

Trust, Communication, and Information after *The Democratic Dilemma*

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In *The Democratic Dilemma*, Arthur Lupia and Mathew D. McCubbins addressed a question of enduring importance: Can citizens learn what they need to know to make informed political decisions? Before *The Democratic Dilemma*, many scholars offered pessimistic answers (Bartels 1996; Converse 1964; Delli Carpini and Keeter 1996). These answers were based on surveys showing ordinary citizens' ignorance of basic facts about politics (e.g., the name of their senator and who nominates Supreme Court justices). Rather than assuming that such factual knowledge is necessary for informed decision making, Lupia and McCubbins developed a novel theory that identified the conditions under which uninformed citizens can learn from others. To rigorously test their theory, they designed laboratory and survey experiments. The result was a more optimistic picture of citizens' capabilities and the health of our representative democracy.

This article highlights the contributions that *The Democratic Dilemma* made to three distinct areas of research. First, I discuss its contributions to research on political sophistication. I argue that *The Democratic Dilemma* inspired scholars to investigate whether citizens differ in their ability to learn from information they receive. Second, I describe *The Democratic Dilemma's* contributions to research on political endorsements. Chief among these are questions the book raised about whether and when endorsers are perceived as knowledgeable and trustworthy in real-world settings. Third, I discuss *The Democratic Dilemma's* contributions to neuroscience research that investigates learning and decision making. Together, these contributions shed new light on the circumstances under which different types of citizens in various political environments can trust and learn from others.

CONTRIBUTIONS TO POLITICAL SOPHISTICATION RESEARCH

The Democratic Dilemma has had a lasting impact on political sophistication research. Lupia and McCubbins contributed to this area of research by developing a game-theoretic model that identified conditions under which uninformed citizens will trust and learn from the statements of another individual (i.e., "the speaker"). In particular, their model identified two necessary and sufficient conditions for learning: citizens must believe that there is a sufficiently high probability that the speaker (1) is *knowledgeable*, and (2) shares common interests with them (and therefore is *trustworthy*). If these two conditions are satisfied, then in equilibrium, citizens base their

decisions on the speaker's statement and learning occurs. Otherwise, citizens ignore the speaker and learning does not occur. Lupia and McCubbins also incorporated institutions (e.g., the threat of verification and penalties for lying) into their model. They showed that sufficiently high probabilities of verification and large penalties for lying induce a speaker whose interests conflict with those of citizens to make truthful statements and citizens to, therefore, trust and learn from the speaker's statements.

These theoretical results are important for several reasons. First, in contrast to previous formal models of citizen learning (Calvert 1985; Grofman and Norrander 1990; McKelvey and Ordeshook 1986), Lupia and McCubbins did not assume that the speaker is credible (i.e., knowledgeable and trustworthy). Rather, they considered whether and when learning can occur if a speaker does not share citizens' interests. They also incorporated institutions, which was rarely done in voting behavior research at the time. Their theoretical results demonstrated that institutions can substitute for a speaker sharing common interests with citizens and induce citizens to learn from the speaker's statements. This is significant because it indicates that self-reported factual knowledge is not what matters for sophistication. Rather, sophistication can vary across political settings depending on the institutions that are in place.

Lupia and McCubbins's approach to testing their theory empirically was another major contribution. Specifically, they designed and conducted laboratory experiments that were analogous to their theory of learning. In the experiments, subjects guessed the outcomes of unseen coin tosses. As in the model, another subject (i.e., "the speaker") observed each coin toss outcome and then made a statement about whether the coin landed on heads or tails. Importantly, subjects knew that the speaker was under no obligation to communicate the coin toss outcome truthfully. Lupia and McCubbins manipulated whether the speaker had common or conflicting interests with subjects. They also manipulated whether the speaker with conflicting interests was subject to a penalty for lying or threat of verification. Lupia and McCubbins varied the presence of common versus conflicting interests, as well as the size of the penalty for lying, by manipulating the speaker's and subjects' financial incentives. They also manipulated whether the speaker observed the coin toss outcome and, therefore, whether the speaker was knowledgeable. Their experimental results showed that citizens trust and learn from the speaker's statements under the conditions their model identified (i.e., when citizens believed that the speaker was knowledgeable

and trustworthy). In this way, Lupia and McCubbins showed that even when subjects lack knowledge about the coin toss outcome, they can learn from a speaker's statements and make better decisions than they would have made on their own (i.e., by guessing randomly).

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The Democratic Dilemma's empirical approach is noteworthy because experiments were infrequently used in political science at the time. The abstract, economics-style experiments that Lupia and McCubbins conducted were rarer still. Indeed, to the extent that experiments were used at the time, they tended to focus on mundane realism—that is, the extent to which an experimental setting *looks* like the real world. Hence, the political science experiments that were conducted typically used manipulations and measures that mimicked real-world politics. Yet, as Lupia and McCubbins (1998, 99; emphasis in original) persuasively argued, “Like all empirical science, our laboratory experiments require an *inductive leap*. This leap is the assumption that our method of experimental observation is a faithful analogy to our theory. Though many social scientists do not realize it, *all* scientists make this leap when they use empirical research to evaluate theoretical explanations.” In this way, *The Democratic Dilemma* set the stage for future economics-style experiments in political science and helped spark the “experimental revolution” in political science. It also established the importance of having control over what people know (and do not know) in experiments, as well as the drawbacks of using self-reported political knowledge as a measure of sophistication.

The Democratic Dilemma's substantive contributions also cannot be overstated. In addition to offering a more optimistic perspective on whether citizens can learn what they need to know in democratic settings, Lupia and McCubbins raised important questions for future research on political sophistication: Do citizens differ in their ability to learn from information they receive? In particular, do citizens' levels of sophistication affect their responses to different types of information? *The Democratic Dilemma* left these questions open because subjects could not vary in their level of sophistication at predicting coin tosses (i.e., they all knew that a fair coin has a 50% chance of landing on heads). In doing so, it inspired scholars to pursue the answers by conducting experiments that enable a comparison of how sophisticated and unsophisticated subjects learn from different types of information (Boudreau 2009; Kam 2005; Kuklinski et al. 2001; Lau and Redlawsk 2001).

Indeed, I read *The Democratic Dilemma* during my first year of graduate school at the University of California, San Diego, and it inspired my research on these open questions. To this end, I replicated Lupia and McCubbins's experiments using math problems instead of coin tosses. I chose math

problems because subjects vary in their level of sophistication at performing this task and because an objective measure of it (i.e., SAT math scores) exists. I was able to execute my experiments thanks to Lupia and McCubbins's guidance, their willingness to share their experimental materials,

and their instructional video that showed exactly how they conducted their experiments. This is noteworthy because Lupia and McCubbins were transparent about their experimental procedures long before this was the norm in political science. Consistent with their theory, my experimental results revealed that even unsophisticated subjects (i.e., who lacked knowledge about how to solve math problems) were able to learn from a knowledgeable and trustworthy speaker's statements. In fact, the improvements in unsophisticated subjects' decisions were so large that the gap between their decisions and those of sophisticated subjects closed (Boudreau 2009).

CONTRIBUTIONS TO RESEARCH ON POLITICAL ENDORSEMENTS

The Democratic Dilemma also made significant contributions to research on political endorsements. Although the speaker in Lupia and McCubbins's theory could represent various political, legal, or economic actors, the authors considered the speaker to be a political endorser in chapter 9 (Lupia and McCubbins 1998). This is a relevant application because an endorser's recommendation about which candidate or policy to support might provide an effective substitute for detailed political information, but only if citizens are willing to trust and learn from the endorser.

To test this application of their theory, Lupia and McCubbins conducted innovative survey experiments that asked respondents to make decisions about a real-world policy issue: whether to support or oppose spending money to build more prisons. The authors manipulated whether or not an endorsement was present. If an endorsement was present, they varied whether it came from Phil Donohue or Rush Limbaugh. They also measured whether each respondent perceived these endorsers to be knowledgeable and trustworthy. This allowed them to examine whether respondents followed endorsers that they viewed as credible and ignored those that they did not. Consistent with their theory, the authors found that respondents tended to follow only endorsers that they viewed as knowledgeable and trustworthy.

By applying their theory to the study of political endorsements, Lupia and McCubbins both inspired and influenced subsequent studies on this topic. Indeed, *The Democratic Dilemma* provided a theoretical framework for thinking about the effects of endorsements. It also offered a novel and rigorous way of testing their effects (i.e., population-based survey experiments). In addition, the book motivated scholars to

address important open questions: When are different kinds of endorsers perceived as knowledgeable and trustworthy in the real world? Are there differences among citizens in their ability to discern whether endorsers share their interests?

To address the first question, scholars began to examine a broad range of endorsements in different political environments. For example, Druckman (2001a) examined the effectiveness of political party endorsements. Based on the lessons of *The Democratic Dilemma*, he conducted a pretest that asked subjects to rate the extent to which they perceived their own political party as knowledgeable and trustworthy. His results demonstrated that partisans perceived their own party as a credible source of advice. As such, they followed its recommendation about which policy solution to implement. In a related study, Druckman (2001b) examined whether and when citizens consider political actors and newspapers as credible sources of advice. Other scholars considered the conditions under which citizens respond to endorsements from interest groups, prominent politicians, and racial/ethnic groups in presidential, congressional, and local elections (Arceneaux and Kolodny 2009; Boudreau, Elmendorf, and MacKenzie 2019; McDermott 2006; Nicholson 2012). These studies also were informed by *The Democratic Dilemma* and focused on how an endorser's credibility affects citizens' responses.

The second question has received less empirical scrutiny. The few studies that address it indicate that even politically uninformed citizens can identify whether prominent endorsers share their interests, thereby using their recommendations effectively. For example, Arceneaux and Kolodny (2009) showed that politically uninformed Republicans can use a liberal interest group's endorsement to help them choose candidates who share their partisanship. Similarly, Boudreau, Elmendorf, and MacKenzie (2015) demonstrated that endorsements from political parties and well-known politicians with ideological reputations help uninformed citizens to make decisions that are comparable to those who are informed. An open question for future research is whether and when other types of endorsements—particularly those from politically active groups whose ideological reputations are less clear (e.g., law enforcement organizations)—provide citizens with substitutes for the political information that they lack. It also is

Indeed, connectionist models from cognitive science are the foundation of Lupia and McCubbins's theory of learning (Churchland and Sejnowski 1992). As Lupia and McCubbins (1998, 19) stated, "Connectionist models show how people systematically attribute meaning to new or relevant objects by connecting them with objects, events, or people they have encountered before." Thus, connectionist models indicate that people are capable of making complex inferences even when they possess limited information. Neuroscientific studies of the mechanisms that underlie learning and the way that individuals adjust their behavior based on feedback are consistent with this conclusion. However, many of these studies examine learning and decision making in relatively isolated environments. *The Democratic Dilemma* provides an important reminder that learning and decision making typically occur in social and institutional contexts. Therefore, these contexts should be incorporated in studies that examine the cognitive and neural mechanisms that underlie citizen decision making.

McCubbins's subsequent research did exactly this. In doing so, it contributed to cognitive neuroscience and shed new light on how people process political information. Specifically, it replicated the coin toss experiments in *The Democratic Dilemma* while recording subjects' brain activity with electroencephalograph (EEG) technology (Boudreau, McCubbins, and Coulson 2009). As in *The Democratic Dilemma*, subjects received information from a knowledgeable speaker about the coin toss outcome. In one condition, the speaker shared common interests with subjects. In another condition, the speaker's interests conflicted with those of subjects. In yet another, the speaker's interests conflicted with those of subjects but the speaker was subject to an institution (i.e., a penalty for lying) that provided an incentive to be truthful.

Whereas *The Democratic Dilemma* showed that subjects were equally likely to trust a speaker who shared their interests and a speaker who was made trustworthy by an institution, Boudreau, McCubbins, and Coulson (2009) examined whether subjects' brains treat information from these two types of speakers as equally informative. The EEG results showed that subjects' brain activity differed in response to information from a speaker who shared their interests versus a speaker who was made trustworthy by a penalty for lying.

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unclear what, exactly, citizens learn from endorsements (e.g., which interests are held in common) and how they form their perceptions of them.

CONTRIBUTIONS TO COGNITIVE NEUROSCIENCE

The Democratic Dilemma also made significant interdisciplinary contributions, most notably to cognitive neuroscience.

In particular, it appeared that subjects perceived statements from the speaker who shared their interests to be slightly more informative than statements from the speaker who faced a penalty for lying. This indicated that the manner in which a source was made trustworthy (and not only trustworthiness itself) affected how citizens processed information from it. This is important because one of *The Democratic Dilemma's*

main conclusions is that the institutional context matters and can substitute for common interests. These results suggest that the institutional context might matter in distinct ways and that scholars have only just begun to understand its effects on the cognitive processing of information.

CONCLUSION

Although it was published 20 years ago, *The Democratic Dilemma* had an enduring influence on research in political science and other disciplines. With its ambitious combination of formal theory, laboratory experiments, and survey experiments, *The Democratic Dilemma* provides a more optimistic (and convincing) answer to the question of whether citizens in a representative democracy can learn what they need to know. By identifying the conditions under which citizens will trust and learn from others, Lupia and McCubbins shaped the trajectory of research on political sophistication and political endorsements. In other disciplines (e.g., neuroscience), *The Democratic Dilemma* provided an important reminder that understanding learning and decision making requires attention to the social and institutional contexts in which people live. ■

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