

## **UC Merced**

### **Proceedings of the Annual Meeting of the Cognitive Science Society**

#### **Title**

Tracking the Response Dynamics of Implicit Partisan Biases

#### **Permalink**

<https://escholarship.org/uc/item/8rt5785h>

#### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 37(0)

#### **Authors**

Duran, Nicholas D  
Nicholson, Stephen  
Dale, Rick

#### **Publication Date**

2015

Peer reviewed

# Tracking the Response Dynamics of Implicit Partisan Biases

Nicholas D. Duran (nicholas.duran@asu.edu)

School of Social and Behavioral Sciences, Arizona State University  
Glendale, AZ 85036, USA

Stephen Nicholson (snicholson@ucmerced.edu)

Department of Political Science  
University of California, Merced  
Merced, CA 95343, USA

Rick Dale (rdale@ucmerced.edu)

Cognitive and Information Sciences  
University of California, Merced  
Merced, CA 95343, USA

## Abstract

Despite widespread political conspiracy theories about Presidents Barack Obama and George W. Bush, a majority of partisans continue to distance themselves from such beliefs. Even so, the ideological biases that drive conspiratorial thinking may be hard to overcome. In this study, we examine the unintentional endorsement of conspiratorial beliefs as revealed in movement dynamics. We track the cursor movements of Republicans and Democrats as they click target regions on their computer screens, ostensibly providing bias-free opinions (e.g., clicking “FALSE” upon reading “Barack Obama was born in Kenya”). However, during these response movements, we find inhibition and movement attraction to regions of the screen where a competitor response is located (e.g., “TRUE” for the “birther” conspiracy). These dynamics are not present for general conspiracies or political knowledge items. Though both Republicans and Democrats show evidence of implicit biases, changes in the strength of competition also reveal key asymmetrical differences.

**Keywords:** response dynamics; implicit beliefs; political psychology; social cognition

## Introduction

Recent public opinion polls reveal that the current United States electorate is increasingly divided along ideological and partisan lines (Pew Research Center, 2014). Although such division has led to a profusion of conspiratorial narratives, those who endorse the more extreme conspiracies are still in the minority (Harris Interactive, 2010; Oliver & Wood, 2014). Of course, to gauge these beliefs, pollsters and researchers rely on the explicitly stated views of responders. Only somewhat recently, however, have researchers in political cognitive psychology begun to look beyond explicit responses provided in political surveys to alternative measures that gauge the more implicit, automatic beliefs that occur outside of conscious awareness (Burdein, Lodge, & Taber, 2006). This trend is supported by a growing body of research showing that people can hold implicit attitudes and stereotypes that are divergent from what they explicitly state (Greenwald & Banaji, 1995).

To study these hidden and automatic processes, several primary methods have been developed, with the Implicit Association Test perhaps chief amongst them. In this method, the association strength between paired concepts (e.g., liberal-bad, conservative-good) is examined during categorization (Nosek, 2007). Other methods involve priming paradigms, whereby participants might be presented with the words

“Bush” or “Pro-Choice” for a fraction of a second, and then a target word, such as “comedy” or “toothache,” to be evaluated for positive or negative affective tone. If one has a negative predisposition to “Pro-Choice,” this should facilitate a judgment that “toothache,” a negative word, is indeed negative (Lodge & Taber, 2005).

Although these methods have been instrumental in detecting implicit beliefs, the setup of these designs, in comparison to more traditional opinion surveys, limits the types of content that can be presented, as well as the scale of distribution. Putting these practical matters aside, implicit methods also limit the insights that can be made about the time-course of cognitive processing. The predominant methods, though valuable, only provide discrete behavioral outcomes and single summary measures (e.g., reaction time). They are unable to capture the moment-to-moment changes in mental processes that occur between initial stimuli exposure to the final response. It is across these moments of change that multiple processes may converge, including the activation of implicit belief content, and what will eventually be the ostensible, explicit response.

Recent evidence suggests that this ongoing activation happens in parallel and can compete over time (Freeman, Dale, & Farmer, 2011). This is critical for assessing implicit beliefs for two major reasons. First, a more fine-grained temporal analysis of implicit belief competition will provide a clearer understanding of *when* this competition exerts its influence. Is it at the earliest moments of processing, indicating immediate access, or later in processing once the explicit belief has already been considered, suggesting a weaker role of bias in the response process? Second, a more fine-grained analysis also allows us to assess the relative strength of competition across partisan responders. There is considerable debate whether an asymmetry of political bias exists across Republicans and Democrats. Political scientists and media commentators alike argue whether those with a conservative ideology, overwhelmingly people who identify as Republicans, are more likely to engage in avoidance behaviors when information challenges their worldview (Nam, Jost, & Van Bavel, 2013), as well as whether they are more likely to endorse political conspiracy theories (Chait, 2011).

## The Present Study

To unpack reaction time and explore the ongoing cognitive changes that would otherwise remain hidden, we draw from an approach we call *action dynamic analytics*. These analytics measure an ongoing stream of mental activity as it is continuously expressed in the ongoing movements of the body. There is substantial evidence showing that the mind and body are functionally linked, such that traces of mental processes, as they occur, are simultaneously expressed throughout a motor response (Duran, Dale, & McNamara, 2010; Freeman et al., 2011). Our approach operates by dynamically tracking individuals' arm movements as they move a cursor along a computer screen to answer questions and make decisions. Although seemingly simple, when coupled with sophisticated quantitative analyses, we can go beyond *what* individuals respond when answering questions (e.g., checking a "yes" or "no" box on a survey), to *how* that response is carried out in the "micro-behavioral" changes in cursor movements.

To visualize how competition from implicit partisan belief biases might be expressed in cursor movements, imagine a participant clicking at the bottom of her screen to reveal a statement such as, "Barack Obama was born in Kenya." She might then move to an option at the top of her screen that indicates disagreement. However, moment-by-moment fluctuations of indecision, or deviations towards or away from an opposing response option (i.e. to agree), may reveal early, late, and/or a sustained implicit preference to endorse the conspiratorial statement, en route to disagreeing.

We expect these dynamics to be modulated by partisan predispositions, such that Republican responders may show greater evidence of implicit agreement with the example statement, "Barack Obama was born in Kenya," versus a statement such as "George W. Bush used fraud to win the 2000 election" or with more neutral false statements such as "Barack Obama has twin boys." Likewise, we expect Democrat responders to show greater implicit agreement with statements such as, "George W. Bush used fraud to win the 2000 election," versus "Barack Obama was born in Kenya." Although we predict symmetrical bias between partisans at this level, we can also test more explicit claims by political scientists that Republicans are more likely to engage in avoidance behaviors (Nam et al., 2013). We can do so by evaluating whether Republicans are more likely to move away from response options possibly deemed offensive and threatening to their worldview. For example, when moving to disagree with the statement "George W. Bush used fraud to win the 2000 election," they may avoid the region of the screen where an "agree" option is located, doing so to a greater degree than Democrats in a similar situation of having to respond to the statement "Barack Obama was born in Kenya."

Finally, we can also examine how the conspicuousness of conspiracy wording in each statement influences response behavior. It has been noted that self-presentation biases might be a major factor when responding to opinion surveys, particularly when those endorsing conspiratorial statements are

viewed by commentators as deluded and dangerous, or originating from cult-like thinking (Sunstein & Vermeule, 2009; Krugman, 2013). Thus, we may see less influence of implicit biases when statements have an obvious and negative connotation. For this reason, we also included inconspicuous statements that are outwardly positive, such as "Barack Obama was born in Hawaii," or "George W. Bush did not act as a dictator during his presidency," but nevertheless still veil an underlying negative conspiratorial connotation. Here implicit biases might be more pronounced.

## Method

Participants were recruited through Amazon Mechanical Turk (AMT), an online crowdsourcing platform, and paid \$1.50 for their time. Participants were asked to read 24 statements about the current and former president that "some people think are true and some people think are false." These statements consisted of both true and false trivia statements about the presidents (12 from a possible 24), with critical statements that were designed to reveal implicit beliefs (12 from a possible 24). In addition to these items, participants also saw six true and false trivia statements (from a possible 12) as they relate to general political facts, and six false statements about well-known, non-partisan general conspiracies (examples of each statement type are presented below). An equal number of unique false and true statements were presented to each participant (with the exception of all false general conspiracy statements).

Statements were presented two words at a time in the center of their screens, with participants controlling the rate of presentation by clicking on a small calibration circle at the center bottom. When participants reached the end of each statement, the words "FALSE" or "TRUE" were displayed in the opposite top corners of their screens (counterbalanced across participants). The participants then had six seconds to move their cursor to one of the response options in order to click on it. If participants exceeded six seconds, a warning was presented that payment would be withheld for excessive delays. An excessive number (greater than 10%) was used to remove participants from future data analysis. At the end of this cursor tracking phase, participants were then redirected to a standard survey to answer questions about political ideology, political knowledge, and basic demographics.

## Participants

A total of 788 participants were included in this study, ensuring that participants' IP addresses were based in the United States, that they were 18 years of age or older, that no more than 10% of their trials exceeded a set deadline to respond, and that they only completed the study once. Participants self-selected into three major partisan ideologies based on a series of questions in the survey portion of the study. These questions consisted of the initial question: "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?" If participants selected "Independent" or "Other/No Preference" we then asked: "Do you think

Table 1: Subset of statements where implicit bias might be revealed.

Explicit Response
<b>Conspicuous right-wing “respond false” (bias to accept)</b>
Barack Obama is a Muslim
Barack Obama disregarded information to prevent the attack on the American consulate in Benghazi
<b>Inconspicuous right-wing “respond true” (bias to reject)</b>
Barack Obama was born in Hawaii.
Barack Obama has never suggested that government-led medical panels should make end-of-life decisions for people.
<b>Conspicuous left-wing “respond false” (bias to accept)</b>
George W. Bush used fraud to win the 2000 election
George W. Bush helped plot the 9/11 terrorist attacks as a means to going to war in Iraq.
<b>Inconspicuous left-wing “respond true” (bias to reject)</b>
George W. Bush did not act as a dictator during his presidency.
George W. Bush was behind a government plan to help repair the levees protecting black people after Hurricane Katrina.

of yourself as closer to the Republican or Democratic party?” If participants select “Neither” to this question, they were classified as an “Independent,” otherwise they were grouped as “Republican” or “Democrat.” We focus here on responses from Republicans and Democrats. A total of 181 (22.97%) participants identified as Republicans and 458 (58.12%) as Democrats.

### Statement types

The items in this study can be categorized into two major categories. The first are statements hypothesized to elicit implicit beliefs, and the second are statements that are non-partisan and important for establishing a baseline of comparison. We are most interested in items where participants provide a final correct answer. Thus, items that are objectively false, such as “George W. Bush belongs to the Democratic party,” or “Barack Obama was born in Kenya” must be answered false, and items that are objectively true, such as “Barack Obama is a Christian,” or “George W. Bush did not know that 9/11 was going to happen” must be answered truthfully. In this way, our participants are providing responses that are informed and seemingly without ostensible partisan bias.

**Implicit bias statements.** Implicit bias statements are associated with conspicuous or inconspicuous right- and left-wing conspiracy theories about Presidents George W. Bush and Barack Obama (see Table 1). For conspicuous statements, these are blatantly false right- or left-wing conspiracy statements that are negative in content. To respond without ostensible bias is to respond “FALSE,” where an implicit partisan bias might be to accept the statement (competition with “TRUE”). For inconspicuous statements, these are true, positive statements about the two presidents, nevertheless there is a veiled right- or left-wing conspiracy that can be endorsed (competition with “FALSE”).

**Baseline statements.** To determine whether hypothesized changes in trajectory movements are driven by the conspiratorial partisan content or partisan content in general, we contrasted implicit bias statements with neutral statements about the two presidents and other political trivia. For example, par-

ticipants might see statements such as “Barack Obama is married to Michelle Obama,” “George W. Bush has twin boys,” or “Medicare is a program run by the U.S. federal government to pay for old people’s health care.” Participants also saw general conspiracy statements, such as “The Apollo moon landings never happened and were staged in a Hollywood film studio.” These were included to determine whether our participants were apt to implicitly endorse all types of conspiracies, or only those that are partisan in nature.

### Analysis

**Angle profiles.** For purposes of trajectory movement visualization, we converted all response trajectories so the final target response (either “FALSE” or “TRUE”) is as if participants were moving to the right side of their screens and the competitor response is on the opposite side. The  $x,y$  coordinates of the trajectory movements were then linearly interpolated to be scaled within 101 time steps. We then converted each  $x,y$  time step to an angle that reflects where a movement is relative to the  $y$ -axis, such that angle values above zero capture movement toward the target, with higher values indicating a more direct path to the target. Conversely, angle values below zero capture a more direct path to the competitor response. One advantage of this visualization is that movements along the  $XY$  plane are integrated into a single measure.

**Trajectory variables.** The  $x,y$  movement trajectories also allow for a number of dependent variables to be generated. Although dozens of variables can be extracted, we focus on two that are representative of the fine-grained deviation and timing properties of most interest. The first variable, *area under the curve*, uses a trapezoidal approximation to compute the area formed by the trajectory (or curve) as it moves from its point of origin to where it ends at the target response. A greater arc toward the opposing option (due to attraction toward the competitor) will result in a greater value for *area under the curve*. The second variable, *in motion*, is the amount of time it takes participants to move from right outside the initial calibration circle to their final response choice. This measure captures the duration of a response and is a proxy of response difficulty.

To evaluate these measures, we use separate mixed-effects model based on the R statistical package *lme4*. For each model, the fixed-effects predictors include the centered and contrast coded factors: Target Response (TRUE and FALSE) and Statement Types (General knowledge, Right-wing, Left-wing, and General conspiracy). These were entered as main effects as well as in interaction. The appropriateness of considering the interaction was determined by likelihood ratio tests between models with and without the interaction term. The random effects structure for all models included random slopes for subjects and by-subject random slopes for statement types. These were determined as necessary through likelihood ratio tests of models with increasing fixed-effect structure complexity. For both models we report coefficients of the predictors, their standard error, and derive  $p$ -values from the

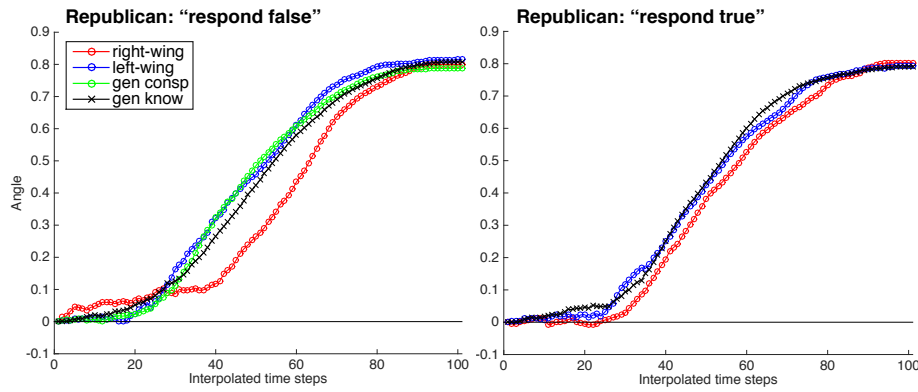


Figure 1: Angle profiles for Republicans. For “respond false” (left panel), the least direct path to target is seen with right-wing conspiracy responses about Barack Obama (red), as compared to left-wing conspiracy responses (blue), and general knowledge (“gen know;” black) and general conspiracy baseline (“gen consp;” green). For “respond true” (right panel), a similar pattern is not evident.

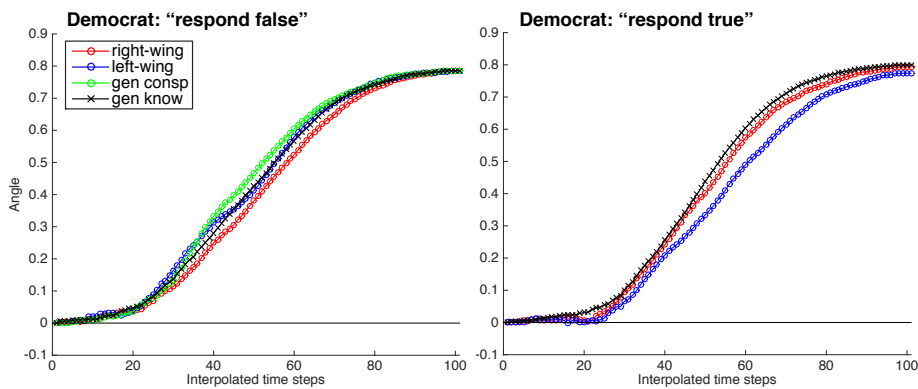


Figure 2: Angle profiles for Democrats. For “respond true” (right panel), the least direct path to target is seen with left-wing conspiracy responses about George W. Bush (blue), as compared to right-wing conspiracy responses (red) and general knowledge baseline (“gen know;” black). For “respond false” (left panel), the reverse pattern for left-wing angle movement is seen, as compared to right-wing responses.

*t*-values for each of the factors in the model.

## Results

### Republicans

**Angle profiles for statement types.** Starting with “respond false” responses, Figure 1 shows that the angle toward the target is more direct throughout response movements (e.g., higher sustained angle values) for the general knowledge, general conspiracy, and left-wing statement items compared to the right-wing statement items (left plot). Indeed, for the entire length of the “respond false” right-wing statements, from the earliest moments of processing, the movements show a less direct approach, suggesting competition from the opposing response option (e.g., implicitly responding “TRUE”). This pattern is also somewhat present in the explicit “respond true” responses, but to a lesser extent.

**Trajectory variables.** For both trajectory variables, the interaction between Response Type and Statement Type was significant (see Table 2 “target:type” column). Next, we conducted planned comparisons, evaluating right- and left-wing implicit bias statements and general conspiracy statements against the comparison group of general knowledge state-

ments. For the “respond false” responses, both variables show statistically significant evidence for right-wing implicit bias (see Table 2 for statistical reporting of results and Table 3 for means and SE). When Republicans responded to statements rejecting conspiratorial statements about Barack Obama (where the bias is to accept), their movements deviated more toward the “TRUE” option (to accept) compared to general knowledge items, and took longer to do so - as compared to general knowledge statements. Moreover, when Republicans responded to statements rejecting conspiratorial statements about George W. Bush (e.g., left-wing implicit bias), their movements avoided the “TRUE” option to a greater degree and were much faster compared to general knowledge statements. Doing so was equivalent to their responses to general conspiracy statements, which showed the least evidence of response competition overall.

Next, we conducted additional planned comparisons, now between the right- and left-wing implicit bias statements. As expected, there is greater evidence of increased deviation and extended motion times for right-wing implicit bias statements compared to the left-wing statements.

Conversely, for the “respond true” responses, the results were not as pronounced. We found no evidence of implicit

Table 2: Results of mixed-effects models for trajectory variables from Republicans and Democrats. Cells include coefficients, their standard errors (in parentheses), and level of significance estimates for planned comparison tests.

Republicans		respond false				respond true		
	target:type	right-wing	left-wing	gen consp	right vs left	right-wing	left-wing	right vs left
Area under curve (pixels)	$\chi^2(2)=6.630^*$	440.049* (189.784)	-344.319** (133.271)	-347.843** (112.724)	814.109*** (222.299)	-	-	-
In motion (ms)	$\chi^2(2)=13.359^{**}$	123.615*** (35.010)	-89.746*** (22.744)	-74.188*** (19.167)	218.237*** (41.341)	128.02*** (36.038)	-	99.775* (41.906)
Democrats		respond false				respond true		
Area under curve (pixels)	$\chi^2(2)=28.069^{***}$	-	-184.03* (94.299)	-302.08*** (72.696)	301.602* (130.672)	-	601.465*** (138.321)	-507.35*** (147.555)
In motion (ms)	$\chi^2(2)=38.285^{***}$	-	-33.117* (16.469)	-72.522*** (12.787)	64.015** (22.219)	48.174** (16.035)	119.294*** (20.176)	-71.12*** (23.633)

Note: \* p < 0.05, \*\* p < .01, \*\*\* p < .001

Table 3: Means and standard errors (in parentheses) across statement types for trajectory variables (Republicans and Democrats).

Republicans		respond false				respond true		
		right-wing	left-wing	gen consp	gen know	right-wing	left-wing	gen know
Area under curve (pixels)		1533.102 (186.544)	684.664 (83.868)	673.093 (67.761)	1028.468 (71.233)	1255.662 (160.666)	1052.929 (143.260)	986.017 (70.326)
In motion (ms)		711.916 (37.062)	487.332 (15.416)	503.547 (14.049)	579.419 (12.183)	690.524 (34.549)	588.015 (22.649)	559.815 (11.844)
Democrats		respond false				respond true		
Area under curve (pixels)		1122.208 (101.407)	846.895 (74.640)	720.084 (46.867)	1036.402 (44.308)	1034.111 (77.980)	1497.033 (122.937)	957.539 (40.917)
In motion (ms)		602.276 (15.775)	547.542 (13.937)	505.997 (8.868)	585.946 (7.860)	607.618 (14.406)	675.690 (18.981)	564.030 (7.384)

belief competition in terms of *area under the curve*; however, responses to right-wing implicit bias statements were in motion longer as compared to general knowledge statements and left-wing implicit bias statements.

## Democrats

**Angle profiles for statement types.** An opposite pattern from the Republican responders is seen in the angle profiles of Democratic responders. Figure 2 shows that for the entire length of the “respond true” left-wing statements, the associated movements take a less direct approach (lower angle values) compared to right-wing statements or general knowledge items (right plot). This suggests competition from the opposing response option, which is to implicitly respond false when accepting a left-wing statement as true. A similar pattern is not present in the “respond false” responses (left plot).

**Trajectory variables.** For both trajectory variables, the interaction between Response Type and Statement Type was significant. Beginning with respond true responses, where, based on inspection of the angle profiles, implicit left-wing partisan bias was most pronounced, we conducted planned comparisons of statement types against general knowledge items. Both variables confirmed statistically significant evidence of left-wing implicit bias (see Table 2 and Table 3). When Democrats accepted seemingly positive, but veiled conspiratorial statements about George W. Bush (where the bias is to reject the positive connotation), their movements de-

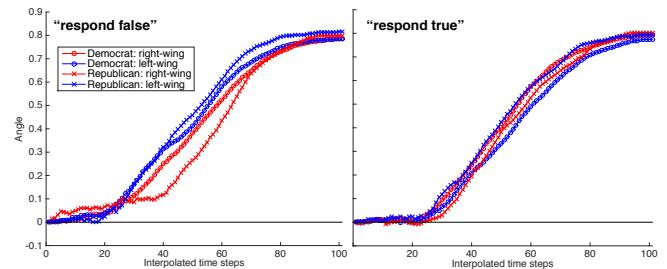


Figure 3: Republican and Democratic angle profiles for implicit bias statements, compared side-by-side.

viated more toward the “FALSE” option (to reject) and took longer to do so, as compared to general knowledge items. However, for *in motion*, Democrats also showed longer movements times to accept seemingly positive, but veiled conspiratorial statements about Barack Obama. Nevertheless, when comparing these response times *in motion* against those involving Bush, they were in motion for much less time.

For the respond false statements, a particularly unexpected finding occurred. When rejecting conspiratorial statements about George W. Bush, where we predicted left-wing implicit bias to be exhibited in movements toward the “TRUE” option, trajectory movements instead deviated away from this option and were much faster in motion time as compared to general knowledge statements. Moreover, when directly comparing left-wing implicit bias responses against right-wing responses

(involving Obama), the left-wing bias statements were still responded to with faster and less deviated movements, similar to the Republican movements. This can be seen in Figure 3 (left plot) with the more direct approach to the target occurring for Republican and Democrat statements about Bush.

## Conclusion

Implicit partisan biases were revealed for both Republicans and Democrats as a function of statement type. However, this bias depended greatly on whether target responses were to “respond false” or “respond true.” For Republicans, the most pronounced biases occurred while rejecting statements that involved a conspicuous and negative statement about Barack Obama (right-wing items; see Figure 3, left plot). As participants rejected these statements, ostensibly responding with no partisan bias, their movements told another story. This result contrasts with Democrats who showed minimal difficulty while rejecting conspicuous and negative statements about George W. Bush. Indeed, doing so appears to be even easier for them as compared to rejecting equivalent statements about Barack Obama.

Does this mean that Democrats are without bias, or even holding an implicit bias against Obama? This conclusion is challenged when examining Democrats trajectory movements when accepting positive statements about Bush. In these cases, a veiled conspiracy acts as a response competitor, and an implicit partisan bias is now exhibited for Democrats (left-wing items; see Figure 3, right plot). One possible interpretation of this discrepancy is that they are exhibiting a self-presentation bias, whereby Democrats are more prone to distance themselves from obvious and negative conspiratorial statements, particularly when the conspiracy is concerned with an opposing political party. As a result, we see facilitated responding in rejecting statements that cast George W. Bush in a bad light, which even supersedes the rejection of negative conspiracies concerning their own political party. This “moral high ground” gives way once the negative implications of the conspiratorial statements becomes more subtle, as is the case with the inconspicuous, veiled positive statements about Bush. In comparison, the Republicans in our sample do not appear to share this mindset. The greatest implicit partisan bias were overwhelming expressed for the conspicuous negative statements, but only for the president of the opposing political party.

Lastly, concerning the issue of whether Republicans or Democrats are more likely to avoid response options that are a threat to their worldview - quite literally exhibited in arm movements *away* from a visually displayed “TRUE” option when rejecting conspiratorial statements about their own party - the above results suggest Republicans are more prone to do so. Indeed, when compared to Democrats, the arc of their movements were reduced by an area of 437.544 pixels (confirmed as statistically significant in a follow-up mixed effects test  $B=445.271$ ,  $SE = 165.311$ ,  $p=0.007$ ).

The differences that emerged between Republicans and

Democrats are undoubtedly driven by a multitude of dispositional and situational factors. If only concerned with the dispositional, it may be tempting to conclude, for example, that Democratic responders are more susceptible to self-presentation biases, but less so to inhibition-based avoidance. While this may be true, the current data was also collected during a period when a Democratic president was in power. If the power structure had been reversed, we may have seen Democratic responses that are closer to our current set of Republicans. Nevertheless, action dynamic analytics will continue being a powerful method for teasing apart these fine-grained differences in future research.

## References

- Burdein, I., Lodge, M., & Taber, C. (2006). Experiments on the automaticity of political beliefs and attitudes. *Political Psychology*, 27, 359–371.
- Chait, J. (2011, June). The asymmetry of electoral conspiracy theories. *New Republic*. Retrieved from <http://www.newrepublic.com/blog/jonathan-chait/89466/the-asymmetry-electoral-conspiracy-theories>
- Duran, N. D., Dale, R., & McNamara, D. S. (2010). The action dynamics of overcoming the truth. *Psychonomic Bulletin & Review*, 17, 486–491.
- Freeman, J., Dale, R., & Farmer, T. (2011). Hand in motion reveals mind in motion. *Frontiers in Psychology*, 2, 59.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102, 4–27.
- Harris Interactive. (2010, March). “Wingnuts” and President Obama (Tech. Rep.). Retrieved from [http://www.harrisinteractive.com/vault/Harris\\_Interactive\\_Poll\\_Politics\\_Wingnuts\\_2010\\_03.pdf](http://www.harrisinteractive.com/vault/Harris_Interactive_Poll_Politics_Wingnuts_2010_03.pdf)
- Krugman, P. (2013, September). The wonk gap. *The New York Times*. Retrieved from <http://www.nytimes.com/2013/09/09/opinion/krugman-the-wonk-gap.html>
- Lodge, M., & Taber, C. S. (2005). The automaticity of affect for political leaders, groups, and issues: An experimental test of the hot cognition hypothesis. *Political Psychology*, 26, 455–482.
- Nam, H. H., Jost, J. T., & Van Bavel, J. J. (2013). Not for all the tea in China! Political ideology and the avoidance of dissonance-arousing situations. *PloS One*, 8, e59837.
- Nosek, B. A. (2007). Understanding the individual implicitly and explicitly. *International Journal of Psychology*, 42, 184–188.
- Oliver, J. E., & Wood, T. J. (2014). Conspiracy theories and the paranoid style(s) of mass opinion. *American Journal of Political Science*, 58, 952–966.
- Pew Research Center. (2014, June). *Political polarization in the American public* (Survey report). Retrieved from <http://www.people-press.org/files/2014/06/6-12-2014-Political-Polarization-Release.pdf>
- Sunstein, C. R., & Vermeule, A. (2009). Conspiracy theories: Causes and cures. *Journal of Political Philosophy*, 17, 202–227.