NEGATIVE AFFECTIVE LANGUAGE IN POLITICS

Stephen M. Utych
Ph.D. Student
Department of Political Science
Vanderbilt University
stephen.m.utych@vanderbilt.edu

Prepared for presentation at the 35th annual meeting of the International Society of Political Psychology, July 6-9th, 2012, Chicago.
Abstract

In this paper, I examine how the use of negative affective language, or words that individuals have strong, pre-existing negative reactions towards, regardless of context, can influence evaluations of policies and politicians. Using the Affect Infusion Model (AIM), I believe that processing style influences how individuals use affect to guide these evaluations. In simpler processing tasks, individuals will use affect as a heuristic. This causes a misattribution of generalized negative affect onto a political target, leading to harsher evaluations of the target. Given that this processing style is simple, affective language should not impact how information is retrieved from or encoded in memory. When a processing task is more complex, I expect affective language to influence what times of information citizens draw on to make decisions. Further, I expect affective language to influence how new information is stored in memory: those who are exposed negative affective language, negative evaluations of politicians should persist more strongly in memory. I present evidence from two experiments that is supportive of these hypotheses.
“Persuasion may come through the hearers, when the speech stirs their emotions”

- Aristotle, *On rhetoric: a theory of civic discourse*

Since nearly the dawn of politics, politicians have made appeals to their constituents based not only on logic or reason, but also through emotions. While Aristotle considers these two factors, *logos*, or logic, and *pathos*, or emotion, to be direct appeals to reason or emotion (Aristotle 1991), I examine how politicians and the media can influence affective responses to politics in a more subtle way. Specifically, I am interested in the use of affective language, which I define as words that individuals are likely to have strong positive or negative reactions to regardless of context, such as “death” or “love.” In this paper, I argue that generalized mood can be induced by highly positive or negative words, and that this mood is used by individuals to inform their political evaluations. How information is processed also matters; when processing is simple, individuals should use affect solely as a heuristic to guide their judgments at the time, but when processing is more complex, affect will influence how information about political figures is stored in memory.

Are citizens basing their evaluations solely based on their perceptions of factual information, or do their affective states matter? If the answer, as I believe it is, is the latter, this brings to light important normative concerns for political scientists, and anyone interested in politics generally. Typically, the role of generalized affect in influencing decision making is examined as a diffuse mood created by something clearly irrelevant to politics, and often out of the control of political elites. However, affective language that is included with political information is not as plainly irrelevant, and can easily be manipulated by elites such as politicians and the mass media. If politicians can use language to create a mood that makes the
masses like them more, or their opponents less, this is problematic for democracy. Affective language is increasingly becoming relevant in political life, and it is important to determine what consequences this type of language has on mass political attitudes.

THE ROLE OF LANGUAGE IN POLITICS

The role of language in political rhetoric has been examined by scholars, and this is a literature I intend to expand upon by focusing on affective responses to language. Schlesinger (1974) dramatically notes, “we infer the spirit of the nation in great measure from the language” (p. 557). Conservative and liberal politicians tend to use different types of language, and speak about different things, in their public comments (Tetlock 1983). Incumbents and challengers also differ in the content of their language in an election context, with incumbents focusing more on optimism and commonality and challengers being more patriotic and ideological (Hart 2000). In inaugural addresses, presidents typically focus on rhetoric that refers to Americans as sharing both principles and dispositions (Beasley 2001). Context matters in how politicians speak: different types of political figures talk about different things. In this paper, I focus specifically on the consequences of the choice of language in political speech.

In studies of newer forms of media, political blogs were found to provide more emotionally driven content, especially in the comments section (Vatrapu et al. 2009). Analysis of the response to German elections on Twitter finds that a large amount of the messages posted about the parties competing in the election including positive or negative affective responses (Tumasjan et al. 2010). Even considering more traditional forms of media, front page articles in both major Canadian newspapers (Soroka et al. 2009) and the New York Times (Young and Soroka 2011) tend to have either a positive or negative tone. Young and Soroka (2011) find that, using automated content coding, approximately 50% of New York Times articles in their sample
are negative in tone, while approximately 25% are positive and only 25% are considered neutral. Certain issues, such as crime and foreign policy, tend to be more negative in tone, while environmental policy articles are more positive (Young and Soroka 2011). The use of violent political metaphors, or rhetoric that refers to politics as a fight or type of combat, is rather prevalent in political speech (Kalmoe 2011, 2012). Such violent political metaphors influence individuals who are high in trait aggression to both participate in politics (Kalmoe 2011) and support violent political action (Kalmoe 2012). While this work focuses on the outcomes of types of political language, the psychological processes underlying these outcomes are beyond the focus of the existing research. Here, I plan to offer a comprehensive view about how a particular type of language, affective language, can influence political attitudes, both directly and through its influence on information processing.

**HOW AFFECT INFLUENCES JUDGMENTS – THE AFFECT INFUSION MODEL**

Affective language should influence political decision making. When individuals are asked to arrive at an opinion about a political object, they will draw on the various considerations about that object they have in their minds (Zaller 1992). When individuals receive political information intertwined with affective language, this language should create a particular mood in them, giving them another consideration that seems relevant. The affect infusion model (AIM) specifies the conditions under which individuals adopt particular cognitive strategies, and how affect operates in these contexts (Forgas 1995). The AIM assumes two things about the nature of judgments: process mediation, which says that the influence of mood on judgment is dependent upon what processing strategy is used, and effort minimization, that individuals will adopt the simplest processing strategy that satisfies the requirements of the context of the judgment (Forgas 1995). Mood is likely to influence judgments and processing in circumstances in which
an open, constructive style of information processing is used (Fiedler 1991). Indeed, more complex or atypical processing tasks have been found to increase the influence of affect on judgments (Fiedler 1991, Forgas 1992). Considering these assumptions, one must consider what processing strategies are available, and which strategies would make affect infusion more or less likely to occur.

Occasionally, processing strategies can be adopted that minimize or eliminate the role of affect. When individuals have a crystalized attitude and can retrieve their response easily, or when they have motivations to reach a particular conclusion, affect will not be infused with their evaluation (Forgas 1995, Eich et al. 2008). Of particular interest are information processing strategies where affect infusion should occur, and how they differ. These strategies are a simple, low-effort strategy, heuristic processing, where affect is used to guide a quick judgment, and constructive processing, a deeper, more effortful processing style where affect influences the search for, and encoding of, information in memory.

Heuristic processing occurs when a target is simple or typical and the judgment is not highly personally relevant to an individual (Forgas 1995). Heuristic processing is not a deep processing style, and individuals using heuristic processing typically lack the motivation, resources, or both to engage in deeper processing (Schwarz and Clore 1983, Eich et al. 2008). This processing is still open and constructive, since individuals lack prior information on which to base their judgment, but they are still trying to arrive at a judgment with minimal effort (Forgas 1995, Paulhus and Lim 1994). In this situation, affective states can influence judgment. Individuals often think “how do I feel about this?” as a heuristic, and this heuristic serves to guide their judgment about the object (Schwarz and Clore 1988, Clore and Isbell 2001). Heuristic processing looks similar to affect as information (see Schwarz and Clore 1983), with
affective states guiding judgments through a misattribution of feelings. If an individual is able to adopt a heuristic processing style, considering the goal of effort minimization, it should be adopted over constructive processing. When heuristic processing is used, affective language should lead to increased mood congruence in judgment tasks. However, since individuals are not making much effort with regards to information processing, I expect that affect will not have many long term consequences for memory. Some judgment tasks, however, are not conducive to heuristic processing, and a constructive processing style must be adopted.

When the individuals are not able to use motivated or direct processing strategies, and when a task is demanding or complex, they use a constructive processing strategy (Forgas 1995). Constructive processing is the most effortful form of processing, and is “adopted only when simpler and less effortful processing strategies prove inadequate to the judgmental task” (Forgas 1995, p. 47). The AIM predicts that, when constructive processing is used, affect infusion and mood congruence should increase since the judgment requires more effortful and elaborate information processing (Forgas 1995, Eich et al. 2008). Affect influences substantive processing because individuals may selectively use certain information when making that judgment (Bower 1991, Forgas 1995). Since individuals retrieve information that is congruent with their current affective state (Bower 1981), this should create an even stronger influence of mood than when individuals use less effortful heuristic processing. Still, the effect of mood may be different: those who engage in less effortful processing should use their feelings only as a heuristic in the judgment. In constructive processing, decisions are not arrived at as easily. Mood can still bias the search for information in one’s memory, but given the more effortful cognitive processing, the use of mood as a heuristic for judgments could be muted. However, given the depth of information processing with this strategy, I expect that information will be encoded in memory.
more congruently with one’s current affective state. While affective language might influence quick judgments more strongly, this deeper processing style may have more long term consequences for politicians, since information about them will be encoded more negatively when negative affective language is used.

Previous research on effortful thinking suggests that this type of information processing leads to higher quality decision making. The elaboration likelihood model of information processing suggests individuals are motivated to make correct decisions, and that more effortful information processing leads to better decision making (Petty and Cacioppo 1981). Those who are high in need for cognition, and thus expected to be more effortful thinkers, do indeed search their memory for more issue-relevant information (Cacioppo et al. 1986), and have been shown to give more weight to strong, compared to weak, arguments than those who are low in need for cognition (Cacioppo, Petty and Morris 1983). However, later work finds that, even when effortful thinking is incentivized, individuals are still highly susceptible to external anchors (Epley and Gilovich 2005). Here, I make no judgment on the quality of decision making when constructive processing strategies are used. The AIM suggests that affect will bias information search, though this does not need to stand in conflict with previous work by Cacioppo, Petty and colleagues. An individual’s mood can simply lead them to believe that certain types of information in memory are more relevant to the current judgment task than others, or that certain types of information are more convincing than others.

Considering this, affect should influence judgments and behaviors differently depending on the processing style used. In heuristic processing, individuals make only a partial, or possibly no, search for more information in memory, while in constructive processing, individuals make an extensive and detailed search in memory (Forgas 1995). Negative affect, in particular, should
have distinct consequences for how information is processed under effortful processing. When in a negative mood, individuals engage in more effortful information processing (Isen 1984), with a higher focus on searching memory for external relevant information (Bless and Fiedler 2006). Negative affect improves both the coding and retrieval of information in memory (Forgas, Laham, and Vargas 2005; Forgas, Goldenberg, and Unkelbach 2008), and increased cognitive elaboration (Bless et al. 1990). Negative affect has distinct consequences for constructive information processing: individuals should better recall information and also recall more external information they deem relevant to the judgment at hand.

Affect has been shown to be influence judgment in many scenarios. Moods induced by various external means, including the weather, sporting events or films, have been shown to increase mood congruence in evaluations of one’s own life (Forgas and Bower 1987, Forgas and Moylan 1987, Schwarz and Clore 1983, Schwarz et al. 1987), and negative external events have been shown to decrease support for incumbent politicians (Achen and Bartels 2004, Healy, Malhotra and Mo 2010). Further, work on classical conditioning finds that priming subjects with images that have a positive or negative valence can influence evaluations of neutral objects (Olson and Fazio 2001). Priming individuals with a negative word, or with a photo of a politician individuals have a positive or negative existing evaluation of, can influence evaluations of other political candidates (Weinberger and Westen 2008). This research, however, often focuses on mood inductions that are artificial or out of control of political elites. Here, I extend these applications to examine the words used in political communication or rhetoric to determine whether something as simple as positive or negative language can influence attitudes.

**HOW AFFECTIVE LANGUAGE INFLUENCES POLITICAL JUDGMENTS**
Language and rhetoric are important parts of political life; not only does it matter what politicians and the media say about politics, but I argue it also matters how they say it. Considering the AIM framework\(^1\), I believe that the use of affective language in political communication could influence both political judgments and how political information is processed. I define affective language as the use of particular words that individuals have strong prior affective response towards. Using the affect infusion model, I believe that seeing affective words will trigger memories stored about these words. For example, seeing a political figure described as a “cancer” will activate negative thoughts one has stored about cancer, inducing a generalized negative mood\(^2\). Negative affective words, such as “cancer” or “loneliness,” are words are often considered “bad,” regardless of the context, and individuals mostly have negative responses to these words (Bradley and Lang 1999). The inclusion of such affective language in political speech, such as a news article, campaign advertisement, or a politician’s public speech, will help to facilitate the framing effect of the message. Framing can influence attitudes by portraying a political object in a positive or negative light (Chong and Druckman 2007a), and using affective language while framing should help to facilitate the framing effects by giving people more seemingly relevant information to make their decision. Depending on the processing style, this change in relevant information will happen either directly through affect or indirectly through how new information is encoded in memory and old information is retrieved in memory to influence decision making (Forgas 1995). This research will provide a new, more

---

\(^1\) I use a valence model for affect rather than examining discrete emotions. This valence model focuses on simple negative or positive reactions, rather than a discrete emotional response. Models of affect and its influence on information processing focus on a diffuse mood, rather than a discrete response to a particular object (Bower 1981, Schwarz and Clore 1983, Forgas 1995, Eich et al. 2008). This is an important distinction; given that I argue an affective response is created by language, a targeted emotional response would be directed at words rather than the political target.

\(^2\) For words such as cancer, I expect that individuals generally have negative responses to the word, though it’s possible that some individuals could respond more or less negatively than others. The Affective Norms for English Words (ANEW) (Bradley and Lang 1999) database rates words to give the average valence response to the word, suggesting that such average affective responses should be expected.
subtle examination in how affect can be infused with information received by an individual, and one that is especially relevant to politics. Rather than focusing on external or artificial mood manipulations, this study will examine very real ways that political elites can use language to manipulate the mood of those consuming political information.

In this paper, I present results from two different experiments on affective language. I examine situations where I would expect either heuristic or constructive processing styles to be used. When heuristic processing is used, I expect that affect will influence judgments about political objects directly; when individuals are exposed to negative affective language, this will lead to more negative evaluations of political objects. However, I do not expect negative affective language to have any influence on how information is retrieved from memory. Since little to no information needs to be retrieved from memory to make the judgments, those who receive negative affective language will perform similarly on a memory task compared to those who receive neutral language. In a more difficult scenario, where I would expect constructive processing to be used, I also expect that judgments of a political object will be harsher when subjects are exposed to negative affective language compared to neutral language. However, I expect this effect to be more indirect. Given the difficulty of the decision task, individuals will think more about the decision and search their memories for relevant information. When constructive processing is used, I expect individuals not only to think more about their decisions, but also to pull in more relevant information and remember more factual information, since affect should increase memory and lead to a more detailed information search (Forgas 1995, Isen 1984, Pham 2009).

**STUDY 1 – AFFECT AND HEURISTIC PROCESSING**
Subjects were recruited from Amazon’s Mechanical Turk (mturk) on November 9th and 10th, 2011. Subjects were offered $1 to complete an omnibus study on public opinion which they were told would take about 15 minutes to complete. The study took subjects, on average, only a little over 10 minutes to complete. The study has a total $n$ of 602 subjects, who were randomly assigned to one of four experimental conditions. For the present study, a total of 316 subjects were retained for analysis. The subjects ranged in age 18 to 79, though the sample skews a bit young, with a mean age of approximately 34. The sample is 55% female, and rather well educated, with over 85% having at least an associate’s degree and 46% having at least a bachelor’s degree. The sample also tends to skew liberal, with 50% of subjects identifying as at least somewhat liberal, and only 28% identifying as at least somewhat conservative.

Subjects analyzed in this paper were assigned to one of two experimental groups. The control group read a fictional news article about a voter identification law that they were told was being considered in another state. The treatment group read a similar article, though in this article 18 words with a negative affective valence were included. These are words that individuals have been shown to have strong negative reactions towards, as coded in the Affective Norms for English Words (ANEW) database (see Bradley and Lang 1999). The negative words

---

3 Two of these groups related to positive affective language. I have excluded these groups from analysis in this paper because, while expectations in heuristic processing for positive affect are similar to negative affect, expectations for how positive affect should influence memory in constructive processing are considerably less clear. Positive affect is also generally less powerful than negative affect (Fredrickson 2003); given this relatively subtle affect manipulation, creating high levels of positive affect through language may prove difficult. As such, I have decided to focus on negative affective language here.

4 154 subjects were assigned to the neutral language control group and 162 were assigned to the negative emotional language treatment group.

5 The mean for ideology, on a 7 point liberal to conservative scale, is 3.51.

6 Treatment texts from study 1 are available in Appendix A.

7 This is a relatively small treatment. Each article contains approximately 250 words, so only about 7% of the words in each article are replaced between the control and treatment groups.

8 In the ANEW database, Bradley and Lang (1999) rate over 1000 English words on the dimensions of valence, arousal and dominance. I focus on the valence, or positive/negative, dimension. Words are rated on a scale of 1-9, with words rated closer to one highly negative, closer to nine highly positive, and those rated near five neutral.
have an average ANEW valence rating of about 2.22 (s.d. 0.47), considerably lower than the neutral score of 5.0.

After agreeing to participate in the study, subjects first⁹ read the treatment text for the group to which they were assigned for the emotional language study. After reading the article, subjects were asked to rate their support of the proposed law and the politician mentioned in the article. After answering questions about the article, subjects were finally asked to provide open ended responses about what comes to their mind when thinking about the proposed law¹⁰. After answering this question, subjects then moved on to an unrelated study.

I expect this scenario to be a situation in which individuals are likely to engage in heuristic processing. While voter identification laws have been considered or enacted in many states, it is an issue that has not been on the agenda for a very long time and one that is of relatively minor importance in people’s day to day lives, so I expect that citizens will not have a set response to questions about this law and be unable to engage in response retrieval. However, this article presents subjects with only one side of the story. Here, they are told about potentially negative consequences of the law without mention of the arguments in favor of the law. Since framing should give individuals a guide about how to think about this policy (Chong and Druckman 2007a), the frame should allow them to make a relatively quick decision about how they feel about the policy. Here, I expect the negative affective language to facilitate mood congruence in evaluations of the political objects, but there should not be any difference in memory or elaboration about the policy. If individuals do engage in heuristic processing, they are not thinking very deeply about the topic and affect should not have an influence on how they are thinking about the topic.

⁹ After answering two qualifying questions about age and citizenship, and reading a consent form and agreeing to participate in the study.
¹⁰ Text for the open-ended memory task prompts is available in Appendix B.
First, I examine how negative affect influences assessments of two political objects, the proposed Voter ID law and the fictional politician, Ben Griffin, mentioned in the news article. Between the positive treatment and positive control, there was a difference in ideology, with the treatment group being more conservative. Given that the Voter ID legislation has a distinct ideological base of support in conservatives, the lack of balance on political ideology between treatment and control groups could bias my results. Further, the negative language treatment group was younger on average than the control group. Given that the article frames this law as particularly detrimental to the elderly, I imagine that a subject’s age could influence their support of that law. As such, all analyses are done using ordinary least squares estimation while controlling for ideology\textsuperscript{11} and age. These results are presented in Table 1.

(Table 1 about here)

On support for the Voter ID act\textsuperscript{12}, subjects in the negative affective language condition are significantly less likely to support the act than those in the neutral language control group. This effect, while small, is still substantively important, with those in the treatment rating their support of the law over seven points lower than those in the control. To put the magnitude of this effect into perspective, the mean support for the law in the neutral words control condition was about 20 points lower than support for the law in a similar condition, using neutral words with a frame that is supportive of the law’s passage. Therefore, the effects of negative affective language on support for policy are about 1/3 the size of the effects of framing, which we already know should be quite strong. Further, the effect of the treatment on support for the law was

\textsuperscript{11} Those who answered “Don’t Know” to ideology (9 total subjects) are excluded from analysis for ease of presentation. Including these subjects provides statistically and substantively similar results.

\textsuperscript{12} Support for the Voter ID Act was assessed on a 0-100 scale, with 100 indicating the highest level of support.
substantively similar to the effect of gender, and larger in magnitude than the effect of living in a state that has enacted a Voter ID law.\textsuperscript{13}

For politician support, I find a similar pattern. Support for Ben Griffin on a 0-100 feeling thermometer decreases by a little over 4 points for those in the treatment group, compared to the control. While this effect is again rather small, it is roughly 1/4 of the effect of moving from very liberal to very conservative. Further, this effect is especially profound when considering that those in the treatment group support Griffin’s stance on the Voter ID act more than those in the control. Given that this is the only information they have about Griffin’s ideology, these results demonstrate that feelings matter when individuals are asked to evaluate political figures. Subjects may agree with Griffin more on policy in the treatment group, but they still rate him more negatively on a feeling thermometer.

Next, I turn to the open-ended responses subjects gave about their thoughts about the Voter ID law they had just read about. If heuristic processing occurs in this scenario, I expect there to be no difference between the treatment and control groups in these responses. Individuals are using affect as a “how do I feel about this?” heuristic, rather than having it influence their search in memory while deciding what conclusion to arrive at. Table 2\textsuperscript{14} presents the differences in the first three responses\textsuperscript{15} to the open-ended question about the Voter ID law that subjects read about.

(Table 2 about here)

\textsuperscript{13} For clarity of presentation, models estimated with these controls are not included in the paper. They produce substantively similar coefficient estimates for the treatment.
\textsuperscript{14} Here, I present difference of means or difference of proportions test results. OLS models with controls for gender, ideology, age, and race produce similar results.
\textsuperscript{15} Subjects could give a maximum of seven total responses. For ease of comparability to Study 2, I have restricted this analysis only to the first three responses.
There is little discernible difference between those who read the story with affective language and those who read the story with neutral language on these measures. In both groups, subjects wrote approximately 130 characters, or roughly 43 characters per response, suggesting that negative affect does not spur increased cognitive elaboration in this processing task. They were also equally likely to make at least one mention of a topic not mentioned in the article, with about 55% of subjects in each group saying at least one thing about an outside topic. These responses typically included references to other places where identification was required, claims about which political party supported or opposed the law, or claims of potential racial bias in the law. Between both groups, roughly 26% of individuals were able to repeat a statement made in the article, such as the law’s effect on the poor and elderly and problems with fraud in absentee voting. Interestingly, there was a slightly higher proportion of individuals in the neutral language control who expressed a negative opinion of the law than those in the negative language treatment (though, this difference does not approach statistical significance), 46% to 42%. This suggests that the previous responses about support of the law and Ben Griffin were not results of a deep thought process, but instead were quick decisions made using affect as a heuristic. Negative affect should lead to more considerations of external information (Bless and Fiedler 2006) and better recall of relevant information (Forgas, Laham, and Vargas 2005) when a more effortful processing approach is taken. Here, we see that is simply not the case, suggesting that individuals are using the faster, more superficial heuristic processing style when making this judgment. It appears that subjects are not attaching their feelings to the Voter ID law when storing it in memory, causing the influence of affective language to dissipate when they are later asked to engage in a more cognitively challenging task.

16 Here, I look at the proportions of individuals who mentioned a topic not in the article, recalled a fact from the article, or said something negative about the law in at least one of the first three responses, compared to those who made no mention of these.
STUDY 2 – AFFECT AND CONSTRUCTIVE PROCESSING

For study 2, subjects were recruited both on Amazon’s Mechanical Turk and from undergraduate political science courses at Vanderbilt University. Subjects from Mechanical Turk were paid $2.50 for their completion of an omnibus study, which took about 30 minutes to complete. Subjects recruited at Vanderbilt completed the same study in a laboratory on campus in exchange for course credit. A total of 281 subjects completed the study at Vanderbilt, and 248 on Mechanical Turk, for a total \( n \) of 529 subjects\(^ {17} \). Of these, 426 were assigned to either the treatment or control group for the current study\(^ {18} \). Subjects were rather similar across the two modes of study with regards to gender, race and ideology – approximately 53% of subjects were female, 7% African-American, 5% Hispanic and both groups leaned slightly liberal, though not largely so. As expected, there were differences in age, with subjects on Mechanical Turk ranging in age from 18 to 82, with an average age of about 35, while subjects in the lab had an average age of about 20. Overall, the average age across the two samples was 27.

In this study, subjects were first presented with brief background information about two candidates that they were told were competing in a gubernatorial election in a different state\(^ {19} \). Afterwards, subjects were presented an article to provide them more information about this election. Subjects were randomly assigned to receive an article about accusations of a political scandal with neutral affective language, or a similar article including negative affective language\(^ {20} \), a design similar to that of study 1. Here, 36 words\(^ {21} \) were replaced in the treatment

\(^{17}\) In all analyses in this section, I pool subjects from the student and mturk samples. While there are a few differences between the samples on some of the dependent variables overall, statistical analyses on each sample individually provide similar results to statistical tests of the pooled sample.

\(^{18}\) 208 subjects were assigned to the neutral language control and 218 to the negative affective language treatment. The remaining subjects did not receive an article about the political scandal and are excluded from analysis.

\(^{19}\) Text for the introduction is available in Appendix A.

\(^{20}\) Full text of these articles is available in Appendix A.
article. These words have an average ANEW valence rating of 2.37 (s.d. 0.55), similar to the average rating in study 1 and again, far towards the negative end of the nine point ANEW valence rating scale.

I expect that this study will present subjects with a more difficult judgment task than the previous study; here, subjects are not given a single frame telling them how to think about an issue. Instead, they are presented with accusations of corruption against one candidate by his opponent, and the accused candidate then denies these charges. This scenario is similar to two-sided frames; different considerations are provided by different sources, and subjects have to evaluate which candidate they believe is being honest. When presented with two-sided frames, the effects of each frame will either cancel out when each side is comparable in strength (Chong and Druckman 2007b, Sniderman and Theriault 2004), or framing effects will be demonstrated by the frame presenting the strongest argument when strength of the competing frames differs (Chong and Druckman 2007b). Here, the strongest frame could be different to each subject: individuals could be especially opposed to corruption in politics and trust Thomas, or be especially wary of mudslinging and trust Spencer, or subjects could feel each candidate is similarly believable. In this scenario, subjects are presented with a rather difficult judgment task; they must evaluate these fictional candidates based on the article they have read, and to do so they must determine who they actually believe is being honest. Such deliberation, similar to a more extensive form of information processing, however, has been shown to have no effect on the quality of decision making (Jackman and Sniderman 2006), suggesting that, in this context, subjects may be especially confused on who to believe. Since I expect a constructive processing style to be adopted, subjects will make a detailed search in their memory when making

\[\text{The articles were roughly 275 words long in this study, meaning approximately } 13\% \text{ of the words in the treatment article were negatively valenced words.}\]
evaluations (Forgas 1995). As such, I predict that affect will influence what subjects think about when considering this election and, contrary to a heuristic processing situation, cause differences between conditions on what they think about in regards to the election.

(Table 3 about here)

In this study, I included a PANAS scale to measure negative affect; this scale features five questions to measure negative affect that have been shown to be highly reliable (see Watson, Clark and Tellegen 1988). To measure generalized negative affect, subjects were asked to report the extent to which they felt afraid, upset, nervous, scared and distressed at that very moment, and responses to these five questions were used to create an additive index to measure negative affect. Here, individuals in the negative affective language group reporting significantly higher levels of negative affect. This effect is rather small, a difference of only about .5 on the 20 point scale, though overall levels of self-reported negative affect tended to be low across groups. Despite this difference in affect, table 1 shows little difference between the treatment and control groups in their evaluations of the two candidates, Arthur Spencer and Eric Thomas. Here, both candidates are rated, on average, near the midpoint on the feeling thermometer across groups, and subjects are roughly equally likely to say they would vote for Spencer or Thomas. This runs a bit in contrast to my expectations. Affect infusion suggests that, in situations with constructive processing, affect should influence judgments that individuals are making. In this situation, it is hard to imagine direct or motivated processing occurs: the election is fictional, so subjects do not have any pre-determined responses to give, and there is little reason to arrive at a particular conclusion. Why, then, does negative affective language not lead to harsher evaluations of the

---

22 Responses were on a five point scale, ranging from 0-4. For the negative affect measure, values theoretically range from 0 (no negative affect) to 20 (highest negative affect). Cronbach’s α = .89.c
23 Results presented are difference of means or difference of proportions tests. Models estimated using OLS and controls for race, gender, partisanship and ideology produce substantively and statistically similar results.
political candidates that subjects read about? Here, it is possible that affect is simply not being used as a heuristic, which is exactly what would be expected in constructive processing, where individuals think more deeply about judgments and do not simply ask how they feel about objects (Forgas 1995, Eich et al. 2008). In examining the open-ended responses from subjects, it does appear that many have chosen to take sides in the election, choosing to believe either Spencer or Thomas. However, which candidate subject’s support is not being influenced by the affective language treatment \(^{24}\). Effortful thinking, however, has been shown to increase ambivalence with regards to candidate preferences (Rudolph and Popp 2007). Compared to the previous study, with a more simple judgment task, subjects here may be more likely to see the negatives in both candidates and have a harder time choosing who to side with. With this constructive processing task, we should see an influence of negative affective language on how individuals are arriving at judgments.

(Table 4 about here)

The results in table 4 \(^{25}\) present evidence that demonstrates negative affective language does indeed lead to differences in how information is being processed. When subjects are asked to list their thoughts about the election \(^{26}\), those in the negative affective language condition write approximately 25 characters more over the three response options. They also spend about 12 seconds longer (69 seconds, compared to 57 for the control group) answering these prompts, though this difference is completely mediated by the increased length of their responses.

\(^{24}\) Interestingly, there is a considerably higher level of support for Spencer among student subjects, compared to mturk. In the student sample, roughly 57% of subjects would vote for Spencer, compared to only 44% in the mturk sample. It is possible the more experienced Spencer is more appealing to students of political science, or that younger people are more put off by Thomas’ negative campaign. In both samples, there is no difference in candidate support between the affective language treatment and the control group.

\(^{25}\) These results are robust to regression controlling for demographic characteristics.

\(^{26}\) Full text of this prompt is available in Appendix B.
Negative affective language also increases the recall of factual information\textsuperscript{27}; roughly 24\% of subjects in the treatment group mentioned a fact from the introduction about the candidates in their three memory responses, while only 18\% of the control group did. Those who read the article with negative affective language also mentioned external considerations more often, with 32\% mentioning a topic not supplied in the article as coming to mind when they think of the election, compared to just 22\% of the control group\textsuperscript{28}. Here, subjects typically mentioned other politicians they were reminded of (the most mentioned were John McCain and Mitt Romney), other political scandals, or drew conclusions about either candidate’s partisanship. Subjects in the negative affective language treatment also provided harsher assessments of both candidates in their open-ended responses, despite not rating the candidates differently on the feeling thermometer. Roughly 19\% in the treatment group made at least one negative comment about Spencer in their open-ended responses, and 25\% made a negative comment about Thomas, compared to only 13\% and 18\%, respectively, in the control group. Negative sentiment about Spencer often called him a liar, corrupt, and out of touch with the average citizen. Thomas, meanwhile, was often characterized as immature, desperate, and unwilling to focus on the issues. Here, we do see some evidence that affect is influencing evaluations of the candidates; those who read an article with negative affective language have more negative things to say about both candidates. This suggests that individuals are thinking about what they like and dislike about the two candidates, and that reading an article with negative language leads to more negative

\textsuperscript{27} These percentages are smaller in magnitude than in study 1, which does not directly make sense at first glance. However, in study 1, subjects completed the affective language study at the beginning of a short study that took only about 10 minutes total. In study 2, the affective language study began approximately half-way through a longer study. It is possible that subjects put forth less effort due to the location of the task within the larger study. Also, in study 1, subjects had seven spaces available to elaborate on their thoughts about the article, while they had only three available in study 2. This may have suggested to subjects that they were expected to write more about the article in study 1.

\textsuperscript{28} The student sample was significantly more likely to recall information from the previous screen or bring in outside information in their open-ended responses than the mturk sample, though both groups were more likely to do so in the negative affective language condition than in the control.
thoughts about both candidates, even though this effect did not appear in the previous, more direct measures.

**Summary and Conclusions**

I believe these findings provide insight into how the words used by the news media and politicians can influence political judgments. Despite word choice being seemingly irrelevant to assessments of political phenomena, negative affective language influences these assessments. When presented with a frame highlighting the negatives of a proposed policy, individuals evaluate the policy more negatively when the article includes negative affective language. In accordance with how affect infusion should work in a heuristic processing scenario, they also evaluate a politician opposed to the policy more harshly, even though they are more in agreement with the politician’s policy stance. However, suggesting that affect is being used simply as a heuristic and not having much influence on information processing, there is no effect of affective language on recall of information, mention of external information from memory or negative responses toward the policy. Here, subjects evaluate the policy more negatively when asked for a quick judgment, but are not more likely to express a negative opinion when asked to elaborate on what they think of the policy. This suggests that negative affective language can create a mood that is available for a quick judgment, in this scenario of heuristic processing, but that this effect may not persist for long after the judgment, as the policy is not judged any more negatively in memory.

In contrast, a scenario where constructive processing takes place does lead to more negative reactions in memory. Here, a scenario where accusations are made between two political candidates leads to more negative evaluations of both candidates in open-ended cognitive responses when negative affective language is used, even though there is no difference
in feeling thermometer ratings. This suggests that the consequences of negative affective language may be more long term, with more negative feelings about the candidates encoded in memory when negative affective language is used compared to neutral language. Politicians, it seems, may need to be careful about using affectively charged language when making accusations. In this study, subjects reported more negative responses to the politician accusing misconduct rather than the one accused of misconduct, and these negative feelings were more prevalent when affective language was used.

This work also has implications for mass polarization. If individuals differ in how they get their political information, and certain types of information are more affect laden, my research suggests that those who receive emotional content will become more polarized in their political attitudes. Given self-selection into agreeable political information (Mutz 2006), emotional content may serve to widen the gap between liberals and conservatives, leaving those who consume less emotional media somewhere in the middle. This proposition is interesting, but may be difficult to test. However, considering that individuals are currently getting more information from social media such as Twitter and Facebook, and that social media is more likely to use emotional language (Tumasjan et al. 2010), I could imagine a scenario where a study of social media users’ political attitudes may be helpful in addressing this.

I believe there are also implications for studying campaigns and elections. Politicians are often in close elections, and may be looking for any avenue possible to increase support and ensure their election. My findings present an interesting “Catch-22” for politicians: using negative affective language can decrease support for a policy they don’t like, but this appears to come at the expense of increasing negative evaluations of the politician who is also associated with these negative words. However, in heuristic processing scenarios, this effect does not seem
to persist very long. Politicians are also faced with a dilemma, though, when attacking their opponents, and perhaps one that is more damaging. The use of affective language in the context of negative campaigning does increase negative opinions about the target of the negative campaign, but it also increases negative opinions about the accuser, as well. In situations where individuals must engage in deeper processing of political information, such as when they must determine whether negative accusations in a political campaign are true or not, mood congruence does appear to occur in memory about the candidates. In the context of real political campaigns, this might suggest that politicians are better off using Super PACs to levy attacks against their opponent, to avoid association with the negative advertising and the consequences for judgments that come along with it.

How individuals receive and process political information, and how that influences their evaluations of political objects, have important consequences for politics generally. In this paper, I present results that suggest that when individuals are exposed to language that makes them feel generally negative, they also feel more negatively towards the political objects presented along with this language. Given that we live in an emotional world, I believe it is imperative for political scientists to understand how the words we use to talk about politics can influence how we think about politics.
References


Weinberger, Joel and Drew Westen. 2008. “Rats, we should have used Clinton: Subliminal priming in political campaigns.” *Political psychology* 29(5): 631-651.

Young, Lori and Stuart Soroka. 2011. “Affective news, the automatic coding of sentiment in political texts.” *Political communication* forthcoming.

Table 1. Impact of Negative Affective Language on Political Attitudes – Study 1

<table>
<thead>
<tr>
<th></th>
<th>Support for Voter ID Law</th>
<th>Feeling Thermometer – Ben Griffin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Emotional Words</td>
<td>-7.17* (3.43)</td>
<td>-4.26+ (2.77)</td>
</tr>
<tr>
<td>Conservative</td>
<td>54.37** (6.09)</td>
<td>-13.28** (4.91)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.37** (0.14)</td>
<td>-0.02 (0.11)</td>
</tr>
<tr>
<td>Constant</td>
<td>39.24** (5.81)</td>
<td>61.09** (4.68)</td>
</tr>
<tr>
<td>N</td>
<td>307</td>
<td>307</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.2171</td>
<td>0.0335</td>
</tr>
</tbody>
</table>

Table entries are Ordinary Least Squares (OLS) coefficients with standard errors in parenthesis. + p<0.10, * p<0.05, ** p<0.01, one tailed.
Table 2. Effect of Negative Affective Language on Cognitive Elaboration – Study 1

<table>
<thead>
<tr>
<th></th>
<th>Length of responses in characters</th>
<th>Proportion mentioning topic not in article</th>
<th>Proportion mentioning fact from article</th>
<th>Proportion mentioning negative opinion of law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral Language</td>
<td>129.98 (7.36)</td>
<td>0.56 (0.04)</td>
<td>0.25 (0.04)</td>
<td>0.46 (0.04)</td>
</tr>
<tr>
<td>Negative Language</td>
<td>129.49 (7.26)</td>
<td>0.54 (0.04)</td>
<td>0.28 (0.04)</td>
<td>0.42 (0.04)</td>
</tr>
<tr>
<td>Difference</td>
<td>0.49 (10.34)</td>
<td>0.02 (0.06)</td>
<td>-0.03 (0.05)</td>
<td>0.04 (0.06)</td>
</tr>
<tr>
<td>$t$</td>
<td>0.047</td>
<td>0.27</td>
<td>-0.49</td>
<td>0.74</td>
</tr>
<tr>
<td>$N$</td>
<td>316</td>
<td>316</td>
<td>316</td>
<td>316</td>
</tr>
</tbody>
</table>

Table entries are means or proportions for each group with standard errors in parenthesis.
Table 3. Effect of Negative Affective Language on Political Evaluations – Study 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral Language</td>
<td>7.26 (0.25)</td>
<td>46.64 (1.30)</td>
<td>48.02 (1.15)</td>
<td>0.49 (0.03)</td>
</tr>
<tr>
<td>Negative Language</td>
<td>7.83 (0.27)</td>
<td>47.81 (1.32)</td>
<td>49.89 (1.22)</td>
<td>0.51 (0.03)</td>
</tr>
<tr>
<td>Difference</td>
<td>-0.57 (0.36)</td>
<td>-1.17 (1.85)</td>
<td>-1.87 (1.68)</td>
<td>0.02 (0.05)</td>
</tr>
<tr>
<td></td>
<td>(-t)</td>
<td></td>
<td>(-t)</td>
<td>(-t)</td>
</tr>
<tr>
<td></td>
<td>(-1.58^*)</td>
<td>-0.63 (1.85)</td>
<td>-1.11 (1.68)</td>
<td>-0.58 (0.05)</td>
</tr>
<tr>
<td></td>
<td>(N)</td>
<td>426</td>
<td>426</td>
<td>426</td>
</tr>
</tbody>
</table>

Table entries are means or proportions for each group with standard errors in parenthesis.

* - p<.10, one-tailed
Table 4. Effect of Negative Affective Language on Cognitive Elaboration – Study 2

<table>
<thead>
<tr>
<th></th>
<th>Length of responses in characters</th>
<th>Proportion mentioning topic not in article</th>
<th>Proportion mentioning fact from introduction</th>
<th>Proportion mentioning negative opinion of Spencer</th>
<th>Proportion mentioning negative opinion of Thomas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral Language</td>
<td>92.45 (5.32)</td>
<td>0.22 (0.03)</td>
<td>0.18 (0.03)</td>
<td>0.13 (0.02)</td>
<td>0.18 (0.03)</td>
</tr>
<tr>
<td>Negative Language</td>
<td>117.32 (5.96)</td>
<td>0.32 (0.03)</td>
<td>0.24 (0.03)</td>
<td>0.19 (0.03)</td>
<td>0.25 (0.03)</td>
</tr>
<tr>
<td>Difference</td>
<td>-24.87*** (4.05)</td>
<td>-0.10** (0.04)</td>
<td>-0.06** (0.04)</td>
<td>-0.06* (0.04)</td>
<td>-0.07** (0.04)</td>
</tr>
<tr>
<td></td>
<td>-2.86 (2.32)</td>
<td>-1.65 (1.62)</td>
<td>-1.62 (1.75)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>426</td>
<td>426</td>
<td>426</td>
<td>426</td>
<td>426</td>
</tr>
</tbody>
</table>

Table entries are means or proportions for each group with standard errors in parenthesis.
* - p<.10, ** - p<.05, *** - p<.01, one-tailed
Appendix A – Treatment texts

Study 1

C1: Neutral language condition

Senate to Vote on Voter ID Law Tomorrow

The state senate will vote tomorrow on Senate Bill 37, also known as the Voter ID Act, which will require all voters to present government issued photo identification at the polls. This legislation aims to reduce voter fraud, but those who do not support the bill claim that there is no evidence of this, and that the bill has unintended consequences. The opponents of the Voter ID Act claim that it will create barriers to voting for low income groups, especially the elderly.

“This bill doesn’t do anything to make elections fairer,” Senator Ben Griffin, a staunch opponent of the bill, told reporters this morning. “When fictitious voters are voting in elections, it’s done via absentee ballots, not at polling stations.” Griffin noted that a driver’s license is the most common form of identification, causing the poor and the elderly to be most impacted by this requirement. In many counties, the number of registered voters without identification would be enough to change the election outcome. Under the current law, there is no requirement for state residents to have photo identification.

Opponents of the legislation anticipate that it will pass and soon be signed into law by the governor. Senator Griffin still suggests that individuals should arrive at the State Capitol tomorrow to show supporters how broad resistance to the Voter ID Act is. “I expect that debate will be contentious,” Griffin says, “and showing how constituents feel is how we will make sure this bill does not pass.”

C2: Negative affective language condition (Affective words in red for illustrative purposes only; the text was all black when presented to subjects)

Senate to Vote on Voter ID Law Tomorrow

The state senate will vote tomorrow on Senate Bill 37, also known as the Voter ID Act, which will require all voters to present government issued photo identification at the polls. This legislation aims to reduce voter fraud, but those who do not support the bill claim that there is no evidence of this, and that the bill betrays its purpose. The opponents of the Voter ID Act are terrified that it will create barriers to voting for those in poverty, and especially hurt the elderly.

“This bill fixes an election system that isn’t broken,” Senator Ben Griffin, a frustrated opponent of the bill, told reporters this morning. “When dead voters are voting in elections, it’s done via absentee ballot abuse, not by deceit at polling stations.” Griffin noted that a driver’s license is the most common form of identification, causing the poor and the elderly to be most burdened by this requirement. In many counties, the number of registered voters without identification would be enough to change the election outcome. Under the current law, there is no punishment for state residents who fail to obtain photo identification.

Opponents of the legislation fear that it will pass and soon be signed into law by the governor. Senator Griffin still suggests that angry individuals should arrive at the State Capitol tomorrow to show supporters how broad hostility towards the Voter ID Act is. “I expect that the debate will be ugly,” Griffin says, “and showing how constituents are enraged is how we will make sure this bill is defeated.”
Study 2

Candidate introduction

Introduction:
Please consider the following two candidates for Governor in another state:

Arthur Spencer is a five term state senator who has spent the past four years as the majority leader in the state senate. Prior to entering politics, Spencer served in the U.S. Air Force and received a Bronze Star for his service in Vietnam. Spencer is married with three grown children.

Eric Thomas is serving his first term as state treasurer. He previously served one term as mayor of the second largest city in the state. Before entering politics, Thomas was a businessperson. Thomas is married with one young child.

C1: Neutral language condition

Accusations Fly between Gubernatorial Candidates

Gubernatorial candidate Eric Thomas has levied a strong claim against his opponent, state senator Arthur Spencer, accusing him of misconduct in his support of state financing for a natural gas pipeline. Thomas suggests that this may go beyond simple cronyism, as Spencer is a large shareholder in Access Energy, the company building the pipeline. Spencer denies claims of impropriety, noting that this support of the pipeline arose from his longstanding support of clean energy and not due to his personal connection to the company.

“These allegations are not the truth, but are driven by my opponent’s standing in the polls. I would never let the voters down. I would never misuse my political power,” Spencer said at a press conference yesterday. Spencer said he was rattled by the allegations, noting that he’s worked to uncover ethical issues in the state legislature for years. “I will continue my campaign to be your next governor, despite Mr. Thomas’ efforts to undermine both my political career and my reputation,” Spencer stated.

The claims are problematic for Spencer, and could cut the twenty point lead he holds in the polls with the election still months away. Thomas believes that this news shows Spencer’s lack of integrity, and could revive his own candidacy. He has already called for an investigation into whether Spencer did anything improper regarding his support of the pipeline. “The state budget is already tight, and Senator Spencer convinced the legislature to budget hundreds of millions of dollars to benefit himself. He belongs in a courtroom, not the Governor’s mansion,” Thomas told reporters, “Arthur Spencer is a detriment to democratic government.”
Gubernatorial candidate Eric Thomas has dropped a bomb against his opponent, state senator Arthur Spencer, accusing him of misconduct in his support of state financing for a natural gas pipeline. Thomas is afraid that this may go beyond simple cronyism, as Spencer is a large shareholder in Access Energy, the company building the pipeline. Spencer rejected claims of foul play, noting that his support of the pipeline arose from his longstanding support of pollution reduction and not due to selfish considerations.

“This assault is a disgusting lie, driven by my opponent’s jealousy and gloomy poll numbers. I would never betray the voters. I would never abuse my political power,” Spencer said at a press conference yesterday. Spencer said he was insulted by the allegations, noting that he’s been hostile towards corruption and fraud in the state legislature for years. “I will continue my campaign to be your next governor, despite Mr. Thomas’ perverse efforts to crucify both my political career and my reputation,” Spencer stated.

This crisis is a nightmare for Spencer, and could destroy the twenty point lead he holds in the polls with the election still months away. Thomas believes that this scandal shows Spencer’s bankrupt integrity, and could bring his own candidacy back from the dead. He has already called for an investigation into whether Spencer is guilty of anything criminal regarding his support of the pipeline. “The state is drowning in debt, and Senator Spencer deceived the legislature into holding hundreds of millions of dollars hostage to benefit himself. He belongs in a jail cell, not the Governor’s mansion,” Thomas told reporters, “Arthur Spencer is a cancer to democratic government.”
Appendix B – Texts for open-ended prompts and candidate background

Study 1
We are interested in what comes to people’s mind when thinking about the Voter ID Act. We would like to ask for some of your reactions. What are some things that come to mind when you think of the Voter ID Act? Please type out some things that come to mind in the spaces below. Don’t worry about spelling, grammar or punctuation. We just want to know what comes to your mind when you think about the Voter ID Act.

Please write each thing that comes to mind on a new line.

(Subjects were presented with 7 spaces to type open-ended responses to this question)

Study 2 – Open-ended prompt

Next, we are interested in what comes to your mind when you think about the election between Arthur Spencer and Eric Thomas. List anything that comes to mind when you think about this election.

What is the first thing that comes to mind?

What is the second thing that comes to mind?

What is the third thing that comes to mind?