge of information and its sources; it should also include knowledge of how people *interact* with information, particularly the ways that motivated reasoning can influence citizens' interactions with political information.

My goal for this paper is to provide the conceptual groundwork to warrant further investigation into the viability of making the motivated processing of political information a priority for information literacy education.

**Thesis #1: Information literacy education should prepare students to use political information effectively in their lives as citizens.**

Jacobs and Berg refer to several official documents that connect librarianship and/or information literacy education with important citizenship outcomes.<sup>4</sup> These documents include:

- The American Library Association's *Core Values of Librarianship*.<sup>5</sup>
- The International Federation of Library Associations and Institutions' *Beacons of the Information Society: The Alexandria Proclamation on Information Literacy and Lifelong Learning*.<sup>6</sup>
- The Association of College and Research Libraries' *Information Literacy Competency Standards for Higher Education*.<sup>7</sup>
- United States President Barack Obama's proclamation that October 2009 should be declared "National Information Literacy Month."<sup>8</sup>

The common theme running through each of these documents is that the ability to locate and evaluate information is critical to an individual's ability to make informed decisions. Information literacy is therefore essential to an individual's success in achieving personal goals, excelling in one's career, and participating as an informed citizen in the political processes of one's community and nation. In order to help individuals realize these important achievements, libraries and other educational institutions should make information literacy a priority.

Jacobs and Berg point out that, even though the connection between information literacy and democracy is made clear in these and other important documents pertaining to the mission of libraries, the day-to-day activities of information literacy educators in libraries tend to focus narrowly on tool-related skills or on preparing students to succeed in upcoming research assignments. There may be some transfer from skill acquisition in an academic context to the effective use of information in a citizenship context, but, all too frequently, the connections are not made explicit, either for the students in the classroom or for the librarians teaching in an information literacy program.<sup>9</sup> Hoping that students will be able to transfer academic information skills to a citizenship context on their own is not enough, as research suggests that students have difficulty applying critical thinking skills acquired in one context to problems that arise in another.<sup>10</sup> Insofar as significant learning from political information requires the ability to select and evaluate sources in a deliberate, even-handed manner, the transferability issue is a serious one indeed.

Addressing citizenship outcomes in library instruction involves significant opportunities for academic libraries. We operate in an institutional context marked by a persistent demand to show how higher education makes a demonstrable difference in students' lives. To adapt to these challenges, academic libraries must integrate themselves more completely into the teaching mission of the university, to shift from the traditional "library as service" model to a "library as classroom" model.<sup>11</sup> A consequence of this shift is that, like classroom faculty, the library and its personnel are expected to help students transform themselves into something better. Librarians' expert perspective on the creation, dissemination, and consumption of information provides a basis for making a distinctive contribution to students' development as lifelong learners, particularly in their lives as citizens, as recorded information is the raw material for much of a citizen's independent learning.

But what would it mean in practical terms for information literacy education to develop students' abilities to use information as citizens? Several authors in the LIS literature have called for the transformation of skills-based information literacy as articulated in the ACRL *Standards* into a more thorough-going interrogation of one's information landscape, an approach known as *critical information literacy*.<sup>12</sup> By exploring the power relations inherent in information processes (Whose perspective is represented in the library's information resources? Whose voice is absent?), critical information literacy promises to awaken students to inequalities in the structures that create and distribute information. It also alerts students to the role they play as active participants in communities that can either perpetuate or address these inequalities. By examining information as a product of people's contingent choices, rather than an impartial recording of unchanging truths, the critically information literate student develops an outlook toward information characterized by a robust sense of agency and a heightened concern for justice. In other words, critical information literacy develops students' sophistication with respect to information while simultaneously cultivating personal qualities conducive to vigorous participation in democratic processes.

While I think that critical information literacy holds great promise for awakening students to their potential as citizens, I wish to explore a complementary direction that addresses a different sort of challenge to the ideal of informed citizenship. As I understand it, critical information literacy is a form of information education that addresses students' feelings of apathy and helplessness with respect to their political situation. An additional obstacle for information literacy educators to consider is motivated reasoning, the tendency for prior beliefs to adversely influence one's judgment when seeking or evaluating information.

In her essay "Information  $\leftrightarrow$  democracy: An examination of underlying assumptions," Dervin has articulated this challenge in another way. To set the context of the problem, she identifies a cultural narrative on the relationship between information and democracy that has achieved, in her terms, a "near-mythic status."<sup>13</sup> She distills five premises from this narrative, two of which bear repeating here:

- "That access to 'good information' is critical for the working of a 'good democracy.'"
- "That the value of 'good information' is such that any rational person will seek it out and that, therefore, availability [of information] equals accessibility."<sup>14</sup>

Dervin goes on to lay out several challenges to these premises based on theoretical perspectives that have exerted considerable influence on 20<sup>th</sup> century thought. The most notable challenge for the purposes of this discussion is the notion of the "incomplete person." Dervin issues a call to develop information systems that acknowledge "that we are not always centered, always conscious, always ordered; that we are sometimes unconscious, sometimes decentered, sometimes disordered."<sup>15</sup> In other words, even when "good information" is readily available, potential users of information will not always employ the information in the rational manner assumed by the predominant "information  $\leftrightarrow$  democracy" narrative.

This paper explores motivated reasoning as one of the ways that users can deviate from the ideal of the rational user, an ideal presumed by influential but over-simplified conceptions of how information systems support democratic decision making. If information literacy education is to make a positive contribution to the workings of a "good democracy," it must take into account the non-cognitive factors

that influence the ways that citizens tend to process political information. Is it safe to assume that we give each bit of information a “fair hearing,” always adjusting our beliefs to conform to compelling evidence? Or do our backgrounds and preferences inhibit our ability to be objective when evaluating information that challenges our beliefs? Recent studies of how people process political information suggest that there is significant potential for prior beliefs to interfere with the way users search for and evaluate information. I turn to these studies now.

**Thesis #2: Motivated reasoning is a prevalent obstacle to the objective processing of political information.**

An extensive review by Molden and Higgins shows that motivated reasoning can take a variety of forms and skew information processing in a breadth of contexts. These authors establish broad categories to classify the work of other researchers: those studies of information processing that emphasize motivation to arrive at a certain type of *outcome* and those that focus on motivation to employ particular types of *strategies*.<sup>16</sup> Molden and Higgins further break down outcome-oriented motivation to distinguish between *directional* and *nondirectional* processing. Directional, outcome-oriented motivation, the class of motivation explored in this paper, tends to issue in processing that supports (a) previously existing beliefs, (b) a positive image of oneself, or (c) a positive image of one’s close associates. Such processing also tends to reject new information that calls one’s prior beliefs into question or reflects negatively on oneself or one’s associates.<sup>17</sup>

Note that motivated reasoning can influence information processing on a variety of topics, not just politics. For example, Liberman and Chaiken’s study of coffee drinkers found a strong tendency to question the validity of scientific studies that connected heavy caffeine use with serious risks to one’s long-term health.<sup>18</sup> But this paper will concentrate on studies of the motivated processing of political information, as this form of motivated reasoning has a direct impact on the use of information for effective citizenship. In particular, I will consider motivated reasoning’s impact on skills perennially addressed in library instruction: evaluation of information sources and information search.

### *Motivated reasoning and evaluation of information*

In general, the literature on motivated processing of political information indicates that our prior beliefs exert a considerable influence over how we evaluate new information about issues and candidates. Instead of impartially modifying our previously held beliefs in the face of contradictory evidence, we tend to screen out information that challenges our existing opinions.

A study by Taber, Cann, and Kucsova addresses the key aspects of how prior attitudes influence the processing of new information on policy issues. Their experiments explicitly call on participants to evaluate the *strength of arguments* on various issues – not the *strength of their agreement* with the point of view the argument defends.<sup>19</sup> Even though the researchers' protocol clearly asked participants to share impartial evaluations of argument strength, comparison of the participants' ratings with their prior attitudes shows two important trends in the participants' processing of policy-related arguments:

- An *attitude congruence bias*, or a tendency to give a strong rating to arguments that support participants' prior attitudes. The stronger the prior belief, the greater the tendency to give supporting arguments a good rating.<sup>20</sup>
- A *disconfirmation bias*, or a tendency to devote more time and thought to discounting and generating criticisms of arguments that do not support one's prior beliefs. Participants with strong prior attitudes took an average of 30% more time to rate arguments that were inconsistent with their prior beliefs than they did with consistent arguments, a discrepancy that the researchers interpret as a sign of "deeper processing" of inconsistent arguments. Participants were also asked to provide brief comments after each rating. When commenting on arguments inconsistent with prior attitudes, those with strong prior beliefs tended to include more comments expressing their disagreement or providing disconfirming evidence in the form of counterarguments.<sup>21</sup>

It is important to note that such biases do not apply only to policy issues. A study by Redlawsk exposed test subjects to a simulated electoral campaign in order to examine how opinions of candidates formed early in the simulation affected subjects' processing of campaign information in later stages of the experiment. Subjects exhibited similar trends in the processing of information regarding political

candidates, i.e., information inconsistent with test subjects' existing preferences (a) elicits greater processing time and (b) tends not to be taken into account when test subjects cast their vote for the candidate of their choice.<sup>22</sup> To express the findings in the terms introduced above, the attitude congruence bias and the disconfirmation bias influenced how test subjects evaluated and ultimately accepted or rejected information about political candidates. Interestingly, Redlawsk found these trends to be mitigated significantly among test subjects who were told that they would be asked to remember details about the simulated campaign and to justify their choice of candidate to the researcher at the end of the simulation. That is, additional motivation for test subjects to process information *accurately* made the impact of early preferences less prominent, though the influence did not disappear entirely.<sup>23</sup>

Perhaps the most striking illustration of the influence of the disconfirmation bias can be found in Nyhan and Reifler's 2010 study of the processing of corrective information in media reports on political issues. This series of experiments revealed a strong tendency among participants to disregard corrective information that challenged common beliefs associated with their ideological preferences. In this study, participants answered a series of baseline factual and opinion questions to determine the subject's level of ideological commitment and political sophistication. Then they read mock newspaper accounts in which a public figure makes a statement that affirms a widely held misperception. Articles for the test group included a correction based on authoritative evidence provided by the authors or editors of the report; articles for the control group did not include this information.<sup>24</sup>

For example, one of Nyhan and Reifler's experiments called for participants to read an article in which President Bush asserts the necessity of the 2003 military intervention in Iraq owing to the possibility that terrorist networks could acquire weapons of mass destruction from Saddam Hussein. The test group's article also contained a corrective passage that refers to the CIA's Duelfer report, which concluded that there were no weapons of mass destruction in Iraq at the time of the intervention. The control group's article did not include a reference to the Duelfer Report.<sup>25</sup> In follow-up questions, participants in the ideological sub-group likely to hold the misperception about weapons of mass destruction in Iraq showed a marked tendency to disregard the corrective information and maintain

support for the misperception. To continue with the example above, politically liberal test subjects tended to adjust their beliefs about the presence of weapons of mass destruction in Iraq to conform with the evidence in the correction, while conservative subjects tended to disregard the corrective information and maintain their belief that WMDs in Iraq posed a genuine threat.<sup>26</sup>

Moreover, the data revealed that conservative respondents frequently became *more convinced* of the presence of WMDs after having encountered corrective information that would appear to disprove the presence of WMDs. Rather than tempering their convictions in the face of countervailing evidence, several test subjects became so defensive about the misperception that they actually came away *more convinced* of its truth than they had been prior to encountering the disconfirming corrective information. The researchers refer to this trend as the “backfire effect,” and they recommend further testing to determine whether such reactions are more prevalent among conservatives than among liberals.<sup>27</sup>

The examples above serve as empirically documented illustrations of the “decentered” nature of the “incomplete person” Dervin refers to in her critique of the prevailing narrative on information and democracy. The attitude congruence bias and the disconfirmation bias indicated in these studies suggest that the ready availability of authoritative political information is no guarantee of the clear-headed appraisal and use of information implied in the notion of “informed democracy.”<sup>28</sup>

### *Information Seeking and Confirmation Bias*

In addition to influencing the manner in which we process and evaluate the information we encounter, our prior beliefs may also affect the choices we make in seeking information. In a 2006 study of how undergraduates process the arguments of interest groups on the issues of gun control and affirmative action, Taber and Lodge found that the majority of participants tended to seek out information from groups whose public positions were most congruent with their own attitudes, a tendency that the researchers refer to as a *confirmation bias*. For example, on the issue of gun control, political conservatives tended to seek out information from the NRA and the Republican party and to avoid information from Citizens Against Handguns.<sup>29</sup> Participants tended to follow this pattern of sticking to ideologically sympathetic sources despite the experimenters’ attempts to encourage test subjects to take

an evenhanded approach to their search so that they could better explain the issue to other students.

Interestingly, the tendency to refer to sympathetic sources when seeking information was more pronounced among participants with relatively high levels of political sophistication.<sup>30</sup>

Valdis Krebs' 2004 study of book-buying patterns on the websites of Amazon.com and Barnes and Noble shows that Americans who purchase political books with a significant ideological bent show a strong tendency to buy other books on the same side of the ideological spectrum, only rarely crossing partisan lines.<sup>31</sup> Lilienfeld, Ammirati, and Landfield take this study to be an illustration of the confirmation bias at work outside the laboratory.<sup>32</sup>

Garrett, Carnahan, and Lynch stress that confirmation bias should not be confused with a systematic defensive avoidance of information sources that conflict with one's prior opinions. Their study of Americans' usage of online news sites from 2004 to 2008 suggests that, although news seekers tend to gravitate toward more ideologically-consistent sources, increased use of ideologically-consistent sources is correlated with increased usage of ideologically-discrepant news sources as well. In other words, heavy users of MoveOn.org or CNN.com are likely to spend some time on the Fox News website as well. Although use of counter-attitudinal sites is less frequent among the most committed ideologues and those with a relatively low interest in politics, this study suggests that deliberately shielding oneself from sources that challenge one's existing beliefs is not the norm.<sup>33</sup>

Again, the findings in these studies reinforce Dervin's critique of the notion that providing information that encompasses a breadth of perspectives is sufficient for an open-minded exchange of ideas in which citizens consider a variety of points of view when updating their beliefs<sup>34</sup>. Confirmation bias makes it likely that users will seek out information sources that tend to affirm their existing beliefs and attitudes.

#### *Limits to motivated reasoning*

It is important to note that, for all its remarkable influence, motivated reasoning is not so pervasive that we are completely unable to use political information to update our beliefs in a reasonable way. A longitudinal study of presidential approval ratings by Gerber and Green shows that Democrats,

Republicans, and Independents all tend to adjust their ratings of the president's performance in similar ways in response to national events. If motivated reasoning completely dominated public opinion, one would expect that, during an economic downturn, Republican ratings of a Democratic president would dip down while Democratic ratings for the same president would remain relatively consistent. Instead, Republicans, Democrats, and Independents all lower their ratings by comparable amounts. This consistency leads the researchers to conclude that the effects of motivated reasoning "may be more apparent in people's immediate reactions to new information. The polarizing effects of information that have occasionally been observed in the laboratory may simply be too short-lived to manifest themselves in aggregate time series spanning months or years."<sup>35</sup>

Furthermore, it appears that even motivated reasoners can only withstand so much disconfirming information before revising their existing beliefs. A campaign simulation study by Redlawsk, Civettini, and Emmerson establishes the existence of an "affective tipping point," a threshold that subjects reached after encountering a significant amount of "bad press" about their initially preferred candidate. Once test subjects reach this tipping point, they stop exhibiting signs of a disconfirmation bias in favor of their initial choice and select a new candidate.<sup>36</sup> Redlawsk and colleagues estimate that, outside the laboratory, the threshold for defensive processing may be relatively high, such that "[c]andidates who need to win new voters without alienating their bases should be able to lean to the middle, as long as they don't lean too far."<sup>37</sup>

### *Mitigating motivated reasoning*

This research uncovered no silver bullets that negate the influence of motivated reasoning completely. Indeed, a review by Lilienfeld, Ammirati, and Civettini suggests that the obstacles against effective intervention are varied and substantial, not least of which is a significant level of difficulty in recognizing biases in one's thinking, identified by Pronin, Gilovich, and Lee as the "bias blind spot."<sup>38</sup> Likewise, merely telling students that motivated reasoning has an impact on their information processing is apt to yield mixed results, as this revelation is likely to be met with a level of disconfirmation bias among students who view themselves as intelligent, fair-minded people.

However, research points to at least a few encouraging leads for diminishing the impact of motivated reasoning. Education in metacognitive strategies (e.g., “consider all sides of an issue before drawing a conclusion”) seems to be a logical place to start, but research on the effectiveness of this approach is mixed. Willingham suggests that biased thinking may be mitigated by instruction in critical thinking strategies, so long as critical thinking skills are not presented in the abstract but taught in the context of domain knowledge.<sup>39</sup> Teaching students to evaluate arguments in an even-handed manner may work best in lessons that take advantage of students’ background knowledge of political issues, health issues, and research skills.

A study by Nyhan and Reifler shows that having test subjects engage in a self-affirmation exercise significantly reduces their level of defensive processing when faced with counter-attitudinal information on policy issues.<sup>40</sup> Harris and Napper’s research on the motivated processing of health-related information yielded similar results. Their study of motivated resistance among college students shows that self-affirmation exercises reduce the tendency to disconfirm or disregard health messages connecting heavy alcohol consumption with a higher incidence of breast cancer.<sup>41</sup> In both studies, the self-affirmation exercise consisted in having the test subjects identify an important value and write about how that value influences their conduct. This rather modest intervention enabled test subjects to deal more evenhandedly with information that challenged their perceptions about their own knowledge and health.

Nyhan and Reifler also find that presenting challenging information in a chart or graph tends to reduce disconfirmation bias. The researchers conclude that the decreased ambiguity of graphical information (as opposed to text) makes it harder for test subjects to question or counterargue with the content of the chart.<sup>42</sup>

In sum, although there is significant empirical evidence that our prior beliefs tend to exert an impact on how we process new information, motivated reasoning’s effects are not absolute (i.e., it is still possible for a concern for accuracy to outweigh our tendency to preserve our existing beliefs), nor is it so hardwired into our perceptions and reasoning that its effects cannot be reduced (though it appears unlikely

that it will ever be eliminated entirely). But motivated processing of political information does pose a significant challenge for librarians and other information literacy educators who aspire to make a positive impact on their students' lives as citizens. Ideally, a citizen uses political information to learn how to cast their vote, how to lend their support, when to advocate, when to resist, and when to keep quiet until they learn more. Therefore, a citizen's higher education should include awareness of the factors that can influence or obstruct their capacity to learn about political matters. Motivated reasoning is among those factors.

**Thesis #3: Information literacy education should include awareness of motivated reasoning, particularly its influence on our interactions with political information.**

We have established that motivated reasoning is a salient issue for information literacy education, especially insofar as information literacy concerns itself with lifelong learning and informed citizenship. We have also reviewed research that identifies motivated reasoning as a powerful but not insurmountable influence on how individuals search for and evaluate information about political candidates and policies. The remaining question is the most difficult of all: what should information literacy educators *do* about motivated reasoning's impact on the processing of political information?

Motivated reasoning poses a multi-layered pedagogical problem. It calls for students to learn about the nature of motivated reasoning as a psycho-social phenomenon that exerts a negative influence on how our society uses media to reflect upon its challenges and opportunities. Motivated reasoning also calls for students to account for its influence in their own interactions with political information. Merely introducing motivated reasoning as a prevalent psychological feature is not likely to be sufficient to elicit a difference in individuals' behaviors and judgments, as using psychological concepts to analyze one's own thinking is a notoriously tricky business. As Pronin, Gilovich, and Ross point out, "[T]he processes that give rise to most biases are unlikely to leave a phenomenological trace accessible to simple introspection."<sup>43</sup> It will take additional instructional work to encourage students to face motivated reasoning as something that can happen to them.

What would this sort of instruction look like? While this question calls for further exploration by scholars and practitioners in the information literacy community, I would like to outline what I see as the most salient questions related to this issue.

1) What resources are available in the existing literature of information literacy and library instruction?

Although the studies reviewed in this essay point out graphic representations of information and self-affirmation exercises as techniques for mitigating motivated reasoning, I am confident that we can develop methods that are more explicitly educational. If we are successful, students will cultivate an awareness of the topics that tend to arouse bias in information processing. They will also develop strategies for vetting their own judgments and decisions involving provocative information. The end result is not likely to be perfect objectivity in the processing of political information – motivated reasoning is both too pervasive and too elusive to hope for such an outcome. Instead, we can help students explore and appreciate the non-rational aspects of the way we process information. To circle back to Dervin’s notion of the incomplete person, students need to recognize that in our dealings with information, we are “sometimes unconscious, sometimes decentered, sometimes disordered.”<sup>44</sup> Ideally, this sensitivity to our limitations will prompt us to be more tentative, more deliberate in our interactions with information.

Fortunately, some in the information literacy community are already developing techniques to support and challenge students as they question their own assumptions about information and knowledge. Troy Swanson’s work on the intersections between information literacy and “personal epistemology” is particularly promising in this regard.<sup>45</sup> Drawing on the work of educational and developmental psychologists such as Barbara Hofer<sup>46</sup>, Swanson establishes that our assumptions and beliefs about the nature of learning and knowledge have an impact on how we use information to learn. For example, an individual who believes that knowledge in a certain domain consists in a set of discrete, relatively static facts is apt to achieve a sense of certainty on a research question much more quickly than someone who views knowledge as provisional, relative, and evolving.

Swanson draws upon research into personal epistemology to argue that “ill-structured problems” prompt students to reflect on their own epistemic assumptions. In the absence of straightforward answers to such problems, students are forced to consider the processes they use to evaluate the information sources available to them. Questions to guide these reflections include: “What information do you trust? What causes you to disagree with a piece of information? Whose voice is included/excluded?”<sup>47</sup> Each of these questions invites one to consider personal as well as external factors that shape one’s judgment, i.e., not just the subject matter of the information and the medium through which the information is expressed, but also the assumptions and attitudes one brings into an encounter with information.

As an example of using “ill-structured problems” to stimulate student learning, Swanson shares his experience leading a class in which students considered a variety of media reports on the 1994 Rwandan genocide. Students were asked to pay particular attention to whose perspectives the media tended to emphasize and whose points of view were most frequently excluded. Swanson reports that student attitudes evolved over the course of their work, moving from assumptions like “[I thought] the media just told us what happened” to an appreciation of the power of journalists to shape public opinion by choosing “which voices to include and which voices to exclude.”<sup>48</sup>

Framing instruction around the notion of personal epistemology is advantageous insofar as learning and knowledge include both external and internal aspects. Instead of focusing exclusively on factors that contribute to the certainty or uncertainty of the information one encounters, an emphasis on knowledge and learning also calls into question the reliability of the learner who is interacting with the information. This sort of teaching provides opportunities to introduce motivated reasoning as a frequent obstacle to working with information in an evenhanded way.

## 2) How do we address the processing of political information without offending sensitive students?

A further question is how best to address controversial matters with students. Recent discussions of “trigger warnings” in higher education suggest that it is easy to cross the line between challenging students and offending or upsetting them<sup>49</sup>. Students can take offense even when instructors steer conversation away from controversial issues in order to avoid offending class participants.<sup>50</sup> Even if

instructors bracket out any partisan motivations as they broach political questions with their students, it would appear that it is easy for students to interpret instruction on political matters as an attempt by the instructor to coerce students into adopting the instructor's point of view.<sup>51</sup>

Yet addressing controversial issues in class has important pedagogical advantages. It engages students in learning by connecting their experiences in class with issues that people care about outside the classroom. Making controversial questions the focus of learning also provides invaluable opportunities for students to learn what it means to discuss and make inquiries into potentially contentious issues in a civil manner. Discussion as a Way of Teaching by Brookfield and Preskill is a promising starting point for learning about ways to structure classroom discussion in a manner that promotes mutual respect, though many of their methods may need to be adapted for the compressed time-frames in which librarians typically work with groups of students.<sup>52</sup> It is critical that we develop techniques to address political subject matter in a way that challenges students without making them feel threatened or treated unfairly.

3) How can librarians find time to work with students in the intensive way that meaningful education on motivated reasoning would seem to require?

Given the complexity of motivated reasoning, successful instruction will likely require a considerable amount of time. As such, motivated reasoning is not the sort of issue that can be successfully addressed by the typical librarian strategies such as one-shot classes and brief videos that students watch on their own. Instead, if librarians are to make any headway with this problem, they will need to work extensively with departmental faculty. This requires cultivating opportunities to work with faculty to design instruction, assignments, and curriculum.<sup>53</sup> Although the literature on librarian-faculty collaboration is extensive, collaborations that address the fair-minded use of information as citizens will likely pose a special challenge because they require the librarian to go beyond the traditional library instruction activities of helping students to locate and evaluate information sources. I predict that fitting models for initiating collaborations for teaching more conceptual subject matter will be forthcoming, particularly as librarians develop partnerships with faculty to teach the concepts outlined in the new Framework for Information Literacy for Higher Education. Such partnerships may involve the library

instructor and the classroom instructor working together to facilitate classroom activities, or these collaborations may involve librarians working with classroom faculty to develop lesson plans that classroom instructors implement on their own.<sup>54</sup> In either case, the success of the strategy advocated for here, i.e., using “ill-structured problems” to prompt student reflection on the obstacles to knowledge, will hinge on a commitment to experimentation, careful planning, and the flexibility to stay in conversation with students wherever their reflections might take them.

## **Conclusion**

A growing body of research in political science and psychology indicates that motivated reasoning exerts a negative influence on our processing of political information. Foundational and aspirational documents for the information literacy movement advocate for information literacy’s importance by describing it as a set of concepts and skills integral to lifelong learning and informed citizenship. Given the information literacy community’s commitment to these ideals, it follows that we should expand our priorities to include educating students about how motivated reasoning can influence their own interactions with political information. Pedagogical and practical considerations make this a difficult change to implement. The pedagogical approach most likely to stimulate deep reflection on motivated reasoning, i.e., facilitating students’ encounters with ill-structured problems, is just beginning to take root in the literature of information literacy education. Furthermore, such methods take a considerable amount of time and will likely require extensive collaboration with departmental faculty. If scholars and practitioners in the information literacy community are willing to undertake the research and development required to address these issues, information literacy educators can live into our commitment to informed citizenship in a more intentional and fruitful way.

But educating students about motivated reasoning should not be pursued merely as a way for librarians to draw their practice in line with their ideals. Most importantly, this sort of education is a matter of preparing students for the challenge of educating themselves in a deceptively confounding information landscape. A crucial aspect of the current information environment is the ease with which one can confuse informing oneself in a significant way with merely taking in information that is in some way

familiar. Shortly after the November 2015 terrorist attacks in Paris and Beirut, this slippery aspect of our media institutions was mentioned in an “On the Media” radio interview with Marc Lynch, Professor of Political Science and International Affairs at George Washington University. Host Brooke Gladstone asked whether the characteristics of today’s news media somehow “enable” the 2016 presidential candidates to propose extreme immigration policies against Syrian nationals. Lynch’s response is worth quoting at length:

I think you really see the cultivation of these more extremist types of views, nurtured and shaped within these very insular online communities of the like-minded ... those [views] now bleed very effortlessly up into the broadcast media, and now, the news, the opinion, the flow of images and information, so much of it goes through social media first and then is reflected back out from the broadcast media.<sup>55</sup>

As the “echo chamber” of our social online life is increasingly reflected in the broadcast media, motivated reasoning makes it easy for us to cleave to the familiar and disregard or disparage the plurality of perspectives that inevitably accompany complex political issues. At the national level, this dynamic contributes to the rise in ideological polarization alluded to at the outset of this paper. At the level of the individual, the implications are equally distressing. Our students have an unprecedented breadth of information resources at their fingertips, yet there is a significant danger that they will miss the opportunity to engage with those voices that hold the greatest prospects for growth. Collecting confirmations of one’s existing views is a poor substitute for meaningful learning.

Support for self-directed learning is central to the mission of the academic library. Modern academic (and public) libraries have a long-standing tradition of combating intellectual narrowness by providing their communities with broad, balanced collections of information resources. More recently, libraries have provided educational programming to develop students’ abilities to search for, evaluate, and use information resources, i.e., information literacy. When successful, these programs empower students to ask sophisticated questions about a source’s reliability. As mentioned earlier, providing this

combination of information resources and discernment regarding their use has broadly been understood as the library's contribution to the ideal of informed citizenship. I propose that libraries continue further along this educational trajectory by helping students reflect critically on their own reliability as processors of political information. Given our fractured media environment, our bias toward information that confirms our existing opinions, and the cyclical way in which these two factors exacerbate one another, supporting this sort of reflection has to be the library's next step in supporting self-directed learning.

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<sup>1</sup> Amy Mitchell, Jeffrey Gottfried, Jocelyn Kiley, and Katerina Eva Matsa, "Political Polarization and Media Habits," Pew Research Center, October 21, 2014, <http://www.journalism.org/2014/10/21/political-polarization-media-habits/>.

<sup>2</sup> Michael Dimock, Jocelyn Kiley, Scott Keeter, and Carroll Doherty, "Political Polarization in the American Public," Pew Research Center, June 12, 2014, <http://www.people-press.org/2014/06/12/political-polarization-in-the-american-public/>.

<sup>3</sup> One frequently hears the term *confirmation bias* used to describe this phenomenon. I use *motivated reasoning* as the broad term to describe the negative influence that previous beliefs have on the processing of new information, and I use *confirmation bias* as a more specific term to describe how existing beliefs influence our *searching* for new information. I find it helpful to differentiate motivated reasoning's influence on different phases of information processing. In reserving the term *confirmation bias* to describe a specific type of motivated reasoning, I follow the taxonomy employed by Charles Taber and Milton Lodge in "Motivated Skepticism in the Evaluation of Political Beliefs," *American Journal of Political Science*, Vol. 50, No. 3 (2006), pp. 763-64.

<sup>4</sup> Heidi L. M. Jacobs and Selinda Berg, "Reconnecting Information Literacy Policy with the Core Values of Librarianship," *Library Trends*, Vol. 60, No. 2 (2011), pp. 384-385.  
[http://muse.jhu.edu/journals/library\\_trends/v060/60.2.jacobs.html](http://muse.jhu.edu/journals/library_trends/v060/60.2.jacobs.html)

<sup>5</sup> American Library Association, "Core Values of Librarianship," American Library Association, June 29, 2004.  
<http://www.ala.org/advocacy/intfreedom/statementspols/corevalues>

<sup>6</sup> International Federation of Library Associations, "Beacons of the information society: The Alexandria proclamation on information literacy and lifelong learning," International Federation of Library Associations, November 9, 2005, <http://www.ifla.org/publications/beacons-of-the-information-society-the-alexandria-proclamation-on-information-literacy>.

<sup>7</sup> Association of College and Research Libraries, "Information literacy competency standards for higher education," Association of College and Research Libraries, January 18, 2000,  
<http://www.ala.org/acrl/standards/informationliteracycompetency>. See particularly the sections "Information Literacy Defined" and "Information Literacy and Higher Education."

<sup>8</sup> Barack Obama, "National Information Literacy Month, 2009: A Proclamation," The White House, October 1, 2009, [http://www.whitehouse.gov/assets/documents/2009literacy\\_prc\\_rel.pdf](http://www.whitehouse.gov/assets/documents/2009literacy_prc_rel.pdf).

<sup>9</sup> Jacobs and Berg, 2011, pp. 384-387.

<sup>10</sup> For a review of such research, see Daniel T. Willingham, "Critical thinking: Why is it so hard to teach?" *American Educator*, Vol. 31, No. 2 (2007), p.13, [http://www.aft.org/sites/default/files/periodicals/Crit\\_Thinking.pdf](http://www.aft.org/sites/default/files/periodicals/Crit_Thinking.pdf).

<sup>11</sup> Gabriela Sonntag, "In Search of Excellence: Qualities of a Library Teaching Model," in *Proven Strategies for Building an Information Literacy Program*, ed. Susan Carol Curzon and Lynn D. Lampert (New York: Neal-Schuman Publishers, Inc., 2007), p. 145.

<sup>12</sup> James Elmborg, "Critical Information Literacy: Definitions and Challenges," in *Transforming Information Literacy Programs*, ed. Carroll Wetzel Wilkinson and Courtney Bruch (Chicago: Association of College and Research Libraries, 2012), pp. 75-95; Lisa O'Connor, "Information Literacy as Professional Legitimation: A Critical Analysis," *Journal of Education for Library & Information Science*, Vol. 50, No. 2 (2009), pp. 79-89, <http://www.jstor.org/stable/40732566>; Jacobs and Berg, 2011, pp. 389-392; Lauren Smith, "Towards a model of critical information literacy instruction for the development of political agency," *Journal of Information Literacy*, Vol. 7, No. 2 (2013), pp. 15-32, <http://dx.doi.org/10.11645/7.2.1809>.

<sup>13</sup> Brenda Dervin, "Information↔democracy: An examination of underlying assumptions," *Journal of the American Society for Information Science*, Vol. 45, No. 6 (1994), p. 369.

<sup>14</sup> Ibid.

<sup>15</sup> Ibid., p. 382.

<sup>16</sup> Daniel C. Molden and E. Tory Higgins, "Motivated thinking," in *The Cambridge Handbook of Thinking and Reasoning*, ed. Keith James Holyoak and Robert G. Morrison (New York: Cambridge University Press, 2005) pp. 296-310.

<sup>17</sup> Ibid.

<sup>18</sup> Akiva Liberman and Shelly Chaiken, "Defensive processing of personally relevant health messages," *Personality and Social Psychology Bulletin*, Vol. 18, No. 6 (1992), pp. 669-679.

<sup>19</sup> Charles Taber, Damon Cann, and Simona Kucsova, "The Motivated Processing of Political Arguments," *Political Behavior*, Vol. 31, No. 2 (2009), p. 144.

<sup>20</sup> Ibid., pp. 145-6.

<sup>21</sup> Ibid., pp. 146-9.

<sup>22</sup> David P. Redlawsk, "Hot Cognition or Cool Consideration? Testing the Effects of Motivated Reasoning on Political Decision Making," *Journal of Politics*, Vol. 64, No. 4 (2002), p. 1030-1040.

<sup>23</sup> Ibid., p. 1040-41.

<sup>24</sup> Brendan Nyhan & Jason Reifler, "When Corrections Fail: The Persistence of Political Misperceptions," *Political Behavior*, Vol. 32, No. 2 (2010), pp. 310-11.

<sup>25</sup> Ibid., pp. 312-13.

<sup>26</sup> Ibid., pp. 313-14.

<sup>27</sup> Ibid., pp. 314-15, 323.

<sup>28</sup> Dervin, p. 382.

<sup>29</sup> Taber and Lodge, p. 757.

<sup>30</sup> Ibid., p. 764.

<sup>31</sup> Krebs' study is reported by Emily Eakin in, "Study Finds a Nation of Polarized Readers," *New York Times*, 13 March 2004, available at:

<http://www.nytimes.com/2004/03/13/books/study-finds-a-nation-of-polarized-readers.html> (accessed 18 July 2014).

<sup>32</sup> Scott O. Lilienfeld, Rachel Ammirati, and Kristin Landfield, "Giving debiasing away: Can psychological research on correcting cognitive errors promote human welfare?" *Perspectives on Psychological Science*, Vol. 4, No. 4 (2009), p. 392.

<sup>33</sup> R. Kelly Garrett, Dustin Carnahan, and Emily K. Lynch, "A turn toward avoidance? Selective exposure to online political information, 2004-2008," *Political Behavior*, Vol. 35, No. 1 (2013), pp. 113-134.

<sup>34</sup> Dervin, p. 382.

<sup>35</sup> Alan Gerber and Donald Green, "Misperceptions about perceptual bias," *Annual Review of Political Science*, Vol.2, No. 1 (1999), p. 207.

<sup>36</sup> David P. Redlawsk, Andrew J. W. Civettini, and Karen M. Emmerson, "The affective tipping point: Do

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motivated reasoners ever 'get it?'" *Political Psychology*, Vol. 31, No. 4 (2010), pp. 563-593.

<sup>37</sup> Ibid., p. 590.

<sup>38</sup> Lilienfeld, Ammirati, and Landfield, p. 392; Emily Pronin, Thomas Gilovich, and Lee Ross, "Objectivity in the Eye of the Beholder: Divergent Perceptions of Bias in Self Versus Others," *Psychological Review*, Vol. 111, No. 3 (2004), see especially the discussion of attempts to determine levels of bias through introspection on pp. 791-793.

<sup>39</sup> Willingham, pp. 8-19.

<sup>40</sup> Brendan Nyhan and Jason Reifler, "Blank slates or closed minds? The role of information deficits and identity threat in the prevalence of misperceptions," (2013), unpublished paper, available at: <http://www.dartmouth.edu/~nyhan/opening-political-mind.pdf> (accessed 17 July 2014).

<sup>41</sup> Peter R. Harris and Lucy Napper, "Self-Affirmation and the Biased Processing of Threatening Health-Risk Information," *Personality and Social Psychology Bulletin*, Vol. 31, No. 9 (2005), pp. 1250-1263.

<sup>42</sup> Nyhan and Reifler, "Blank Slates or Closed Minds?"

<sup>43</sup> Pronin, Gilovich, and Ross, "Objectivity in the Eye of the Beholder," p. 791.

<sup>44</sup> Dervin, p. 382.

<sup>45</sup> Troy Swanson, "Information Literacy, Personal Epistemology, and Knowledge Construction: Potential and Possibilities," *College and Undergraduate Libraries* Vol. 13, no. 3 (2006), pp. 93-112; Troy A. Swanson, "Information is Personal: Critical Information Literacy and Personal Epistemology," in *Critical Library Instruction: Theories and Methods*, ed. Alana Kumbier, Emily Drabinski, and Maria T. Accardi (Duluth, Minn.: Library Juice Press, 2010), pp. 265-278.

<sup>46</sup> See especially B. K. Hofer, "Epistemological Understanding as a Metacognitive Process: Thinking Aloud During Online Searching," *Educational Psychologist* Vol. 39, no. 1 (2004), pp. 43-55. This article clarifies the cyclical relationship between personal epistemology and education: personal epistemology can be viewed as a set of assumptions that influences educational outcomes; it can also be understood as a metacognitive perspective that *is shaped* by one's educational experiences (pp. 45-46).

<sup>47</sup> Swanson, "Information is Personal," p. 272.

<sup>48</sup> Ibid., p. 273.

<sup>49</sup> See, for example, Scott A. Bass and Mary L. Clark, "The Gravest Threat to Colleges Comes from Within," *Chronicle of Higher Education*, September 28, 2015, <http://chronicle.com/article/The-Gravest-Threat-to-Colleges/233449>; Committee A on Academic Freedom and Tenure, "On Trigger Warnings," American Association of University Professors, August 2014, <http://www.aaup.org/report/trigger-warnings>; Kate Manne, "Why I Use Trigger Warnings," *The New York Times*, September 20, 2015, Section SR, p. 5, <http://www.nytimes.com/2015/09/20/opinion/sunday/why-i-use-trigger-warnings.html>.

<sup>50</sup> Conor Friedersdorf, "Stripping a Professor of Tenure over a Blog Post," *The Atlantic*, February 9, 2015, <http://www.theatlantic.com/education/archive/2015/02/stripping-a-professor-of-tenure-over-a-blog-post/385280/>. Even attempts to keep classroom discussions civil can end in disastrous consequences for instructors. In an effort to keep her class free of homophobic remarks, a philosophy teaching assistant attempted to avoid discussing the legitimacy of gay marriage. This offended a student who felt the issue should be up for discussion, and the student confronted the teaching assistant while surreptitiously recording their conversation on his phone. The offended student then shared the recorded conversation with a tenured professor with a prominent online presence. This professor published a disparaging blog post about the teaching assistant, thereby embroiling them both and their university in a highly publicized administrative fiasco.

<sup>51</sup> Research by Linvill and Mazer suggests that students who are positively disposed to reflective thinking and argumentative discussion as a mode of learning are less likely to perceive their instructors as biased. See Darren L. Linvill & Joseph P. Mazer, "Perceived ideological bias in the college classroom and the role of student reflective thinking: A proposed model," *Journal of the Scholarship of Teaching and Learning*, vol. 11, no. 4 (2011), pp. 90-101; and Darren L. Linvill & Joseph P. Mazer, The Role of Student Aggressive Communication Traits in the Perception of Instructor Ideological Bias in the Classroom, *Communication Education*, 62:1 (2013), 48-60. Linvill recommends increased emphasis on civics education at the undergraduate level as a means to mitigate students' tendency to misinterpret challenging speech as biased speech. Such a program would likely present additional opportunities to address the motivated processing of political information. See Darren L. Linvill, "The Bias Fallacy," *Academe*, January-February 2013, <http://www.aaup.org/article/bias-fallacy#.VkuJZXarRD8>.

<sup>52</sup> Stephen D. Brookfield and Stephen Preskill, *Discussion as a Way of Teaching: Tools and Techniques for Democratic Classrooms*, 2<sup>nd</sup> edition, San Francisco: Jossey-Bass, 2005.

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<sup>53</sup> See Patricia Iannuzzi on the necessity of collaborations between librarians and departmental faculty, in Megan Oakleaf, et al., "Notes from the Field: 10 Short Lessons on One-Shot Instruction," *Communications in Information Literacy*, Vol. 6, No. 1 (2012), pp. 5-23. Lynn D. Lampert gives strategic recommendations on cultivating the library's influence on curricular matters in "Searching for Respect: Academic Librarians' Role in Curricular Development," in *Proven Strategies for Building and Information Literacy Program*, ed. Susan Carol Curzon and Lynn D. Lampert (New York: Neal-Schuman Publisher, Inc., 2007), pp. 95-111.

<sup>54</sup> Carrie Donovan, "Shaking Up the Sediment: Re-energizing Pedagogical Practice while Avoiding Bottle Shock," The Innovative Library Classroom, Radford University, Radford, Virginia May 12, 2015. See also Brian Matthews' follow-up interview with Carrie Donovan in "From Teaching to Consulting: Librarians as Information Literacy Designers," *The Ubiquitous Librarian*, June 8, 2015, <http://chronicle.com/blognetwork/theubiquitouslibrarian/2015/06/08/from-teaching-to-consulting-librarians-as-information-literacy-designers-an-interview-with-carrie-donovan/>.

<sup>55</sup> Marc Lynch, interview by Brooke Gladstone, "Lessons Unlearned," On the Media, WNYC, November 20, 2015, <http://www.onthemedial.org/story/lessons-unlearned/>.