

Political Partisanship Alters the Causality Implicit in Verb Meaning

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Laura Niemi¹ , Gina Roussos², and Liane Young³

Abstract

This research adapted the implicit causality task from psycholinguistics to investigate the politics of attribution during the 2016 U.S. Presidential Election. Results showed that both Hillary Clinton and Donald Trump supporters judged their preferred candidate as causal for positive events and their nonpreferred candidate as causal for negative events, indicating an important role for political candidate support in causal attribution, alongside lexical semantics. The findings demonstrate the social psychological utility of the implicit causality task and contribute to our understanding of broadly shared and largely untracked extralinguistic influences on causal attribution.

Keywords

social cognition, cognition, causality, psycholinguistics, political affiliation

People achieve fluid conversation by establishing a shared understanding of causality (Pickering & Garrod, 2014). In the context of conflict, however, conversation is often anything but fluid, as competitive constructions of events unfold (Taylor, 2014). For example, hearing “Donald Trump interrupted Hillary Clinton,” Trump supporters might be more likely to consider this event as caused by something having to do with Clinton. In contrast, Clinton supporters might be more likely to consider the event as caused by

¹University of Toronto, Toronto, Ontario, Canada

²Yale University, New Haven, CT, USA

³Boston College, Chestnut Hill, MA, USA

Corresponding Author:

Laura Niemi, Munk School of Global Affairs and Public Policy, University of Toronto, 315 Bloor Street West, Toronto, Ontario M5S 1W7, Canada.

Email: laura.niemi@utoronto.ca

something having to do with Trump. Prior work indicates that the causal structure of events can be shaped by social psychological factors—such as people’s moral values and the gender of the subject and object of the sentence (Alicke, Mandel, Hilton, Gerstenberg, & Lagnado, 2015; Ferstl, Garnham, & Manouilidou, 2011; Fiedler & Krüger, 2014; LaFrance, Brownell, & Hahn, 1997; Rudolph & Forsterling, 1997).

How social influences on causal structures are conveyed in language, however, is not clear. During conflicts, people are motivated to shift their attributions of causation both to avoid conflict escalation and also for strategic manipulation (Holtgraves, 2002; Taylor, 2014). Moreover, psycholinguists have pointed out, verbs themselves—lexical semantics—will influence causal attributions during language use. When clustered into classes by their semantic core meaning (e.g., *confront*; *judgment*; Kipper-Schuler, 2006), verbs tend to compel similar causal selections of the sentential subject or object, a tendency referred to as their implicit causal bias, measured by the implicit causality (IC) task (Garvey & Caramazza, 1974; Hartshorne, 2014; Hartshorne & Snedeker, 2012). In the IC task, participants are presented with a series of short prompts in the form of “[*Subject name (e.g., Max)*] [*verbed (e.g., thanked)*] [*Object name (e.g., Mary)*] because . . .”; for each prompt, participants select between pronouns referring to the subject or object: “*he*” or “*she*” (gender order is counterbalanced).¹ Research using the IC task has allowed researchers to infer that participants map causation for many broad categories of events to either the sentential subject or object. Recently, researchers have begun to demonstrate that the IC task, typically used to extract verbs’ causal biases, is also useful as an efficient social psychological instrument.

In work using the IC task, the group-supporting “binding” values of loyalty, obedience, and preservation of purity (Graham et al., 2011) were found to be reliably associated with a tendency to select the sentence *object* as the causal source for harm events (e.g., selecting the referent to Person B when asked, “Person A killed Person B because . . .”) (Niemi, Hartshorne, Gerstenberg, & Young, 2016; Niemi, Hartshorne, Gerstenberg, Stanley, & Young, 2019). This recent finding validates and extends work in social psychology linking binding values to stigmatizing judgments of victims as “contaminated” and to victim-blaming (Niemi & Young, 2016). The finding also points to a possible mechanism underlying these effects in causal thinking—people endorsing binding values may select the *object* as the cause for harm verbs because of how they perceive the causal structure of harm.

Illuminating how social influences penetrate causal structures in mind and language is a challenge, but using consistent methodology helps. To more fully understand how social factors and social identities relate to causal structures and causal language, the present work leverages an instrument previously found to be successful at revealing these relationships. Specifically, we build on and extend recent individual differences findings using the IC task by investigating the role of political partisanship. The IC task is particularly apt for this investigation. Its dual, forced-choice format fits with the two-party/candidate system that is often the norm in political contexts as well as its adversarial, competitive nature. Finally, the IC task is a compact, efficient instrument for measuring causal judgment; social psychologists in

many subareas may find it to be desirable for future work as a simple and subtle instrument.

In the current work, we examined people's support for Hillary Clinton or Donald Trump during the 2016 U.S. Presidential Election alongside their IC task selections for negative and positive events. If they attribute negative events to the opponent and positive events to the preferred candidate, this would indicate that the IC task has utility as a social psychological instrument that straightforwardly reveals people's zeal and hostility toward *specific* targets—in addition to its capacity to reveal individual differences in the causal structure of harm. Finding symmetrical opposed causal attributions in a political context would be consistent with the cognitive–linguistic features of conflict (Pickering & Garrod, 2014; Taylor, 2014) and prior work in social psychology showing that people favor the ingroup over the outgroup, for example, in causal attributions and in the withholding of negative character descriptors (e.g., Alicke et al., 2015; Maass, Ceccarelli, & Rudin, 1996). On the one hand, it might seem unsurprising that people represent the causal structure of political events in completely opposite ways, favoring one candidate and disfavoring the other—that's politics! On the other hand, the implications are unsettling—compromise and smooth discourse will be hard to ever achieve without a shared notion of causation.

During the 2016 U.S. Presidential Election, each side saw the other as *unusually* divisive: a 2016 Pew Research Centre survey showed that more than half of *both* Democrat and Republican respondents considered the opposing political party as more close-minded than the average American (Fingerhut, 2017). The current research, carried out before and after the 2016 Election, examined how participants attributed events involving the dyad Donald Trump and Hillary Clinton, including confrontation and hostile discourse (e.g., “mocking” and “interrupting”). Trump and Clinton supporters took the IC task in a study conducted in the months before the 2016 U.S. Presidential Election and in a replication dataset collected in the days following election day. We hypothesized an interaction between political affiliation and whether the event was positive or negative for causal attributions, such that Trump supporters would be more likely to judge Clinton as the cause of negative events and Trump as the cause of positive events, and the opposite for Clinton supporters.

Method

Participants

For Study 1, Amazon Mechanical Turk workers older than 18 years and with United States IP addresses were recruited online during the first 2 weeks of October 2016. After exclusions,² the final sample was 680. This sample size approximates those in which individual differences were previously found to factor into IC responses for people in different groups (Niemi et al., 2016). Of the 680 participants (56% female, Age_{mean} = 37 years), 65% planned to vote for Hillary Clinton and 35% planned to vote for Donald Trump.³

Table 1. Verbs and Sets in the Implicit Causality Task.

	Set A verbs	Set B verbs
Positive verbs	complimented	forgave
	praised	thanked
	inspired	impressed
	interested	comforted
Negative verbs	interrupted	criticized
	attacked	mocked
	disgusted	frustrated
	intimidated	annoyed
	approached	ran against
	confronted	took on
	crushed	squashed
	outdid	beat

Procedure and Materials

This study protocol was approved by an institutional review board and was carried out in accordance with the APA Code of Ethics. After consenting, participants were asked about their political preferences, and then completed the IC task and a demographics survey. To gauge voting intentions, participants were asked: “Who are you voting for in the upcoming election?” with the options Donald Trump, Hillary Clinton, other, or not voting. In the IC task, participants were presented with 24 prompts in the form of either “Trump {verbed} Clinton because . . .” or “Clinton {verbed} Trump because . . .”; for each prompt, participants were asked to predict the next word in the sentence, with the options “he” or “she.” Responses were coded to indicate that the pronoun selected referred to the object (1) or the subject (0) of the sentence. Verb selection focused on achieving a compact set of verbs (Table 1) conveying negativity in a political context (which included negative discourse interactions and confrontation), and positive interactions that could reasonably occur in a political context. The set of 24 verbs (8 positive, 16 negative) was divided to make two groups, Set A and Set B. Participants first viewed one of these groups (either Set A or Set B) in the format “Clinton [verb]ed Trump,” or “Trump [verb]ed Clinton.” The second group (the yet unseen other Set A or Set B), used the yet unseen other prompt format (e.g., “Clinton [verb]ed Trump,” if a participant first saw “Trump [verb]ed Clinton”). The prompt format order and Set order were randomly assigned. Within each Set, the individual verbs were presented in randomized order.

The demographic information collected included level of education, age, gender (male, female, or other), ethnicity (open-response), religiosity on a scale of 1 = *not at all religious* to 7 = *very religious*, and political ideology on a scale of 1 = *very conservative* to 7 = *very liberal*.

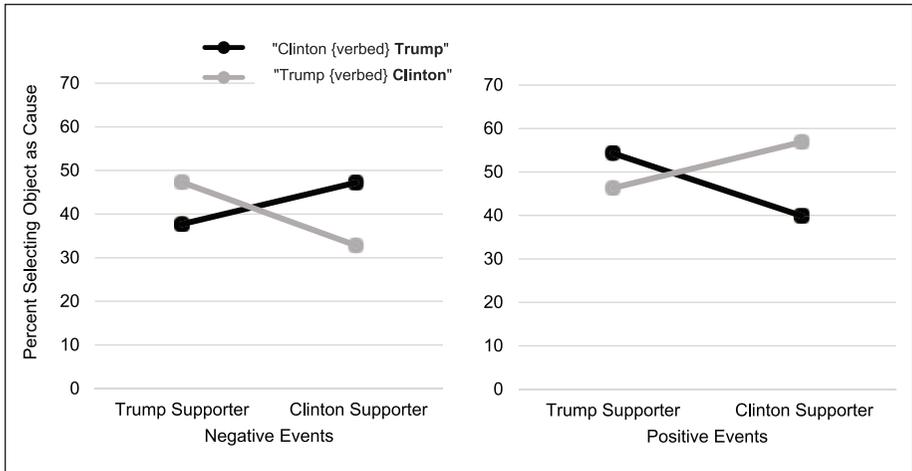


Figure 1. Percentage of participants who selected the object of the sentence as the cause in the implicit causality task for “Clinton {verbed} Trump” events (black) and “Trump {verbed} Clinton” events (gray), by political support (Trump vs. Clinton). Left panel indicates negative events and right panel indicates positive events.

Results

Statistical analyses were completed using R software version 3.5.0. To examine causal attributions (1 = object vs. 0 = subject), the analyses used the lme4 software package (Bates, Mächler, Bolker, & Walker, 2015) to test a generalized linear mixed-effects regression model (link = “logit”), which included event type (1 = positive vs. 0 = negative) and political affiliation (1 = Trump supporter vs. 0 = Clinton supporter), as fixed predictors, and participant ID and verb, as random effects with random intercepts only, at Step 1. The interaction between event type and political affiliation was added at Step 2. Because the dependent variable, selection of the object or subject as the cause of the event, was binary, we used Wald to compute significance and 95% CIs around beta-estimates. Because we expected responses to differ based on who was in the subject or object position, this model was run separately for “Clinton {verbed} Trump” and for “Trump {verbed} Clinton” prompts; we broke down interactions by event type, using the procedures recommended by Aiken, West, and Reno (1991).

Clinton {verbed} Trump

We first analyzed participants’ responses for “Clinton {verbed} Trump because” prompts; selections of Trump (the object) as the cause were coded 1; selections of Clinton (the subject) were coded 0 (see Figure 1). In Step 1 of the regression model, there were no significant main effects of either event type, $b = -0.03$, standard error (SE) = 0.47, $Z = -0.07$, $p = .945$, 95% confidence interval (CI) = $[-0.95, 0.89]$, or

political affiliation, $b = -0.09$, $SE = 0.07$, $Z = -1.27$, $p = .204$, 95% CI = [-0.22, 0.05]. At Step 2, as predicted, there was a significant interaction between event type and political affiliation, $b = 1.32$, $SE = 0.12$, $Z = 11.10$, $p < .001$, 95% CI = [1.09, 1.55]. For positive events, Trump supporters were more likely than Clinton supporters to identify Trump as the causal factor, $b = 0.80$, $SE = 0.11$, $Z = 7.55$, $p < .001$, 95% CI = [0.59, 1.01]. For negative events, Trump supporters were less likely than Clinton supporters to identify Trump as the causal factor, $b = -0.52$, $SE = 0.08$, $Z = -6.54$, $p < .001$, 95% CI = [-0.67, -0.36]. Attributions for negative versus positive events did not significantly differ among Trump supporters, $b = 0.82$, $SE = 0.49$, $Z = 1.68$, $p = .093$, 95% CI = [-0.14, 1.78]; or Clinton supporters, $b = -0.50$, $SE = 0.48$, $Z = -1.03$, $p = .302$, 95% CI = [-1.44, 0.45].

Trump {verbed} Clinton

We next analyzed participants' responses for "Trump {verbed} Clinton because" prompts; selections of Clinton (the object) as the cause were coded 1; selection of Trump (the subject) were coded 0 (see Figure 1). At Step 1 of the model, there was no effect of event type, $b = 0.72$, $SE = 0.41$, $Z = 1.79$, $p = .074$, 95% CI = [-0.07, 1.52]. Differing from the Clinton {verbed} Trump condition, there was a significant effect of political affiliation, $b = 0.32$, $SE = 0.06$, $Z = 4.93$, $p < .001$, 95% CI = [0.19, 0.44], such that regardless of event type, Trump supporters were significantly more likely than Clinton supporters to indicate Clinton as the causal factor. This effect was qualified by the predicted significant interaction between event type and political affiliation, $b = -1.30$, $SE = 0.11$, $Z = -11.37$, $p < .001$, 95% CI = [-1.52, -1.07], which we broke down by event type. Analogous to the Clinton {verbed} Trump condition, for positive events, Trump supporters were less likely than Clinton supporters to indicate Clinton as the causal factor, $b = -0.55$, $SE = 0.10$, $Z = -5.47$, $p < .001$, 95% CI = [-0.75, -0.35]; and, for negative events, Trump supporters were more likely than Clinton supporters to identify Clinton as the cause, $b = 0.75$, $SE = 0.08$, $Z = 9.89$, $p < .001$, 95% CI = [0.60, 0.90]. Trump supporters did not attribute negative events to Clinton significantly differently from positive events, $b = -0.10$, $SE = 0.42$, $Z = -0.24$, $p = .808$, 95% CI = [-0.93, 0.72]. In contrast, Clinton supporters were significantly less likely to identify Clinton as the cause if the event were negative compared with positive, $b = 1.20$, $SE = 0.42$, $Z = -2.87$, $p = .004$, 95% CI = [0.38, 2.01].

Discussion

The present research demonstrates that participants' preferences for Hillary Clinton versus Donald Trump during the 2016 U.S. Presidential Election influenced their causal judgments of events involving the two candidates. As hypothesized, for positive events (e.g., "thanked," "interested," "praised"), both Trump and Clinton supporters were more likely to choose their preferred candidate as the causal factor, regardless of whether that candidate occupied the sentence subject or object position. For negative events (e.g., "mocked," "attacked," "criticized"), Trump and Clinton supporters

were more likely to choose their nonpreferred candidate as the causal factor, again regardless of that candidate's position in the sentence. Comparing causal attributions across event type, in general, Trump and Clinton supporters' causal attributions for positive versus negative events did not differ.

The finding that participants were generally biased to see their preferred candidate as the cause of positive events and the nonpreferred candidate as the cause of negative events is striking from a psycholinguistic standpoint—political bias competed with well-documented lexical biases. For example, many of the verbs we used have strong causal biases toward the object (e.g., verbs from the *judgment* verb class, “thanked,” “praised,” “complimented,” “forgave”; Ferstl et al., 2011; Hartshorne, 2014). It is also notable that effects extended to judging the opponent as the cause when they were, for example, “annoyed” and “attacked”; typically subject-biased verbs (Ferstl et al., 2011), representing, in effect, subtle “victim-blaming.” Indeed, some previous work suggests that blaming the victim is more likely among political conservatives than political liberals (Lambert & Raichle, 2000; cf. Niemi & Young, 2016). Importantly, the present data suggest that in a polarizing environment, shifting causation to protect one's preferred candidate is as likely for liberals as it is for conservatives.

The finding that Trump and Clinton supporters attributed positive and negative events to their preferred and nonpreferred candidates roughly equivalently may be due to the commonly held view that politicians are dishonest (Gallup, 2017). Participants may have understood the nonpreferred candidate as having not only malicious intentions for negative acts, but also disingenuous reasons for positive acts. Indeed, news media characterized both Trump and Clinton this way (Greenberg, 2016). Future research might test this hypothesis by eliciting and coding open-ended responses to IC prompts for whether event valence matches reasoning valence (i.e., a positive reason for a positive act and vice-versa).

From a practical perspective, the present work contributes to an understanding of social-cognitive-linguistic factors at play in the 2016 U.S. Presidential Election (Azevedo, Jost, & Rothmund, 2017; Bock, Byrd-Craven, & Burkley, 2017; Choma & Hanoch, 2017) by highlighting how support for presidential candidates likely involved distinct causal perceptions about events involving the candidates, such as debates. Moreover, the findings show that the IC task is a methodologically lean way to study how political alliances shape causal attributions for political events. Other future work might explore the IC task as an efficient measure of ingroup love (i.e., attributing positive events to the ingroup) versus outgroup hate (i.e., attributing negative events to the outgroup) more generally.

Ultimately, we propose that the observed pattern of responses reflects participants' earnest investment in a fraught political contest. Their competitive constructions of events, and nonmatching causal attributions effectively convey their support for their preferred candidate. What are the chances for alignment of causal event models? People can shift their causal understanding of events, given more context or finer-grained semantic information (Fiedler & Krüger, 2014; Mayrhofer & Waldmann, 2015; Niemi et al., 2016; Niemi et al., 2019; Rudolph & Forsterling, 1997). Pessimistically, however, the nature of political allegiances and the fact that both sides

reliably demonstrated competitive attributions suggest that people may resist consensus even given extra explanatory detail (Rubini, Menegatti, & Moscatelli, 2014). In some cases, defaulting to an interpretation of causation suggested by context-free verb semantics would mean neglecting the political context and aligning casual language with the opposition. Judgments of, for example, one's preferred candidate as the cause of a harmful event, would likely be resisted as not just inaccurate, but also morally wrong.

Indeed, the causal selections participants make are morally tinged; they reflect their values and have high stakes. While moral judgments are effectively conveyed in language through adjectives that describe character (e.g., *honest*; Fiedler & Krüger, 2014), people withhold explicit negative character labels for a number of reasons, for example, to protect the ingroup (linguistic ingroup bias; Maass et al., 1996), to reach a politically mixed audience (Rubini et al., 2014), out of politeness norms (Holtgraves, 2002). Moral judgment is often less than overt. For example, moral values predict how people interpret the causal structure of harm (Niemi et al., 2016; Niemi et al., 2019). Relevant to the present political context, overt attacks of political opponents are typically considered inappropriate (Carraro, Gawronski, Castelli, 2010; Nau & Stewart, 2014). Critically, the present results represent evidence of a language-based attribution process that is well-suited to support political partisanship. By overriding the causality implicit in verb meaning and reinterpreting the causal structures of events to favor the preferred candidate (and disfavor the other), language can serve as a covert vehicle for moral judgments of praise and blame, allowing people to uphold political allegiances while evading the costs of overtly aggressive speech (Fiedler & Krüger, 2014; Taylor, 2014).

We note that not all politically invested people find explicit negative labeling to be costly and aversive. Nau and Stewart (2014) found that Republicans in their sample did not consider putatively Republican politicians delivering messages with aggressive linguistic features to be rude or tactless. Nevertheless, we found symmetrical IC biases, across the political divide, in 2016. Whether ongoing changes in the rhetorical landscape will have asymmetrical effects on implicit causal attributions in the coming political contests is a topic for future investigation.

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ORCID iD

Laura Niemi  <https://orcid.org/0000-0002-1541-5810>

Notes

1. A nongendered version of the IC task re-presents the subject name and object name as the two options for participants to choose between after the prompt.
2. Excluded participants reported they did not plan to vote for either Hillary Clinton or Donald Trump in the 2016 United States Presidential Election ($N = 189$), did not complete the primary measures of interest ($N = 133$), or indicated disagreement or only somewhat agreement with the statement “The United States is geographically north of Central America” ($N = 150$)—i.e., failed the attention check.
3. Datasets and code for the study described here and the replication study, additional analyses, and descriptions of other measures are available online at the corresponding author’s repository for this project: <https://github.com/lauraniemphd/PPAC>.

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Author Biographies

Laura Niemi (PhD Boston College) is an assistant professor of social psychology and global justice at the Munk School of Global Affairs & Public Policy at the University of Toronto. She studies conflict and well-being with methods from social psychology, cognitive science and psycholinguistics.

Gina Roussos (PhD Yale University) is a postdoctoral researcher in the Intergroup Relations Lab at Yale University's Department of Psychology. Her research explores the effects of intergroup bias on beliefs, attitudes, and behavior, and how these biases can be mitigated through novel media interventions.

Liane Young (PhD Harvard University) is associate professor in the Department of Psychology at Boston College in Chestnut Hill, MA. Her work uses behavioral and neuroscience methods to investigate moral decision making and social behavior.