ESSAYS ON THE IMPACT OF PRESIDENTIAL AND MEDIA-BASED USAGE OF ANXIETY-PRODUCING RHETORIC ON DYNAMIC ISSUE ATTENTION

A Dissertation

by

CHRISTOPHER PAUL OLDS

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2011

Major Subject: Political Science

Essays on the Impact of Presidential and Media-Based Usage of Anxiety-Producing Rhetoric on Dynamic Issue Attention

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Approved by:

Chair of Committee,	B. Dan Wood
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ABSTRACT

Essays on the Impact of Presidential and Media-Based Usage of Anxiety-Producing Rhetoric on Dynamic Issue Attention. (December 2011)

Christopher Paul Olds, B.A., University of California, San Diego

Chair of Advisory Committee: Dr. B. Dan Wood

The intention of the project is to determine whether political elites have to discuss an issue using a specific emotional tone before the public and other political elites consider that issue a problem. Research has not yet demonstrated under what conditions elite rhetorical cues can heighten issue attention. Past studies have suggested that an increase in the absolute intensity of elite issue discussion can heighten perceptions of an issue as a problem. The problem with this notion is that within that absolute issue discussion, elites might simply be repeatedly saying conditions related to an issue are stable. They might also present basic factual background information about an issue, a type of discussion unlikely to capture the interest of many in the political system. There has to be a specific type of cue that elites can offer to compel others in the political system to reconsider their outlook on issue salience. Derived from dual systems theories of emotion, this dissertation predicts issue discussion that heightens feelings of anxiety increases the likelihood of an altered outlook on issue salience. To evaluate this prediction, time series statistical techniques were employed.

The time series models evaluated whether prior changes in the level of anxiety-based cues by the president and the media predict changes in the level of attention the public offers to that issue. The same types of models evaluate whether this form of issue discussion by the president predicts issue dynamics of the media, and vice-versa. The several issues studied were crime, health care, poverty, and the environment. Information spanning thirty years was collected from presidential papers, general media newspaper coverage, ideological media newspaper coverage, and multiple public survey organizations.

The findings suggest anxiety-based issue discussion does have the potential to guide issue attention. Prior changes in anxiety-based cues do predict future levels of attention the public provides to issues. A positive shift in anxiety cues by elites appears to have the capacity to increase public attention to issues. This increase though appears to be very small and abbreviated, suggesting limited effects. Elites do not appear to influence each other through anxiety cues.

DEDICATION

The dissertation is dedicated to all the members of my family. Your encouragement has made reaching this point possible. Thank you.

ACKNOWLEDGEMENTS

There are too many people to list here that helped make completion of this dissertation possible. I appreciate all the help that numerous people have given throughout the past several years. I would especially like to thank members of the Department of Political Science at Texas A&M that believed in me and thought I could complete this project.

NOMENCLATURE

VAR	Vector autoregression
MAR	Moving-average representation

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CHAPTER I

INTRODUCTION

The research question of this project is "how do the tone and substantive content of issue rhetoric by political elites affect systemic and institutional attention to that same issue?" The intention is evaluate whether political elites have to use a certain type of language when discussing issues in order for the public and other political elites to perceive these issues as important and worth addressing through formal political action.

In order for decision makers to think of an issue as a problem, it could be necessary for it to be discussed in a specific way. I predict the way in which the issue needs to be discussed is in a manner that stirs specific emotions that compel decision makers to reconsider their previous views. Although this possibility has been raised in past research (e.g. Jones and Baumgartner 2005, 12; Baumgartner and Jones 2009, 26), a specific theoretical framework as to how such a process might work has not been explicitly offered. The capacity for emotional cues to alter the level over time in which major political groups perceive an issue as salient is a relatively untilled area of study.

There is a history of research (Wood and Peake 1998; Flemming, Wood, and Bohte 1999; Edwards and Wood 1999; Peake 2001; Eshbaugh-Soha and Peake 2004; Eshbaugh-Soha and Peake 2005) on issue attention that suggests the increased rhetorical frequency of elite discussion can alter perceptions of issue salience. The assumption is

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This dissertation follows the style of the *American Political Science Review*.

that the increased emphasis of an issue is a potentially persuasive signal from elites that the issue is a problem worthy of significant attention. A concern with this conceptualization is that it assumes that the intensity of issue emphasis from political message senders is enough of an indication for message receivers in the political system to view that issue as a problem.

Any measure that only takes into consideration the frequency of discussion of an issue ignores the potential effect of the content of that language. If message senders are repeatedly emphasizing a recent breakthrough or improvement in conditions related to an issue, it is not clear why this would ultimately lead people to think of that issue as a pressing matter in need of significant attention. During periods of high rhetorical frequency, message receivers might be bombarded with elites simultaneously offering multiple characterizations of an issue, such that they are left unsure as to whether the issue is actually a problem or not.

It might be necessary for political elites to increasingly talk about an issue in a certain way to galvanize attention towards that issue. An increase in the usage of a specific rhetorical form or tone during issue discussion should be the actual driving force behind movement in issue attention. The reason for this is due to the mechanics of information processing. Actors will only change the way in which they think about an issue if they receive a certain type of signal, one that compels them reassess their existing outlook on that issue. Past research on the importance of elite rhetorical tone has shown that the usage of optimism when speaking about an issue could lead others in the system to express a more positive outlook on that issue (Wood, Owens, and Durham

2005; Wood 2007). This suggests that the way in which an issue is discussed can shape the way in which it is perceived. I predict that the increased exposure to signals that make decision makers feel anxious is necessary before decision makers will revise their current outlook on which issues are problems that require government intervention.

The required signal is an increased intensity in language that makes information receivers become anxious. Anxiety is a state of unease about a decision maker's position in life based on current conditions. The prediction is that political elites increasingly using anxiety-based emotional language when discussing an issue is a stimulus that makes members of the public and other political elites reconsider the political environment. When this happens, a review of the current information in the political system will expose decision makers to suggestions that conditions related to an issue are unique and potentially unstable or threatening. Political actors should move away from their habitual judgments on issue salience and come to a revised judgment.

This change in outlook is due to the cognitive mechanics proposed in academic research about dual system models of emotion and theories of non-directional motivated reasoning (Marcus, Neuman, and Mackuen 2000; Taber, Lodge, and Glathar 2001). Upon exposure to signals that make them feel anxious, political actors will ultimately come to feel that the issue discussed with anxiety-based language needs to be addressed and resolved through formal political institutions. In the dual systems framework, feelings of anxiety are distinct from feelings of enthusiasm. Enthusiasm can be seen as a state where the decision maker believes there is high congruence between their expectations and actual conditions.

It is the increased frequency of anxiety-based emotional language when discussing an issue that drives information receivers to place greater attention to that issue. This proposal is different from suggestions that an increase in the overall frequency of issue discussion will heighten perceptions of that issue as a problem. The reason why this distinction matters is that it illustrates that information receivers only exhibit movement from their standing predispositions when specific types of information are presented to them via political communication. Talking about an issue such that it gradually makes people feel that conditions related to that issue are uncertain and potentially threatening will get them to focus on that issue. Mentioning an issue repeatedly will not necessarily suffice if it is hard for people to determine through that signal whether they should be concerned about current conditions pertaining to that issue. It could be that the overall rhetorical frequency of issue discussion is not a clear enough signal for decision makers to believe an updated assessment is necessary. The cues provided are not precise enough for most message receivers to determine how they should feel regarding that issue.

Research has indicated that people are limited information processors (Simon 1983; Nisbett and Ross 1980). Instead of consuming everything incoming from the surrounding information environment, political actors often rely on their existing outlook about an issue. A potential reason for this is that most citizens do not follow politics on a consistent basis, and are unlikely to possess a sizeable amount of knowledge about current politics (Campbell et al. 1960; Converse 1964; Luskin 2002). Given this, many citizens are not aware of specifics related to political candidates and issues. This leads to

an emphasis on the usage of previously used information when faced with a political decision making task (Conover and Feldman 1986; Rahn 1993).

Decision makers will use mental shortcuts known as heuristics in an attempt to make reliable political decisions in spite of not having a substantial amount of background information about politics (Sniderman, Brody, and Tetlock 1991, 19). For instance, knowledge of basic political cues like party attachment is sufficient for many citizens to distinguish between candidates in spite of not knowing their specific issue positions (Popkin 1991). Decision makers could know how to think about a bill by deferring to political figures or groups they trust or respect (Carmines and Kuklinski 1990; Mondak 1993; Lupia 1994).

The concern has been raised that many decision makers do not have the necessary contextual knowledge necessary to use heuristics appropriately (Delli Carpini and Keeter 1996, 51-53). Still, many decision makers appear to use information shortcuts in an attempt to make more accurate political inferences (Lupia 1992). The limited information processing capacity of decision makers could lead to the reliance on decision aides to arrive at decisions congruent with predispositions.

Reliance on heuristics could assist actors in the political system to make evaluations or judgments in-line with what usually makes them satisfied. For example, Brady and Sniderman (1985) show decision makers will attribute policy preferences to groups (e.g. liberals and conservatives) based on how they feel about these groups, and will make judgments accordingly. This likability heuristic means people estimate the policy positions of groups based on their preexisting views of these groups. The question

arises then whether there exists any way in which political message senders can offer information that makes message receivers engage in a reevaluation of the political system. This could be difficult if many have an inclination towards using a limited set of information they believe will help them efficiently reach a decision meeting previously set criterion.

People usually respond to incoming information habitually such that past evaluations of political information will be relied upon to offer an opinion on an issue. If there is no signal in the surrounding information environment to raise concern, there should not be much discernable shift from previous levels of attention towards that issue. When people detect a signal in the information stream that raises concern, people will conduct an information search, and after evaluating the information environment, will decide whether to revise their issue judgment (MacKuen et al. 2007, 126-128). In order for people to initiate this information search and reassess their orientation towards the issue, political actors need to be exposed to specific cues. One type of stimulus that can spawn this reaction is anxiety-based language.

Operating under this framework offers a potential answer to a question frequently asked in the political science literature, "is it possible for elites to guide public sentiment, or do elites ultimately just reflect public sentiment?" The ability of elites to guide the public as to what issues are politically salient will be contingent upon the style of discourse employed when discussing issues. This aspect helps address why a political elite like the president appears to have a relatively mixed record in the ability to direct what the public and the media thinks is important. For some issues, the anxiety-based

emotional language has been used to such a high degree that it appears the president is indeed able to guide attention towards them. For other issues, the level of intensity in anxiety-based emotional language is not large enough to get a response of the overall public and the media to reassess the political environment.

As in any attempt at research inquiry, one must ask the ever important "so what" question, and address what is the value added of the research project. The contribution this project makes is that it takes a long-standing question, and attempts to answer it for the first time with a long-standing theory. In doing so, methods of inquiry are used that have not been meaningfully applied in prior efforts engaging with this theory.

For many years now, we have wondered whether political elites can get the public and other political elites to care about some issues as opposed to other issues. Up to this point, a clear predictive model has not been offered that distinguishes the type of cues in the information environment necessary in order for issue attention to rise. A heretofore unapplied theory to tackle this question suggests cognitively we will rely on habitual preferences, unless a stimulus stirs our emotions and compels us to reassess the information environment (Gray 1987). This theory of cognition and emotion has really only been tested at the individual level with survey based and experimental designs using data spanning brief periods of time. We do not have an indication as to whether the effects proposed by the dual systems theoretical framework are observable over extended periods of time with major groups in the political system.

One way in which to explore this is through a group level analysis of evolving attention given to issues across an extended timeframe. This study tracks changes in

levels of collective public opinion, presidential issue statements, and issue coverage from the media through time. It is possible to determine whether the effects of anxiety-based emotional cues seen in finite periods of time with individual level designs are also observable in the long term evolution of attention specific groups give to issues. The project illustrates that an existing theory used to describe individual level behavior comports well with determining group level attitude changes. This is demonstrated by applying a different approach in research methodology than that used in previous explorations of the theory. The individual level research projects evaluate behaviors over limited periods of time. With this analysis, the response to anxiety cues is evaluated over an extended timeframe.

The dissertation is of value in that it shows the dual systems approach of reasoning and decision making is a legitimate means of explaining changes in issue attention. Political science research applying the dual system theory has only engaged with whether it predicts individual vote choice, not aggregate level public opinion or elite behavior. The findings of this project give some credence to the view that the dual systems model can predict and describe not only specific vote choice at particular points in time, but also general trends over time as to what issues matter politically. This is especially important given that a key concern with using cross-sectional data is whether emotion is actually endogenous or exogenous to changes in political decision-making (see the debate in Ladd and Lenz 2008, 2011; Marcus, Mackuen, and Neuman 2011).

Scholars like Ladd and Lenz claim emotions are actually the rationalization of political preferences, essentially treating emotion as the dependent variable. This

dissertation indicates though that emotion is best applied as an independent variable, as changes in the level of anxiety-based emotional language helps to predict changes in the level of attention given to issues, instead of the other way around.

The dissertation proceeds as follows. The second chapter is a literature review and offers a discussion regarding what is currently known about dual systems information processing and on whether theories of emotional reasoning can help to explain political behavior. In addition, the scholarship on the ability of elites to influence the public and vice-versa is addressed. It is evident from a review of these two major areas of research that they can be linked together in such a way to address the underlying questions that have frustratingly been left ignored in the extant literature.

Chapter three proposes a theory that shines light on these existing puzzles, proposing that a meaningful increase in rhetoric that makes information receivers anxious about an issue will ultimately direct attention towards that issue, lifting the level of attention political actors place on that issue.

In the research design discussion, presented in chapter four, the specific approach used to explore this proposal is detailed. Unlike past research engaged with dual systems theories of information processing, an experimental approach is not as appropriate. The interest is in explaining observable changes over time with group level opinion and the behavior of elite level political actors. This makes a time series approach a more suitable form of inquiry. Due to the nature of this project, original dynamic measures of both anxiety-based and enthusiasm-based emotional language are created. The process behind their creation is chronicled in the design section.

Measures of presidential and media-based emotional language on specific issues are contrasted with movement in the percentage of the public that thinks a specific issue is the most important problem in the country. Issue-specific usage of emotional language by the president is also contrasted with the level of New York Times coverage of an issue, as well as the level of issue coverage seen in two ideologically leaning newspapers, the Washington Times and the San Francisco Chronicle. In addition, whether the general media has the capacity through emotional language to move presidential attention towards an issue is evaluated. The specific issues studied at various points of these analyses are health care, crime, poverty, and the environment.

Results of the time series analyses are given in chapter five, and indicate that anxiety-based language does direct attention towards an issue, while enthusiasm-based language does not move attention towards an issue. This is what is predicted by the dual systems approach. One aspect, though, that has to be considered based on the results is that it may take a certain level of usage of anxiety producing language before one sees any impact on issue attention. Two of the issues studied (the environment and poverty) see a very limited overall usage of anxiety producing language such that an increase in anxiety producing language appears to have little effect.

Finally, chapter six discusses avenues of future study, given the findings of the project. As this study only evaluates anxiety and enthusiasm-based emotional language, other positive and negative valence (emotional value) forms of rhetoric are not studied. Research on emotion and decision-making in other academic fields suggests that all negative valence feelings do not produce the same reaction in decision makers as other

negative valence feelings (Lerner and Keltner 2000, 2001). Positive valence feelings also do not appear to produce the same reaction as other positive valence feelings (Tiedens and Linton 2001). For instance, the usage of anger-based language could produce a different orientation towards political issues than the usage of anxiety-based language. Research into this will clarify the role of emotion and dual systems information processing on the political environment.

CHAPTER II

LITERATURE REVIEW

Emotions and Decision Making

The theory of this project is that it takes a certain form of discussion to get political actors to revise their judgment and move away from their current outlook regarding which issues are the most pressing political problems. The reason for this is that decision makers are equipped with the capacity to respond to specific types of emotional language in specific ways. Emotional intelligence allows people to monitor their own emotions and those expressed by others, evaluate this information, and use it in a logically consistent way when completing decision tasks (Salovey and Mayer 1990; Mayer and Salovey 1993; Mayer and Salovey 1995). With increased exposure to certain forms of emotional language, an emotionally guided reaction is produced. Emotional language could direct people to either automatically rely on habit without much conscious effort, or to quickly survey surroundings and revise evaluations or behaviors accordingly. Decision makers are equipped with tools to either heighten or inhibit reliance on habit based on feelings (Gray 1985, 1990).

Emotional language that makes people anxious to such a degree that they automatically move from habitual views and reconsider the information environment is the rhetorical form political elites have to employ to increase attention to specific issues. In order to get members of the public or other political elites to pay attention to an issue, political elites have to offer a specific type of signal. I believe this signal is one that raises feelings of anxiety. Once made anxious, decision makers will evaluate the

information environment to determine the precise source of their anxiety, and can update their outlook on the political system given their appraisal.

Affect has been considered a state where an individual has a feeling, but is unsure of the source or object producing that feeling (Hoggett 2009, 23). There are low and high levels of anxiety. At low levels of anxiety, people are having affective responses that are outside of conscious awareness, meaning the source of the feeling cannot be clearly pinpointed. Levels of anxiety at the boundary of conscious awareness are considered moods, while those that are in the realm of conscious awareness are considered an emotional reaction (Marcus, Neuman, and Mackuen 2000, 39-41). When individuals feel anxious, they attempt to discover the source for that feeling, or they attempt to learn more about the source to determine why it produces that feeling. Having feelings that we are in unfamiliar territory, or that unexpected threats exist, compel us to appraise why we feel this way (Marcus 2003).

Political message senders that increasingly use language when discussing an issue that makes people anxious compels message receivers to figure out why they feel anxious. In carrying out this process, message receivers will come across an abundance of information provided in the signal suggesting conditions are unexpected, unstable, or threatening about the issue. This will lead decision makers to ultimately move their focus towards that issue and increasingly perceive it as a problem in need of resolution. If political elites opt to discuss an issue but refrain from using language that should raise alarm on the part of other actors in the environment, existing levels of concern about that issue will be observed over time.

The Mechanics Behind the Dual Systems Model

The premise of this current project is derived specifically from the dual systems model of information processing introduced in the field of political science by Marcus, Neuman, and MacKuen (2000). This model originated in the areas of cognitive science and psychology (Petty and Cacioppo 1986; Chaiken 1987; Gilbert 1989; Eysenck and Byrne 1992; Sloman 1996). While the dual systems approach has been applied primarily in efforts to explain individual level behavior (e.g. Evans 2003; Pryor et al. 2004; Dijksterhuis and Nordgren 2006; De Neys 2006), it has been an untapped resource to explain evolving aggregate level behavior.

Dual systems models of cognition propose that human reasoning is rooted in two distinct systems of information processing. One system is the automatic response belief-based system, and the second system is an analytical in-depth deliberative system (Strack and Deutsch 2004). Using the terminology of Marcus, Neuman, and MacKuen (2000), the belief-based system can be thought of as a disposition system, while the deliberative system can be thought of as a surveillance system. Their proposal is that disposition and surveillance systems map out how emotions play a role in political decision making, with emotions being evaluative appraisals of experience that people are consciously aware of (Marcus, Neuman, and MacKuen 2000, 40). Emotions produce a discernable feeling based on an experience. Our disposition and surveillance systems are structured in such a way that political information can be monitored efficiently.

Most of the time, people will respond habitually to information such that they will offer the response stored in memory when asked about a political object. The

seemingly habitual views stored in a person's memory can be translated into routine or learned behaviors through the brain's disposition system (Marcus, Neuman, and MacKuen 2000, 46-48). The dispositional system is thought to be active as individuals receive feedback from their surroundings regarding whether they are successfully reaching their goals. If people feel like they are progressing, individuals experience enthusiasm. When they feel they are not progressing towards their goals relative to their expectations, people can experience feelings of depression or frustration. This means the disposition system regulates certain negative emotions, in addition to positive emotions.

The disposition system gives decision makers the ability to compare incoming information about political objects (like a candidate, party, or issue) to an existing viewpoint about that particular political object. With this comparison, decision makers can change their level of enthusiasm about that object accordingly. For example, this means a political actor can consistently hold the view that immigration policy is necessary, but can still express different levels of enthusiasm about this view given incoming messages from the information stream at different points in time. The reason for this is the disposition system affords individuals the capacity to feel frustrated or excited about an object, yet still maintain a consistent general viewpoint about that object across time (De Neys 2006).

The surveillance system operates in a different manner. With the surveillance system, an information receiver responds to cues present in the information environment such that they no longer rely on habitual behavior. Instead, a reassessment of the surrounding environment is performed (Marcus, Neuman, and MacKuen 2000, 56). It

operates by checking the surroundings for potential threats towards one's wellbeing. If a threat is detected, it heightens attention in the direction of the potential threat. The information receiver is less reliant on past viewpoints and analyses, instead engaging with current information from the environment to make decisions.

When the surveillance system comes across information seen as potentially threatening, attention shifts towards this unfamiliar area. Reliance on the disposition system ceases as actors reevaluate the environment given the incoming cues they are exposed to. The prediction is that we would expect an increased motivation for learning about and an actual attentiveness towards the political object perceived as threatening (57). Conducting an attentive review of the information environment can ultimately bring about a new judgment about the political object. The prediction is that anxious individuals should be more vigilant and observant of their surroundings than individuals that are not anxious. The surveillance system brings about decision making that is much more demanding on the brain's computational resources compared to decision making handled by the disposition system (De Neys 2006).

As an example of the process, a person might consistently hold the view that there is no need for government resources to be used to implement and enforce environmental pollution programs. This perspective might change though in the face of a signaling event like the Exxon-Valdez oil spill, or continuous exposure to language in the news that environmental conditions have become potentially dangerous. With either of these possibilities, typical behavior using predispositions ceases given heightened feelings of anxiety. There is a focus on aspects related to the stimulus that produced the

anxiety (Gray 1987). Cues that make people feel threatened to the point that they are anxious about a particular outcome could then spur changes from usual behavior (Miller and Krosnick 2004). This is known as non-directional motivated reasoning (Taber, Lodge, and Glather 2001).

The Surveillance System Allows for Non-Directional Motivated Reasoning

It has been previously proposed that all reasoning is motivated (Kunda 1990). One motivation decision makers have is to achieve an accuracy goal. Decision makers with an accuracy goal are compelled to make a correct or optimal decision (Baumeister and Newman 1994). A second motivation is a directional goal. Decision makers with a directional goal are compelled to justify a pre-existing judgment (Kruglanski and Webster 1996).

Non-directional motivated reasoning has been characterized as accuracy driven reasoning (Taber, Lodge, and Glather 2001). The suggestion is that decision makers who are motivated to come to an accurate judgment will exercise a higher level of cognitive effort to review available information in a deep, careful fashion. Decision makers will process information in a thorough way in those instances where they feel the need to make an accurate decision. Information processing under these circumstances can be a lengthier procedure than the information processing that is motivated by directional goals (Lord, Ross, and Lepper 1979).

Research assessing accuracy goals has looked at whether altering the level of importance of a decision compels behaviors resembling non-directional motivated reasoning (Tetlock 1985). Altering the level of importance is possible by heightening the

perception that a decision can have an actual impact or consequence on a decision maker's life. An experiment by McAllister, Mitchell and Beach (1979) prompted one set of subjects to feel motivated to make an accurate judgment, and prompted another set of subjects to feel motivated to defend their judgment to others. Those subjects that were prompted to be more accurate in their judgments exhibited more extensive and time intensive decision making strategies than other participants.

Other studies have shown that the usage of cognitive biases declines when decision makers are motivated to make an accurate judgment. Kruglanski and Freund (1983) and Freund, Kruglanski, and Shpitzajzen (1985) find that those study participants that were prompted to make an accurate decision were less likely to use stereotypes when evaluating a collection of writing samples. Participants in Tetlock and Kim's (1987) study that were encouraged to make accurate judgments about people based on personality test results considered a wider selection of potential alternatives when describing a person than other study participants did.

This is different from decision makers who engage in directional motivated reasoning. These decision makers might actively seek out new information that supports their views, and also ignore or discount any contrary information they happen to come across (Sweeney and Graber 1984; Fazio and Williams 1986; Frey 1986; Kunda 1990; Harton & Latané, 1997; Lodge and Taber 2000). For instance, Sweeney and Graber (1984) demonstrated that ideological supporters of a politician were more likely to ignore news coverage regarding a scandal involving that politician than non-supporters were.

Directional motivated reasoning might suggest decision makers are repressors of information such that they have an inclination to discount inconsistent information they come across (Olson and Zanna 1979). It could also mean though that decision makers will selectively pay attention to information contrary to their predispositions if they perceive this information as weak and easy to refute (Kleinhesselink and Edwards 1975). Decision makers then that have directional goals rely upon predispositions stored in memory to differentially review information they are exposed to.

To link non-directional motivated reasoning to a dual systems framework, decision makers who feel anxious have the sense that something is not right about their surroundings. Their current outlook on the political environment might not be an accurate assessment of reality. Such a possibility automatically activates the surveillance system, which leads to an information search. The scan of the information environment allows decision makers to assess whether they have to change their outlook on or perspective about a political object. Decision makers can update their assessment in an attempt to make an accurate judgment about the political environment. Political actors should feel compelled to have the "correct" assessment as to which issues are the most pressing problems facing the country.

Any sense of unease or uncertainty about the political system makes people feel that what they currently perceive about the system is not "correct," and needs to be corrected. A motivational goal like this can lead to movement from prior views after a scan of available information. Using the terminology of Abelson (1963), this resembles "cold-cognition." Viewpoints are rationally updated following a careful review of the

multiple options or perspectives presented in the information environment. Behavior like this is markedly different from directional motivated reasoning, where decision makers with preexisting views will be biased against potentially discrepant information. Biased information processing means decision makers will actively try to maintain their current outlook on which issue or issues are the most important problems in the country.

"Hot-cognition" allows for existing feelings about an object that are stored in a decision maker's long-term memory to be immediately activated and accessible for decision making. The approach to incoming information resembles a reflexive reaction. New information is rapidly related to a preexisting affective impression (Redlawsk 2002, 1023). Reasoning under "hot-cognition" resembles an association-based network where decisions about incoming information are quickly tied to already held feelings. "Cold-cognition" is the conscious processing of information available in the system such that explicit learning is possible (Evans 1989; Reber 1989; Sloman 1996; Kahneman 2003). "Cold-cognition" then should be the way in which conflicts or inconsistencies in the information environment are thoughtfully monitored and evaluated. If political actors feel that something does not seem right in the current environment, "cold-cognition" processing allows for a careful and thorough survey of the information environment to see if such a view is warranted.

Relating the Surveillance System to Bayesian Learning Models

Most of the research on the dual systems framework conducted in other academic fields has employed experimental research designs. These studies come to find that feelings of anxiety produce an increased interest in learning more about a potentially

threatening stimulus (Le Doux 1996; Williams et al. 2001; Yiend and Mathews 2001). Information receivers, once made to feel this way, exhibit the capacity to engage in a thorough evaluation of the information they are exposed to, even if they might have had a prior position on the issue.

This is analogous to the framework proposed by models of Bayesian learning. Under Bayes' rule, decision makers should be able to incorporate information in an efficient way that is open to alternative perspectives. If compelled to reassess the information environment due to anxiety-based language, decision makers can review the signals present in the information stream, and can update their outlook accordingly. While a mass public will not be particularly knowledgeable or attentive to what is happening in the political environment, they can still be persuadable about politics (Gerber and Green 1999). Specific cues in the information environment can make decision makers of differing political affiliations/attachments think about a political object in the same way and to the same degree. Such a result should hold just as long as there are equivalent levels of prior uncertainty (192). This makes it possible to see parallel partisan movement in posterior beliefs across political parties (Gerber and Green 1997).

We have seen evidence in research that political actors are capable of updating their assessment of issues in the face of specific cues in the information environment. In an analysis about concern regarding the issue of climate change, Wood and Vedlitz (2010) show citizens become more concerned about climate change based in part on the strength of their prior beliefs, and by how certain they are about the new information

they are exposed to regarding the issue. Citizens not strongly attached to prior beliefs, who come across information that differs greatly from their prior beliefs, or who feel certain about new information, are those individuals that are likely to express a revised conception of the issue. How receptive citizens are to new information was found to differ across party lines, which does indicate heterogeneity in change and stability of issue beliefs.

Wood and Doan (2003), although not explicitly writing from a Bayesian framework, did find that the Clarence Thomas Supreme Court nomination hearings helped to fundamentally change the level of non-acceptance of sexual harassment. Their finding suggests that when the preferences of the public appear to be incongruent with the current social interpretations of an issue, a stimulus can help to shift preferences of members in the system towards the direction of social interpretations.

Bartels (2002) says Bayesian learning models where decision makers efficiently incorporate incoming information and update perspectives on the political environment is still demonstrable in cases of divergence in opinion due to partisan biases. His study finds parallel opinion shifts in line with Bayesian updating, and also gaps in opinion attributable to partisan biases. Discernable gaps are present on matters as varied as the state of the national economy, views of presidential performance, and perceptions of candidate traits. As Bartels (126) himself states, "(o)pinion change in accordance with Bayes' rule may often be biased…as long as it does not manifest internal contradictions."

Partisan loyalties though could shade how people think about politics to such an extent that an updating of opinion as suggested by Bayes' rule is not always seen. Goren (2007) finds that partisan biases cloud how decision makers will evaluate information about nominees of the opposite party. Political partisans will evaluate opposing party candidates on qualities they believe their own party excels most in to preserve their opinion about the opposing candidate and party.

If Bayesian learning models are valid, all decision makers, regardless of partisan background or prior knowledge about the political environment, have the capacity to update their positions given incoming information. If predictions derived from dual systems models hold, decision makers change their outlook on the salience of an issue following increased exposure to anxiety-based language about that issue. Decision makers should be able to change their outlook on issue salience in the face of specific emotional cues. Research like Goren (2007) raises questions about the capacity for decision makers to be persuadable. The potential inability of political actors to move away from their predispositions is just one of the existing questions regarding the capacity of a dual systems framework to accurately describe political behavior.

Potential Limitations of the Dual Systems Framework in Explaining Decision Making

An area where there is doubt about the dual systems framework's ability to explain political decision making pertains to whether information receivers actually have the cognitive capacity to perform an in-depth, deliberative information search (Smith and DeCoster 2000). The type and extent of information seeking could really just depend on the type of task decision makers are presented with (Valentino et al. 2009). Anxious

citizens who feel the need to defend their views could end up learning more about alternative viewpoints than anxious people who do not perceive a need to acquire balanced information. This means the effects of anxiety as suggested in theories employing a dual systems framework might not be totally consistent with what actually occurs in particular decision tasks.

Other scholars have offered findings that raise the same line of concern. Feldman and Huddy (2005) found that individuals who were anxious after the September 11th attacks paid a higher level of attention to the news, but were unable to report a higher level of objective facts about the attacks compared to others. This suggests anxious citizens were not capable of actually processing the information they were exposed to. Lavine, Lodge, and Freitas (2005) suggest individuals with authoritarian personality's might seek information congruent with their beliefs when anxious, while individuals with non-authoritarian personalities look for more balanced information while anxious. When anxious, authoritarian personalities only preferred exposure to information congruent with their existing attitudes. Dual systems research proposes that all anxious individuals will conduct a thorough, in-depth information search, regardless of personality. Studies with findings like these raise concerns that the effects of anxiety are idiosyncratic and depend upon the specific individuals being studied.

This relates to a methodological issue of the research on the dual system approach. It has been geared towards only explaining individual level shifts in behavior. Given this, when there have been findings that appear to be inconsistent with the theory, it is unclear whether that can be attributable to deficiencies in the theory, or artifacts of

the sample or specific time period studied. One way to address these concerns is to see if the proposals of the dual systems framework are applicable in studying relationships between political elite issue discourse and aggregate level public opinion over an extended period of time. At the aggregate level, disparities that we see at the individual level cancel each other out, and we can determine whether there are clear trends of movement in a certain direction at any given point in time (Stimson 1999).

If a substantial number of individuals are made to feel anxious about an issue, evidence of this should be discernable in a collective shift in attention towards that issue. Collective opinion shifts on the issue can be an indicator that many information receivers were presented with information that brought about a mass shift from the usual reliance on the disposition system, towards an increased usage of the surveillance system. As political elites increasingly use language about an issue that raises alarm in the public, we should see mass movement in attention directed at that issue.

A reason for these collective shifts can be attributed to the way in which information is processed. Zaller's (1992) Receive-Accept-Sample model suggests individual decision makers will rarely maintain a single consistent attitude about an issue. In reality, they will express opinions based on what is most easily accessible to them at any given time. Preference formation is derived from the most accessible considerations inside an individual actor's memory. The considerations that are most easily retrievable tend to be those that have been most recently considered. In order to produce opinion change, the makeup of considerations most easily accessible to a

decision maker has to be different from times they have been previously prompted to make a decision.

Connecting this to the dual systems framework, a stimulus that makes people anxious compels them to reassess the information environment. This means people will be exposed to considerations they might not have been exposed to before when considering which issues are problems in need of government attention. Upon being asked what they currently think is the most pressing issue, decision makers could come to a different view than before. The most accessible considerations are different from past instances where they were prompted to make an evaluation. I theorize that, under a dual systems framework, prominent political actors like the president and the media can get others in the political system to collectively shift their views on issue salience through emotional language cues.

The usage of anxiety-based emotional language causes an automatic reassessment of the information environment. If Zaller's (1992) proposal of opinion change holds, this appraisal helps change the considerations that are most accessible in memory for multiple actors in the system, which could ultimately lead to discernable shifts in aggregate level political opinion. Unfortunately, this possibility has not been subject to much empirical scrutiny with data spanning an extended period of time. Little research has been done that specifically evaluates the possibility that the dual systems framework can shape political behavior over time.

Dual Systems Theory and Emotion Research in Political Science

The explicit analysis of the ability of the dual systems approach to explain concepts in political science research has been quite limited. What little research that has been conducted is geared towards the explanation of individual level vote choice. Not much work has been done to examine individual level opinion or collective attitudes and behavior.

Marcus, Neuman, and MacKuen (2000) apply the framework to evaluate the candidate choices of respondents to the American National Election Study. Their measure of anxiety is produced through structural equation modeling techniques with the goal of finding respondent mood terms that fit on the same dimension, such as afraid, uneasy, and frustrated. The findings of their analysis suggest anxious voters are more likely to use a wider array of information when making vote choices than non-anxious voters. Respondents identified as anxious voters are more likely to use candidate traits and issue stances when offering a vote choice than voters identified as non-anxious voters. Anxious voters are also less likely to rely on the habitual option of party identification when crafting a vote choice. Anxious voters appear then to make decisions in a different manner than other voters do.

Ladd and Lenz (2008), in an attempt at replicating the work of Marcus, Neuman, and MacKuen (2000), suggest that candidate choice/evaluations are more capable of predicting changes in anxiety than changes in anxiety are capable of predicting candidate choice/evaluations. Survey responses to emotion questions, like many other items in

survey instruments, are largely a reflection of individual partisanship and vote choice under this perspective.

MacKuen et al. (2007), in an attempt to evaluate changes in individual public opinion in the face of macro-level politics, do find that the better economic conditions are, the lower the level of anxiety expressed by respondents. When economic conditions are poor, the higher the level of anxiety expressed by respondents (145-146).

While the dual systems approach has not been explicitly evaluated as pervasively in the field of political science relative to other fields, other political science scholars have come conclusions that resemble those proposed under the framework. These scholars find message receivers that get exposed to certain forms of emotional cues behave in ways distinct from those that have not been exposed. Anxious citizens appear more likely to use new information in their decision-making tasks and perform a more concerted review of candidate positions and traits (Way and Masters 1996).

Given that Marcus, Neuman, and MacKuen (2000) suggest that expressing fear is tied closely with feelings of anxiety, findings that look at the response of fear cues could be relatable to the potential response of anxiety-based cues. Brader (2005, 2006) shows in experimental research projects that people exposed to negative political advertising featuring fear cues are more likely to focus on candidate traits and issues when asked to make a vote choice than those exposed to ads without fear cues. Experimental participants that were presented with negative political advertisements without fear cues relied on prior candidate preferences instead. That participants in the study exposed to fear-based cues used more of the information available to them when making a vote

choice is a finding that correlates with dual systems proposals of surveillance system operations. Graber's (2007) analysis of television news stories comes to a similar finding. She finds those participants exposed to stories that had a larger number of fear cues were more likely to pay attention to political news than participants exposed to news stories that contained a lower number of fear cues.

Research that attempts to evaluate the emotional response of cues related to presidential activity claim that the ability of the president to influence public emotions is going to be mediated in part by audio-visuals selected by the media when broadcasting presidential communications. Bucy (2003) conducted an experiment manipulating news reports of the September 11th terrorist attacks. Viewers of news reports with less intense images of what transpired during the terrorist attacks where the president was presented as an authoritative figure expressed a lower level of anxiety than viewers of news reports with more intense images of the attacks that also featured authoritative presidential rhetoric.

As most studies of the emotional response to political elite activity is geared around the response to visual depictions of elites on television, much of the discussion of the emotional responses of citizens relates to the facial displays of political elites (Masters 1996). The visual response of presidents to events is thought to be of great consequence to message receivers, as political leaders like the president offer citizens cues as to how they should appropriately respond to major events (Bucy and Newhagen 1999; Bucy 2000).

If political leaders like the president through their facial displays are considered to be reacting inappropriately in their response to political events, they will be assessed negatively. Individuals are very mindful of facial displays of emotions. Research shows that exposure to facial displays of emotion can lead to discernable movement of the observer's own face in a similar way, a concept known as facial mimicry (Dimberg, Thunberg, and Elmehed 2000). If there is a mirror system of emotion (Bastiaansen, Thioux, and Keysers 2009), exposure to someone experiencing an emotion could trigger the same emotion personally. If upon reflection that emotion is deemed not fitting with conditions or circumstances, the person that originally displayed the emotion could be evaluated negatively.

Disparities in Effects of Positive and Negative Valence Cues

Another segment of the research on emotion does not specifically manipulate the level of anxiety-based or fear-based cues, instead choosing to look at the response to cues with a general positive or negative tone. The assumption here is that positive valence (emotional value) cues generate the same reaction, regardless of the specific positive emotion being invoked. Negative valence cues consistently generate another reaction, regardless of the specific negative emotion being invoked. Positive and negative emotions give individuals feedback telling them whether certain behaviors are more appropriate than others (Gray 1990).

Experiencing negative feelings means the ability for an actor to reach their desired outcome is threatened, which propels the individual to engage in a systematic and attentive information search. On the other side of the coin, experiencing feelings of

positive emotion indicates the situation is safe. Under these conditions, limited information decisions that rely on cognitive shortcuts like heuristics are appropriate (Schwarz and Clore 1983; Schwarz 1990; Bless et al. 1996; Bless 2000; Schwarz 2002). At first glance, we would think this is similar to the mechanics of the dual systems framework.

Experimental research shows that after exposure to a negative image, memories of information received prior to the image exposure is decreased, while memory of any information following exposure to negative images is increased (Newhagen and Reeves 1992). This suggests a negative stimulus can make individuals revise their assessment as to which information is relevant. This would raise the possibility that a negative stimulus activates the surveillance system. Following exposure, negative information receives more attention and emphasis when message receivers form evaluations than positive information does for multiple decision making tasks (Birnbaum 1973; Anderson 1974; Steiner 1979; Fiske 1980; Skowronski and Carlston 1989; Donsbach 1991; Lau and Pomper 2004). When decision makers are experiencing positive emotions, they are more likely to feel they have enough information to make an accurate decision in line with their goals (Martin et al. 1993; Hirt et al. 1996).

The problem though with this is that specific negative or positive emotion types will not produce the same reaction. For instance, not all negative emotional states will encourage an in-depth information search of the type suggested by the dual systems approach. Tiedens and Linton (2001), in their experimental study, find that feelings of anger automatically brings about the usage of information shortcuts, while feelings of

fear lead to more systematic information processing. Anger has been found to encourage the usage of limited information searches that rely mainly on heuristics (Bodenhausen 1993; Lerner, Goldberg, and Tetlock 1998). Huddy, Feldman, and Cassese (2007, 228) find that feelings of anger lower perceptions of risk and intensify support for action by force, while anxiety heightens perception of risk and lowers support for action by force.

If we were, though, to attempt to connect the positive/negative valence literature in any way to the framework of the dual systems approach, the argument would be that repeated exposure to information with a strong negative tone would produce anxiety that things are not right in the environment. This could ultimately activate the usage of the surveillance system. People who receive cues of a certain type that make them feel consistently uncertain review a more widespread level of information in a more thorough, systematic fashion than individuals with a tendency of feeling certain (Weary and Jacobson 1997). Emotions that help message receivers feel certain leads individuals to rely on a limited information search, influenced mainly by preexisting information. Emotions that help message receivers feel uncertain leads to a more thorough review of incoming information (Tiedens and Linton 2001). It could be that the negative cues are the most likely to make message receivers feel uncertain.

Some research using analytical techniques like factor analysis finds anger and anxiety fit on a similar dimension, leading these scholars to group them together into a single measure (Marcus and MacKuen 1993; Rahn, Kroeger, and Kite 1996; Rudolph, Gangl, and Stevens 2000). In response, a portion of the emotion literature (e.g. Lerner and Keltner 2000, 2001; Huddy, Feldman, and Cassese 2007), suggests anger produces

effects different from what is proposed with anxiety in the dual systems framework. Given this research, a proposal has been offered that anger is a manifestation of negative enthusiasm that is handled by the disposition system (Marcus 2003, 204-205).

Support for this view is seen in findings that indicate feelings of anger and enthusiasm both might make individuals less receptive to views opposite their own, as individuals with these feelings appear more attached to their current viewpoint than other individuals (Valentino et al. 2009). This would suggest a spectrum of low to high negative arousal exists. While there might be a correlation between measures of anger and anxiety, it does not mean the two emotions impact behavior in the same way.

One aspect that would go towards resolving this question is whether anger is a response to an actual event (Stein, Trabasso, and Liwag 2000), while anxiety is the response to a perceived threat (Eysenck 1992). It might be that anger will not increase attention in the manner that anxiety does (Berenbaum, Fujita, and Pfennig 1995; Tiedens 2001). Huddy, Feldman, and Cassese (2007) find that feelings of anger led to shallow information processing on decisions regarding the Iraq war, while feelings of anxiety led to a more thoughtful review of information. Angry individuals that reported having strong interest in a presidential campaign also took the least amount of time searching for information. This raises the question of whether anger could distract decision makers when attempting to complete complex cognitive tasks (Valentino et al. 2008). Decision makers who are angry rely on general information shortcuts when selecting candidates, while individuals who are afraid use specific issue based information (Parker and Isbell 2010).

Such findings have increased calls for explicitly distinguishing negative emotions like anxiety and anger from each other in research designs to see if they stem from potentially different causes (Valentino et al. 2011). The hypothesized reason is that anger occurs when decision makers can pinpoint the source of their feelings (knowing who or what to blame), and they believe they can maintain control over how that source will impact them. This is possibly distinct from anxiety, which occurs when a decision maker feels unclear about the true source of their feelings, or is unsure of how that source will ultimately impact them (Lerner and Keltner 2000, 2001; Smith and Kirby 2004).

An experimental study (Valentino et al. 2011) that induced multiple types of emotional treatments found that anger, and not anxiety or enthusiasm, had a consistent positive association with participation. Anxiety only appeared to be positively associated with certain types of political participation. The reason for this finding might be that anxiety causes people to engage in distancing and avoidance of problems (Smith and Ellsworth 1985; Folkman et al. 1986).

Decision makers who are anxious will often select low risk, low reward choices. The reason is feelings of anxiety increase decision maker concern with risk and uncertainty when completing decision tasks (Raghunathan and Pham 1999). This could also explain something proposed in this dissertation. If message receivers feel increasingly anxious about an issue, we might see more and more people trying to personally distance themselves from the issue. This leads them to label that issue as one that government needs to handle.

We could through continued future study see that there are negative valence emotions that produce different outcomes. Fearful people make more pessimistic predictions about future events, while angry people offer optimistic evaluations (Lerner and Keltner 2000; Lerner et al. 2003). Fearful decision makers are less likely to make risk-averse choices, whereas angry decision makers will tend to make risk-seeking choices (Lerner and Keltner 2001). Lastly, angry decision makers experience negative feelings about past events, but also express optimistic predictions about whether they will reach their future goals. The reason is that angry decision makers have a greater sense of certainty and control than other individuals experiencing other types of negative emotions. With such a high level of confidence, they are less likely to scrutinize their surroundings (Lerner and Tiedens 2006).

While this project does not resolve the issue of whether anger and anxiety are on the same or different dimension of emotional response, the underlying question of whether message receivers respond differently to repeated exposure of emotional rhetoric that does not contain anxiety-producing language is addressed.

Biased Information Processing Prevents Full Function of Dual Systems Framework

The theory used in this project is based on the proposal that decision makers will alter their outlook on issues when presented with a stimulus they perceive as threatening. Existing research on decision-making suggests though that information receivers tend to resist signals that are not congruent with their pre-existing views. Under this mindset, decision makers only seek out and consider information that is aligned with their predispositions (Festinger 1957; Redlawsk 2002; Lodge and Taber 2005). When a

political actor possesses strong prior attitudes about a political object, they will be likely to think arguments congruent with those attitudes are stronger than arguments that fail to be congruent with their attitudes. Individuals do not want to make the significant cognitive effort needed to process and possess views that might be inconsistent with their preexisting positions (Festinger 1957).

As a result, actors will only search for information that reinforces their preexisting attitudes, essentially exhibiting a confirmation bias (Taber and Lodge 2006; Taber, Cann, and Kucsova 2009). Research has found decision makers are likely to form a social network with others politically similar to themselves. This is motivated either by conflict avoidance or an attempt to reduce information costs by finding like-minded informants (Huckfeldt, Johnson, and Sprague 2004). When it comes to individual vote choice, the stronger a voter's party bias, the more likely they are to view politicians of their party as the hero, and politicians of the other party as the villain (Stokes 1966). Biased information processing makes partisan supporters give more positive evaluations of the president than non-supporters (Kinder and Mebane 1983).

Biased individuals will not perceive contradictory views exist in the information environment, making it unlikely they will face the need to revise their preexisting viewpoint (Berelson, Lazarsfeld, and McPhee 1954, 223; Stokes 1966, 127). Prior beliefs can shape whether people find new information convincing (Lord, Ross, and Lepper 1979), especially those that contradict their own positions (Koehler 1993). The perspective here is that decision makers view the political environment through biased

lenses. They are unlikely to update prior beliefs in the face of persuasive information in a way that would be predicted in Bayesian learning models (Gerber and Green 1999).

There is the suggestion that this behavior illustrates an automatic response to political cues; as previously discussed, this resembles a "hot-cognition" form of information processing (Redlawsk 2002; Morris et al. 2003; Lodge and Taber 2005). In terms of political information processing, individuals will place a positive and negative impression on political objects, and store these impressions in long-term memory. This stored impression will be activated automatically when exposed to a stimulus perceived to have an association to the political object (Clore and Isbell 2001). In an aggregate level analysis, Goren (2002) says partisan opponents rely more on perceptions of character weakness than partisan supporters when evaluating presidential incumbents. Directional motivated reasoning can bias how stimuli in the information stream are gathered, evaluated, and integrated into a summary judgment (Kunda 1990; Klein and Kunda 1992; Baumeister and Newman 1994).

For instance, individuals who have negative impressions of Democrats could have this impression activated when they see a picture of a Democratic party politician speaking in the newspaper, interact with a coworker who is a Democrat, or hear a Democratic leaning talk show host on the radio. The proposal is that information receivers struggle with distancing themselves from prior views. Cognitive systems conjure up existing impressions about political objects without much conscious effort necessary. While they might come across compelling evidence that suggests their viewpoint is flawed, biased information processors will strictly adhere to their prior

beliefs (Kunda 1990; Edwards and Smith 1996; Taber, Cann, and Kucsova 2009). Feelings about the message sender could condition how message receivers respond to their cues. Message receivers who are exposed to a policy proposal from a source they dislike are more likely to negatively evaluate that proposal (Capelos 2010). This would be selective exposure to information, where decision makers elect to be exposed to information that matches their beliefs (Stroud 2008).

If the "hot-cognition" hypothesis were correct, this would mean people strictly use cognitive tools similar to that seen in the disposition system of the Marcus, Neuman, and MacKuen (2000) dual systems framework. The reason for this is that the disposition system stores and generates when appropriate the responses and behaviors a decision maker has stored in their long-term memory. If we were to consider the previous case of the individual with a negative impression of Democrats, it could be that this person will be strongly resistant to a Democratic president's attempts to raise attention to an issue. The resistance could be acute in those instances when the issue is seen as one of major interest to Democratic supporters. Message receivers could be resistant to attempts to raise anxiety through emotional language if the messenger is thought in some way to be affiliated with a negatively perceived political object.

It could be, though, that message receivers will be more responsive to new information from or about a political object the receiver has a negative impression of. Lebo and Cassino (2007) find that citizens of the same party attachment as the president are less likely than citizens attached to the opposition party to adjust their outlook on presidential performance when presented with changing inflation and unemployment

levels. While individuals often have a strong attachment to certain political individuals or groups, they also lack enough political sophistication to resist incoming information; in reality, most message receivers could be incapable of resisting contrary information (Zaller 1992).

Agenda Setting Literature

The intention of this project is to evaluate whether a heightened intensity in the usage of a specific form of emotional language assists in political elite attempts to increase attention to issues they want others in the political system to focus upon. This is a way elites can shape the issue agenda of the country. Cobb and Elder (1972) distinguish two types of issue agendas: systemic and institutional. Issues on the systemic agenda are those issues that are those which are perceived by specific groups in the country or the majority of the country as salient. The institutional agenda pertains to those issues being considered by actual formal political institutions. The key dependent variables of this project are the level of attention/focus placed on an issue at any given point in time by the public or elites, such as the media and the president. The project explores the systemic agenda by measuring it as either 1) the percentage of the public that perceives an issue to be politically pertinent, 2) the total level of coverage given to that issue in the media. The total number of statements the president makes about an issue at any given point in time is the selected representation of the institutional agenda.

According to Cobb and Elder (1972), the systemic agenda contains those problems that have the potential to be addressed by formal political institutions, but are not yet actually being considered formally. It is a discussion agenda where the public,

the media, interest groups, and formal political actors like the president determine which issues are those that should be considered by government. This approach essentially proposes a bottom up model where issues move up from the systemic agenda to the institutional agenda, instead of the formal agenda influencing the systemic agenda.

Cobb and Elder (1972) propose that issues move up the systemic agenda as they increasingly garner the attention of more and more members of the public. Attention towards an issue will be initially confined to those most passionate about it. Concern about the issue could broaden to the well-informed citizens of the public, and might expand to the relatively less informed general public, as long as continued conflict and debate captures the interest of more and more people. Whether wide enough interest is generated will in part depend on how the issue has been characterized through problem definition (Rochefort and Cobb 1994). Similarly, Anderson (2010) hypothesizes that issues will fail to generate much attention if they are not seen as problems. Issues are viewed as problems when there is no agreement as to an appropriate solution to pursue.

While all conflicts have the potential to expand, not all of them will if some powerful groups do not want certain issues to receive attention. If increased attention will pose a potential disadvantage to them, they will actively use resources to block issues from consideration (Cobb and Ross 1997). Some elite actors will strategically try to limit the discussion of issues to prevent them from receiving increased attention, exercising either the dominance principle or the dispersion principle (Riker 1993). The dominance principle proposes that when one group is successful in winning an argument for an issue, it will continue to discuss that issue, while the side that loses will no longer

discuss that issue. The dispersion principle proposes that when each side does not win an argument on an issue, each side refrains from discussing that issue, and will pursue an issue with more benefits.

In terms of this project, the purpose of measuring the systemic agenda using the percentage of public attention is to see whether an increase in the usage of anxiety-based language by the president and the media raises public issue attention. In terms of measuring it as the level of media coverage, the intention is to gauge whether an increase in anxiety-based language by an institutional actor like the president can get a non-formal political elite like the media to direct attention towards specific issues. In terms of measuring the institutional agenda by the number of presidential statements made about an issue, the purpose is to see whether an increase in anxiety-based language by a non-formal political actor like the media can increase the level of attention given to an issue by a formal political actor.

I hypothesize that the issues citizens, the media, and the president will view as most pressing politically are those issues where anxiety-based language has guided them to reappraise and revise their outlook on. The form of language both the media and the president use to characterize issues should gradually impact the level of attention actors in the political system place on that issue. As is suggested in Kingdon's (2011, 94-100) discussion of focusing events, events or conditions related to an issue (e.g. a school shooting, a sharp plunge in the stock market, a terrorist attack) can signal to decision makers that attention to these issues is warranted. Events can produce feelings of anxiety

in people, compelling them to conduct an information search to learn about the potential source of concern.

This though does not rule out the possibility that elites like the president and the media also have the capacity to signal attention through emotional language, independent of specific events or conditions. In particular, if elites offer signals about an issue that causes message receivers to reevaluate the information environment, message receivers following their reappraisal could become more concerned about conditions related to that issue. An increase in attention directed at that issue could result.

If elites can direct public attention to issues through certain forms of rhetoric, we might have an explanation as to why fluctuations in issue attention occur. Many issues can be placed on the systemic or institutional agenda at any point in time; the question is which issues become focused on over others? Just because there is the potential for many issues to be perceived as salient problems in need of remedy does not necessarily mean that those issues will ever be recognized as such. Decision makers have a limited capacity for processing and having a dialogue about multiple issues simultaneously. It is doubtful then that decision makers will think about issues in a parallel or simultaneous manner, as they likely mull them over in a sequential fashion (Simon 1983; Jones 1994; Jones and Baumgartner 2005).

This would mean some issues move away from the focus of attention as others rise. One possible manifestation of this is proposed by the research of Downs (1972), who says attention moves in cycles. First, negative conditions exist, but are not seen as problems. Next, there is an alarmed discovery of conditions related to the problem,

followed by information being made known about the economic and social costs to remedy conditions. Following this, pessimism about addressing that issue sinks in and attention wanes, with the potential to return to a high level at future points in time. The proposal is that issues are likely to go through the issue attention cycle if many citizens are affected by it, established interests do not benefit by conditions seen as being the cause of the problem, and the issue has broad interesting qualities to multiple types of actors in the system.

Downs (1972) through the issue attention cycle is claiming that issues can quickly arise as prominent issues, preserve their status as a pressing concern for a finite period, then gradually fade from attention as focus shifts to alternative issues. The problem with this proposal is that the conceptualization of a cycle implies that attention to an issue will return to previous levels once attention given to other issues wanes. In actuality, attention to an issue might never return to past levels at all, and could actually disappear altogether from consideration on the systemic agenda.

This would imply issue attention is highly stochastic, resembling Kingdon's (2011) policy window. Kingdon proposes the existence of three separate activity streams that can identify relevant concerns: problems (potential issues), policy (potential solutions/alternatives), and politics (the occurrence of political events, changes in the makeup of institutions, etc.). These activity streams usually operate independent of each other, but these streams could converge through focusing events such that a policy window 'opens' wherein that issue becomes considered by formal political institutions. Spillovers can occur when the opening of a window for one subject increases the chance

that the window will open for a similar subject. The issue with Kingdon's conception is that such a model is not useful in attempting to predict when the policy window will open for an issue, or will ever open again once an initial attempt at a policy solution has been codified. We would only be able through a post-hoc review determine whether a policy window opened and why that might have occurred.

Baumgartner and Jones (2009, 25-38), in an attempt to construct a predictive model, believe that issues will receive attention due to an expansion of conflict and disagreement regarding how these issues should be best addressed. Groups passionate about an issue can strategically expand the scope of the policy debate with appeals to a wider audience. These groups do this in an attempt to build allies to advance their policy goals. The issue environment is often stable enough such that political elites use institutional structures and rules to maintain the current definition of issues. The intention is to curtail outside involvement in a policymaking system. To do this, elites use positive issue images and express consensus as to how issues are characterized and addressed. This allows for a policy monopoly such that those who benefit most from an issue being characterized or treated a certain way preserve control over how the issue is defined. The stability can be disrupted when the way in which issues are conceptualized changes. Were this to happen, those that were previously not engaged in the issue could become interested in it. This could result in the breakdown of policy monopolies.

New institutional structures to handle an issue can be established when actors become enthusiastic about potentially resolving the complications brought by issues during a Downsian mobilization. Existing institutional structures break down when there

is strong discord as to how issues should be characterized and addressed during Schattschneider mobilization periods (Baumgartner and Jones 2009, 84-90). Although this is more of a predictive empirical model than that offered by other scholars, their analysis is really only confined to relations between the media, interest groups, Congress, and the public, essentially ignoring the role of the president in agenda setting. An additional concern is that there is no meaningful explanation for instances when the qualities are present for either a Downsian or Schattschneider mobilization to occur with certain issues, but they actually fail to happen. This raises the concern that post-hoc explanations are being offered to describe issue attention evolution.

Priming and Framing Techniques

Agenda setting attempts by political elites are analogous to a technique known as priming. Priming changes the criterion used when making decisions (Iyengar and Kinder 1987, 63). Priming can occur when information is presented that consistently emphasizes a specific issue over other potential issues. Through priming, information receivers come to the view that the emphasized issue is more important than any other issue (Cohen 1963; Erbring, Goldenberg, and Miller 1980; Valentino, Hutchings, and White 2002; Sheafer 2007). Iyengar and Kinder (1987) find that people exposed to news stories about specific issues are more likely to find those issues as more salient problems than other potential options. Behr and Iyengar's (1985) analysis of lead stories of national network news finds that when an issue is repeatedly covered as a lead story, it increases the level of public perception that the issue needs to be addressed. It might be, though, that priming effects are only observable when information senders both trust the information

sender and already have enough background knowledge to thoroughly evaluate information (Miller and Krosnick 2000).

Priming strategy could be shaped by several political factors, including existing evaluations of policy issues, politician personality, and exogenous signaling events. What issues are going to be primed could depend on whether the issue is advantageous for a formal political actor to prime. Priming an issue will be seen as worthwhile for a political actor if it increases the likelihood the public will offer a higher evaluation for their approach to the problem, or will help increase public ratings of job performance (Petrocik 1996; Miller and Krosnick 2000). Whether this happens though could be dependent upon whether citizens support the politician's issue stance (Riker 1996; Mendelsohn 1996; Jacoby 1998). It could also be contingent upon the public already considering the issue as one of great national relevance (Hammond and Humes 1995; Lavrakas and Traugott 2000).

Another potential technique that could be applied to move attention is framing. Frames are a way to organize thinking about a political object (Gamson 1992). Framing effects occur when different characterizations of the same event or issue can produce a different response on the part of those being exposed to that characterization (Tversky and Kahneman 1981; Jacoby 2000; Druckman and Nelson 2003). For instance, Nelson, Clawson, and Oxley (1997) find that respondents expressed greater support for a Ku Klux Klan rally when it was characterized as exercising free speech, compared to instances where it was characterized as disrupting public order. Another analysis finds that when racial issues are portrayed using frames emphasizing egalitarianism, racial

attitudes are different from instances where racial issues are portrayed using frames emphasizing individualism (Kellstedt 2000, 2003).

The usage of different frames about an issue or event can lead to varying emotional responses as well. Using alternative attributional frames, which specifically suggest various causes for why something occurs or happens, has been found to produce differing emotional responses (Gross and D'Ambrosio 2004). It could be that certain frames of an issue are more appropriate for or conducive to the usage of anxiety-based emotional language when discussing that issue. In selecting how to frame an issue, elites might be directing the type of language that is used when discussing that issue. Certain types of emotional language could be more likely given the particular way the issue is packaged.

Elite Attempts at Raising Attention to Issues

Presidents often appear to struggle to advance their agenda. Each administration has a relatively limited tenure in office and sees erosion in support over the duration of their term (Light 1991). One way in which the president can attempt to push their policy agenda is to get items of great interest to them on the systemic agenda in hopes that they will ultimately appear on the institutional agenda of other formal political actors in the system. Attempts to look at the ability of the president to influence the systemic agenda have often measured it as the level of media attention given to policy issues (e.g. Wood and Peake 1998; Edwards and Wood 1999; Flemming, Wood and Bohte 1999; Eshbaugh-Soha and Peake 2004). The decision is influenced by early empirical evidence of a correlation between media attention and general public attention to issues

(McCombs and Shaw 1972). The assumption is that the president can use the media as the information channel through which to spark a policy dialogue with the public. Increasing media attention is a way in which to ultimately focus public attention. Research that has evaluated the linkages between presidential and media-based issue attention find a relatively weak influence of presidential attention on media issue attention.

Wood and Peake's (1998) study of U.S.-Soviet, Arab-Israeli, and Bosnian conflicts demonstrates the executive branch lacks success in bringing media attention to issues, once you control for exogenous events and issue inertia. The president in reality seems to be more responsive to media attention than the other way around. Peake (2001) performed a similar analysis with low salience foreign policy concerns (foreign aid, foreign trade, the Caribbean, and Central America) and found the president has a substantial influence on the level of attention the media and Congress invest in those issues. The president appears to exhibit power in shaping attention to issues when prior systemic attention to these issues is low.

Expanding the scope of study to domestic issues, Edwards and Wood (1999) find the president influences media attention on health care and education, while media attention also has the capacity to influence presidential attention for health care, education, and crime. This would indicate a reciprocal relationship in the ability of the media and the president to direct attention to each other.

The ability of the president to influence media attention in domestic policy could also depend on policy type (Eshbaugh-Soha and Peake 2004). Using Gormley's (1986)

salience and complexity typology, Eshbaugh-Soha and Peake (2004) evaluate the level of attention the chief executive and the press offer to clean air (high salience and high complexity), civil rights (high salience and low complexity), and agriculture (low salience and high complexity). The president appears to have a limited, short-term ability to bring press focus towards civil rights and clean air policy.

Findings that the president has a limited ability to direct the systemic agenda when the media is used as the indicator of the systemic agenda are reinforced when treating actual public opinion as the measure of issue attention. Studies of major speeches like the State of the Union Address have attempted to see whether discussion of an issue in the address increases public attention to that issue. In Cohen's (1995) study of this type, presidential attention places a short-lived impact on public attention with economic, foreign, and civil rights issues. In a replication study by Hill (1998) of Cohen's work, reverse causality appears to be present with the data. Presidential attention for foreign policy and economic issues were influenced by the attention the public already placed on those issues. Such an analysis provides very little indication that the president has any capacity to influence the systemic agenda. The president appears to be merely responding to the level of attention the public places on issues. If the president is incapable of directing the public's attention to issues, how can the chief executive be expected to influence public opinion at all?

The President and General Public Opinion Change

The public elects presidents under the view that they will be the leader in advancing national policy by exercising their strong knowledge of policy matters to

make sound decisions that will benefit the citizenry. Still, they also want the chief executive to be representative of the existing policy views of the mass public (Cohen 1999). There is a balancing act the president has to perform. They need to appear responsive enough to public opinion to build goodwill and support from the public for reelection (Neustadt 1990), but not to the extent that they render themselves incapable of advancing their own policy goals (Edwards 1983).

For those studies where findings support the view that presidents can lead public opinion, it appears that popular presidents are more successful in moving public opinion than unpopular presidents (Page, Shapiro and Dempsey 1987; Mondak 1993; Cohen and Hamman 2003). This finding though could also depend upon the availability of information to the public other than that provided by presidential rhetoric (Mondak 1993). There is a substantial body of research that indicates the president lacks the ability to impact public opinion (Sigelman and Sigelman 1981; Glaros and Miroff 1983; Edwards 2003; Wood 2009a).

A lot of the movement in public opinion might be attributable to abrupt changes following major events both domestic and internationally (Page and Shapiro 1992). Still, many events are going to be difficult for individual citizens to interpret without the assistance of political elites (Bartels 1994). The information asymmetry between political elites and public opinion is a window of opportunity of sorts for elites to influence the public (Zaller 1992). For instance, Wood, Owens, and Durham (2005) and Wood (2007) show that the president through the usage of an optimistic tone when speaking about the economy can lead the public to express a more positive outlook about

current and future economic conditions. Wood (2009b) shows that the content of language by the president has potentially far-reaching consequences. His study of foreign policy statements that express general or specific attitudes about the usage of military force can shape domestic attitudes about aspects like consumer confidence and perceptions of economic news.

The usage of this type of language, also known as saber rattling, has been found to invoke emotional support for the president. Usual decision making tools like party identification and ideology are less relied upon when making evaluations of presidential job performance. All citizens, regardless of party affiliation relative to the president, are more likely to approve of the job the president is doing with an increase in saber rattling. What is particularly interesting is that those citizens attached to the party opposite the president will increasingly approve of the job the president is doing with an increased rate of saber rattling (Wood 2009c). Such a finding also offers contradictory evidence regarding suggestions that partisan biases produce divergence across party affiliations in terms of viewpoints about politics (Goren 2007).

While there appears to be mixed results in terms of the ability of the president to influence public opinion, efforts to look at the capacity of public opinion to influence the president show an equally unclear picture. Some studies suggests movement in public opinion strongly moves presidential action, while other studies suggest the president is resistant to public opinion. The president under this view is sharply attuned to working toward getting his or her own ideological agenda through.

Research does find that policy stances of the president are responsive to the overall level of public preference for policy liberalism (Stimson, MacKuen, and Erikson 1995; Erikson, MacKuen, and Stimson 2002). Current policy stances of the president have been found to be a reflection of past movement in public opinion. Page and Shapiro (1983, 1985, 1992) also show a high level of presidential responsiveness to public sentiment at a rate comparable to that of other major political institutions in the United States, like Congress and federal courts.

On the other hand, research like that seen in the work of Jacobs and Shapiro (2000) shows a very limited window wherein the president is strategically responsive to public demand. They find that the president will only be responsive to public opinion prior to elections, or when public support is necessary to advance a specific policy goal. At most other times, presidents will adopt a non-centrist strategy geared toward advancing their own partisan policy goals. The president has the ability to take advantage of increasingly sophisticated polling technology to create persuasive rhetorical messages to get the public to support things they might not if they enjoyed perfect information.

During most other periods, the president might only be responsive to public sentiment when it is expedient to raising their job approval rating (Manza and Cook 2002). It could be that partisan polarization has exacerbated the gap between presidential and public policy stances (Canes-Wrone and Shotts 2004). Any time when we would see congruence in policy stances is at those strategically important periods, such as immediately prior to elections when popular approval appears to wane.

Other scholars like Cohen (1999) show no congruence between the level of presidential liberalism expressed in State of the Union messages and the policy preferences of the public. Cohen also was unable to find evidence that the president would be more likely to respond to public sentiment prior to elections, or to strategically increase approval ratings. Wood (2009a) finds that presidents usually attempt partisan persuasion instead of acting as a centrist, although they are only successful during specific time periods (e.g. start of the term, periods of high approval, presence of supporters in other institutions). Specific presidential administrations might also have a proclivity towards advancing their own policy agenda, regardless of a very low level of public support (Edwards 2007, Jacobson 2007).

It could be that the president as a singular political actor will not move the public as much as multiple political elites interacting together can. Elite level ideological polarization could be responsible for polarization at the mass level (Levine, Carmines, and Huckfeldt 1997; Abramowitz and Saunders 1998). Ideological polarization should be especially pronounced in politically aware party identifiers who have the skills to process cues and from these cues, know how to move their issue views in the direction of the more polarized stands of elites (Layman and Carsey 2002). For instance, Adams (1997) found that each party's stance on abortion has grown clearer and more distinct. People have been able to move their party identification in a way consistent with their attitudes on abortion. Elite level changes in the issue dialogue can then help to bring about mass level responses.

The News Media

While the news media might be seen as a mere conduit of information between formal political elites and the public, in reality the media can be thought of as an independent political actor that can express its own portrayal of reality. The media can elect to cover or fail to cover certain messages of the president. The media can also characterize presidential messages in ways that don't necessarily match the tone or intent of the president (Edwards 2003). The news through its gate-keeping practices can selectively pick what types of issues and events they will or will not cover at any point in time (White 1950; Tuchman 1978; Iyengar and Kinder 1987; Berkowitz 1997). Many members of the press go beyond the basic presentation of factual information, instead offering their own analysis of current events (Graber 2009; Bennett 2011).

The media, without the pressure for reelection that political officials have, can be less constrained in expressing their own perspective on politics (Cater 1959; Protess 1987; Patterson 2008). Indeed, empirical studies have found that much coverage of presidential candidates or administrations is geared towards presenting an up or down evaluation towards the job they appear to be doing campaigning or in office (Grossman and Kumar 1981; Dalton, Beck, and Huckfeldt 1998).

Although the news media appears to have a high potential for influence in guiding public opinion, we do at times see null or minimal effects in the scholarship assessing the role of the media in opinion change in making vote choices (Lazarsfeld, Berelson, and Gaudet 1948; Berelson, Lazarsfeld, and McPhee 1954). Research, though, has also shown that newspaper editorial endorsements can impact voter evaluations of

candidates, as well as shape their ultimate vote choice (Erikson 1976; Dalton, Beck, and Huckfeldt 1998; Kahn and Kenney 2002). People who read a newspaper identified as consistently advancing liberal positions and liberal candidates were more likely to vote for liberal candidates (Gerber, Karlan, and Bergen 2009).

Research that discusses public response to media issue coverage has found that when media outlets increasingly present ideological positions on issues, the receivers of information from those outlets increasingly express issue attitudes in line with that same political ideology (Mutz and Soss 1997). Increasingly negative reporting on economic performance during the election year can produce negative perceptions of the economy (Hetherington 1996). Media coverage then has the potential to shape how the public thinks about politics.

Summary

The above review of the emotions literature and agenda setting literatures makes two things clear. First, emotions may impact decision makers such that they react to cues in the information environment in ways that can potentially determine their decisions. Second, the ability of elite actors to influence the way the public and other elites think is politically salient appears to be mixed. The next chapter bridges together these two considerations and presents a theory that firmly links the discussed literatures together. Elites can invoke certain feelings when discussing issues such that decision makers will ultimately come to view those issues as important and in need of formal government attention. It is not the pure intensity of discussion about an issue that moves attention

towards an issue. The intensity of a specific type of emotional language, anxiety-based language, is what should move attention towards an issue.

The theoretical statement of this project, as mapped out in the next chapter, suggests that increasingly using anxiety-based language about an issue will cause a reappraisal of the information environment. This can lead to an updated assessment of the issue as a problem that requires formal government attention. Such a result will occur if the reappraisal exposes decision makers to information suggesting conditions related to that specific issue are unique, unstable, or potentially threatening.

CHAPTER III

THEORY AND HYPOTHESES

The proposal of this project is that a dual systems framework (Marcus, Neuman, and MacKuen 2000, 45-46) is an appropriate approach to predict and describe changes in the level of attention political actors place on issues. Under a dual systems framework, political actors will stop relying on their predispositions regarding issue salience when they are made to feel anxious. A survey is conducted of the surrounding information that is immediately available. Following this scan of the information environment, political actors decide whether to maintain or move their outlook on issue salience. In order to initiate this appraisal process though, the decision maker needs to have come across a cue that rapidly directs them to reassess their views. When a political actor has feelings of enthusiasm, there is no need to appraise the surrounding environment. There is a clear distinction then between the reaction to feelings of anxiety, and the reaction to feelings of enthusiasm.

One of the primary definitions of anxiety offered by Merriam-Webster describes it as "an abnormal and overwhelming sense of apprehension and fear often marked by physiological signs...by doubt concerning the reality and nature of the threat, and by self-doubt about one's capacity to cope with it (2003, 56)." Anxiety then is a feeling of unease about one's relative position in life given current conditions. There should be cues offered in the political system that cause actors to feel unease about their current status. Once an actor is made to feel uneasy, the surveillance system is quickly activated. The surveillance system attempts to pinpoint the exact source of these feelings, and/or to

learn about the specific qualities of the source that are producing these uneasy feelings (Marcus, Neuman, and MacKuen 2000, 60-64).

This reaction should be different than those cues that raise the level of enthusiasm an actor feels about a political object. Merriam-Webster defines enthusiasm as a "strong excitement of feeling (2003, 417)." A person that is an enthusiast is someone who is "filled with enthusiasm (such) as one who is ardently attached to a cause, object, or pursuit." The disposition system in a dual systems framework determines how well an actor is doing towards achieving their desires; is there a match between what is expected and what is being executed? If there is high congruence between expectations and reality, enthusiasm will rise (Marcus, Neuman, and MacKuen 2000, 46-53). Enthusiasm cues in the system that tell actors that conditions are in line with expectations will compel actors to maintain their preexisting outlook. The cues are informing the decision maker that there is a match between expectations and reality. A reassessment of the information environment is not necessary. The decision maker can remain attached to their outlook on the issue.

This chapter describes the purpose of evaluating the usage of different emotional tones in issue discussion, as opposed to only focusing on the absolute frequency of issue discussion. The actual content of the rhetoric used during periods of high intensity in issue discussion will not necessarily be the same across time. This could mean the behavior exhibited by political actors will also not be consistent. There are those periods where we see pervasive mentions of an issue coming before an increase in attention. These periods could actually be instances where attention is increasing due to a high

intensity in usage of a specific form of issue discussion that spurs movement away from habit. This specific form of language is anxiety-based emotional language, a type of emotional cue that can activate the surveillance system. Through usage of the surveillance system, decision makers can determine whether or not they should increase attention to a specific political object.

There will also be periods where we see pervasive discussion of an issue, yet no ensuing increase in issue attention. In these instances, we could be capturing periods where there is pervasiveness in the usage of language that fails to activate the surveillance system. This language can be either enthusiasm-based language, or language without any emotional content whatsoever. Even though the absolute intensity of issue discussion might be high in two different time periods, the observed response to the issue discussion could be different. The observed response will depend upon the specific content of the language used during these periods. The actual response to an increase in the absolute level of issue discussion will not always be the same, raising questions as to whether a more specific indicator is necessary for issue attention studies.

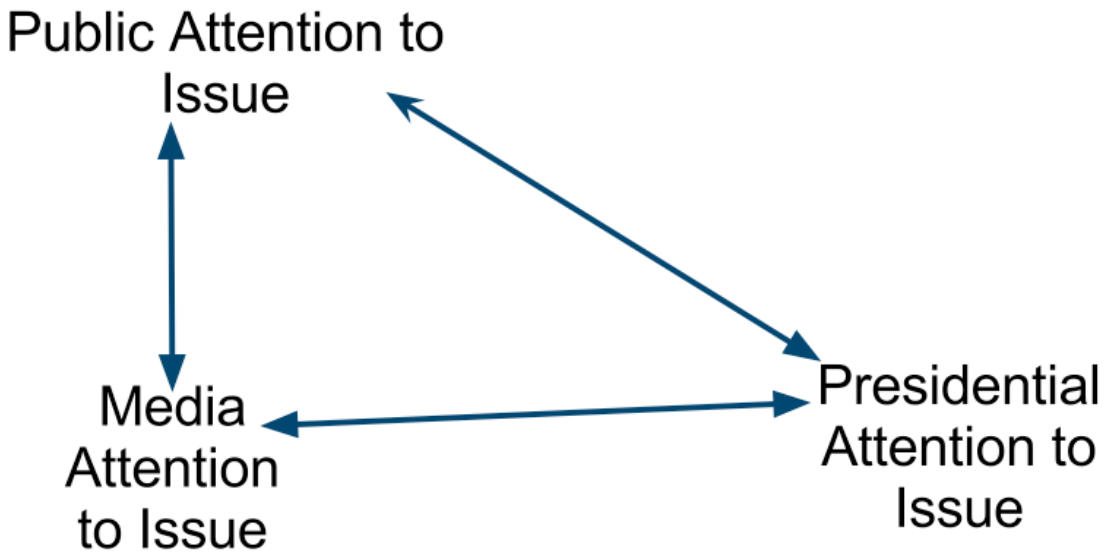
Through a brief exploration of several issue areas (foreign trade, banking and domestic commerce, and advanced technology and space exploration), this chapter demonstrates the need for a breakdown of the traditional issue discussion frequency measure. Elite issue discussion needs to be distinguished by the level of emotional language used within that issue discussion. Cues in the environment that make decision makers feel anxious are necessary to spark changes in issue attention. One of these cues is anxiety-based emotional language. Building off this discussion, empirically testable

hypotheses are presented that predict the role of anxiety-based language in guiding and increasing the focus on specific issues within the system.

Problems with Conception That Absolute Issue Discussion Intensity Heightens Issue Attention

When issue attention does not move from prior levels, message senders are not presenting cues in such a way that can activate the surveillance system. Political elites are not presenting information in a format that can force movement away from habit. One proposal that has been made is that in order for actors in the system to shift attention towards an issue, others in the political system have to repeatedly focus on that issue (e.g. Flemming, Wood, and Bohte 1999; Eshbaugh-Soha and Peake 2005). For example, with elite influence on the public, if either the media or the president increasingly discusses an issue, the prediction is that public attention to an issue will increase. Elites should be able to influence each other as well. An increase in issue references by the president increases media attention to that issue, and vice-versa. The public should have the potential to influence elite attention to issues. An increase in public perception of an issue as a major problem is predicted to heighten presidential and media-based attention of that issue. Figure 3.1 presents a diagram of these traditionally proposed dynamics.

Figure 3.1 Traditional Proposal of Linkages Between Elite and Public Issue Attention



The concern with this conception is that it assumes the mere increase in discussion of an issue is enough to direct others in the system to shift focus towards that issue as well. Decision makers are creatures of habit, meaning there is an inclination to rely on previous viewpoints about an issue. Constantly reviewing incoming cues offered in the information environment is unlikely given that decision makers are limited information processors. To stop the reliance on habit, cues have to be present that can clearly and persuasively make decision makers uncertain or uncomfortable. Decision makers with feelings along this dimension are quickly compelled to perform a careful review of incoming information.

Upon this appraisal of information, a revised outlook is possible. Guided by the perspective of the dual systems framework, the cues that need to be present are anxiety-

based. Rising attention to an issue will be based on whether there are distinct anxiety-based cues in the environment. One such cue, and the focus of this project, is the increased usage of anxiety-based emotional language when discussing an issue. As the brief case studies will show, heightened intensity in issue discussion does not always feature this vital emotional cue.

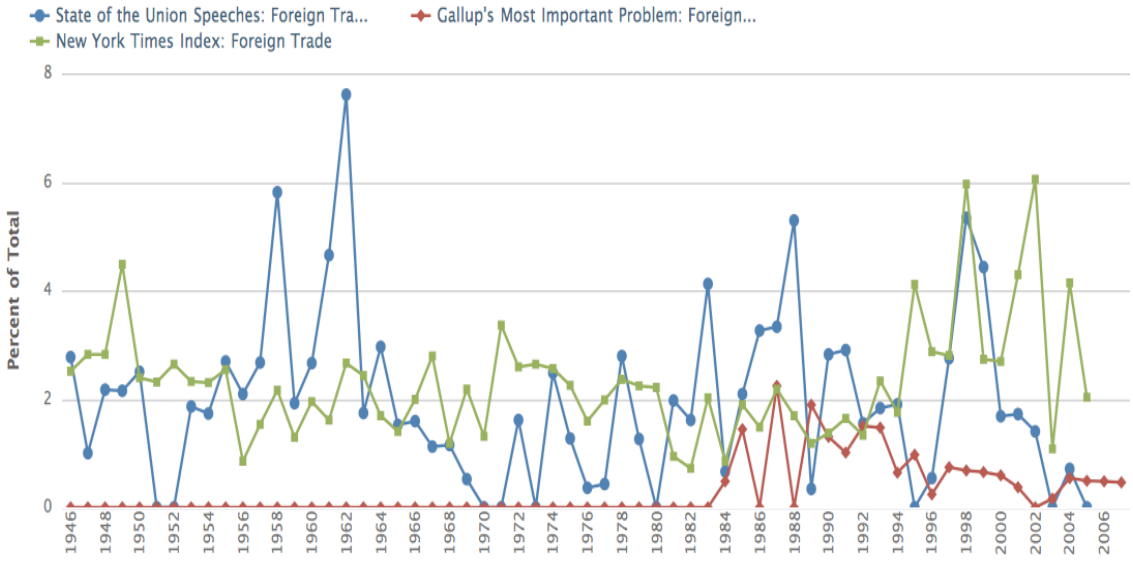
Case Studies to Evaluate Concerns About Absolute Intensity of Issue Discussion

Foreign Trade

There are cases in modern political history where there has been little movement in public attention to issues, despite an increase in the absolute intensity of elite attention. One example of this is the issue of foreign trade. As can be seen in Figure 3.2, the level of public attention to the issue of foreign trade appears resistant to increases in the level of issue references made by the president and the media for almost forty years.

Public attention is the annual aggregated proportion of responses to the Gallup Organization's most important problem open-ended question (and is represented by the red line in the graph). Presidential attention is the annual proportion of the State of the Union Address devoted to the issue (and is represented as the blue line in the graph). Media attention is the proportion of the annual newspaper coverage devoted to the issue, as indicated by the New York Times Index (and is represented by the green line in the graph).

Figure 3.2 Annual Dynamics in Attention Given to Foreign Trade



Source: Policy Agendas Project (http://www.policyagendas.org)

If we were to rely only on the traditional conception that issue attention increases in the face of increased issue intensity on the part of other political actors, we would be concerned by the dynamics presented in Figure 3.2 above. For several decades, there are periods where the level of attention given to the issue by both the president and the media appears to rise, yet public attention appears resistant to this movement. At the point of highest measured intensity in presidential attention to foreign trade, the ensuing level of public attention is not at all different from previous levels. A potential reason is that the predominant content of the language during this period is not suggestive that others in the political system need to be alarmed or concerned about conditions related to the issue. An indication of this is seen in John F. Kennedy's May 17th, 1962 address

before the Conference on Trade Policy, a statement available in the *Public Papers of the President*:

> "We have prospered mightily during this period of the reciprocal trade program. Our exports, a meager $2 billion a year during the three years before the enactment of the first Trade Agreements Act in 1934, have increased tenfold to some $20 billion. Every American is richer because of this great effort."

The time in which public attention to foreign trade initially appears to rise is during Ronald Reagan's second term in office. The interesting aspect is that the level of intensity in presidential attention is not at its highest level of the series during this period. The level of intensity in terms of media coverage is not at its highest level of the series either. What is it then that might have increased the level of public attention to foreign trade in the mid-1980s? A review of the content of issue discussion indicates that there is an emphasis on the usage of anxiety-based emotional language by Ronald Reagan during this time period. A story dated February 12th, 1986 from the Associated Press quoting Ronald Reagan during this period serves as an example of this type of language:

> "The most effective thing we can do for the American farmer is to fight against so-called domestic protectionism. It isn't really protecting anything, it's the No. 1 threat faced by American agriculture. Protectionist measures would only raise the prices of what farmers, and all of us, buy and would likely result in retaliatory trade barriers against our farm products overseas."

The increase in the usage of language suggesting that conditions related to an issue are threatening or uncertain is what should increase attention to an issue, not the absolute intensity of issue references. Repeatedly talking about an issue is not a precise enough signal that attention to an issue is warranted; the usage of specific cues

suggesting actors in the political system should be concerned about an issue is necessary. If absolute intensity were enough to drive attention dynamics, we would see at least some movement from the public before the mid-1980s in the face of heightened attention by the media and the president. The mid-1980s, following the usage of language that employed a tone heightening feelings of apprehension and uncertainty, is the initial period where we see public attention begin to shift.

The public continued to place attention on the issue of foreign trade in the face of continued anxiety-based language by George W. Bush and Bill Clinton. Their usage of this language was to express opposition to the usage of barriers hindering global trade. A review of the *Public Papers of the President* suggests that anxiety-based language was a persistent presence in the debate over the ratification of the North American Free Trade Agreement, an agreement that ultimately came into force in January 1994. On April 15th, 1991 during a briefing to the Associated General Contractors of America, George H.W. Bush offered the following comments: "If we lose this Fast Track authority, we lose any hope of achieving these three vital agreements. We lose trade. We lose jobs. And we jeopardize economic growth. And we unleash horrifying new waves of protectionism."

The mainstream media was also active in the usage of anxiety-based emotional language when covering foreign trade during this period. In a story dated December 2nd, 1992, the Associated Press wrote the following:

> "In parting shots on foreign trade, the Bush Administration today accused China and Taiwan of manipulating their currencies to gain unfair advantage and predicted that a sluggish world economy would send America's trade deficit rising rapidly this year and next. The Administration's gloomy assessment was that the merchandise trade deficit, which shrank in 1991 to an eight-year low of $65.4 billion, would hit $75 billion this year and exceed $100 billion in 1993."

Continued language like this, which offer the sense that conditions pertaining to an issue are unstable or potentially threatening, are a means in which to drive others in the system to scan their surroundings.

Following the passage of NAFTA, the absolute intensity of general issue discussion by political elites still appears relatively high compared to levels prior to its passage. What should be noted though is that during this period, the level of public attention is not as high as levels seen in prior years. The potential explanation is that within this time period, the usage of enthusiasm-based language is more pervasive, and there is a decline in the usage of anxiety-based language. The Clinton administration frequently spoke about the benefits of policies like lower international tariffs. There was also an extensive discussion of the positive contribution China could offer the global economy with admission into the World Trade Organization. In the 1998 State of the Union Address, Bill Clinton states the following:

> "(t)oday, record high exports account for fully one-third of our economic growth. I want to keep them going, because that's the way to keep America growing and to advance a safer, more stable world. All of you know, whatever your views are, that I think this is a great opportunity for America."

An increase in discussion like this, specifying the benefits of foreign trade reforms, will not help to heighten perception of the issue as a problem. During a December 8th, 1999 press conference, Clinton goes on to extol the benefits of limiting barriers to foreign trade:

> "I think that the world is more prosperous, and I know America is more prosperous because of the continuing integration of the world's economy and the mutual interdependence of people and people being able to produce what they produce best in a competitive environment, including costs. And I think we benefit, not just from our exports but from the imports. That's what I believe. I

> believe we will have both a more prosperous and a more peaceful world if we have more of the right kind of globalization."

Language like this indicates conditions related to an issue appear stable or are potentially improving. This should not (and in this case, does not appear to) increase perceptions of the issue as a problem based on proposals of the dual systems framework. The decline in the level of public issue attention given to the issue in the mid to late-1990s, despite the relatively high level of attention given to the issue by other actors in the system, is suggestive. There might be a need to break down the overall intensity of elite issue discussion measures by the emotional content present within that issue discussion.

So while the overall level of elite attention might be high in certain periods of time, the level of attention other actors in the political system give to that issue will not necessarily follow suit. The reason is that there are no cues being offered during those periods of high message sender issue emphasis that will activate the surveillance system of message receivers. In one of those periods where elite issue emphasis appears to be high, and public attention increases, we could in reality be seeing a specific period of time. During this period, an increase in elite usage of anxiety-based language is driving the change. That appears to be the case with the issue of foreign trade, as the period of the mid-1980s to the mid-1990s is marked by an increase in anxiety-based language.

Interestingly, Peake (2001), who finds that presidential intensity of issue discussion raises systemic attention to foreign trade, studies the time period of 1984 to 1995 in his project. This is the exact time period wherein the actual content of

presidential issue discussion appears to suggest a marked increase in the usage of anxiety-based language. Peake suggests his finding indicates that presidents might have more success raising systemic attention via increased discussion of low salience issues, like foreign trade and foreign aide. It could be that Peake is actually capturing the effects of high intensity of anxiety-based language of this time period, and not necessarily the pure effects of absolute intensity of general issue discussion.

Within periods where the intensity of issue statements increases, we might be seeing a period wherein the usage of anxiety-based language is increasing. These are the periods of time where we should expect to see a discernible increase in issue attention. During periods of high issue emphasis where the level of issue attention does not rise, we might be seeing a period wherein the usage of enthusiasm-based or non-emotional language is increasing.

Banking and Domestic Commerce

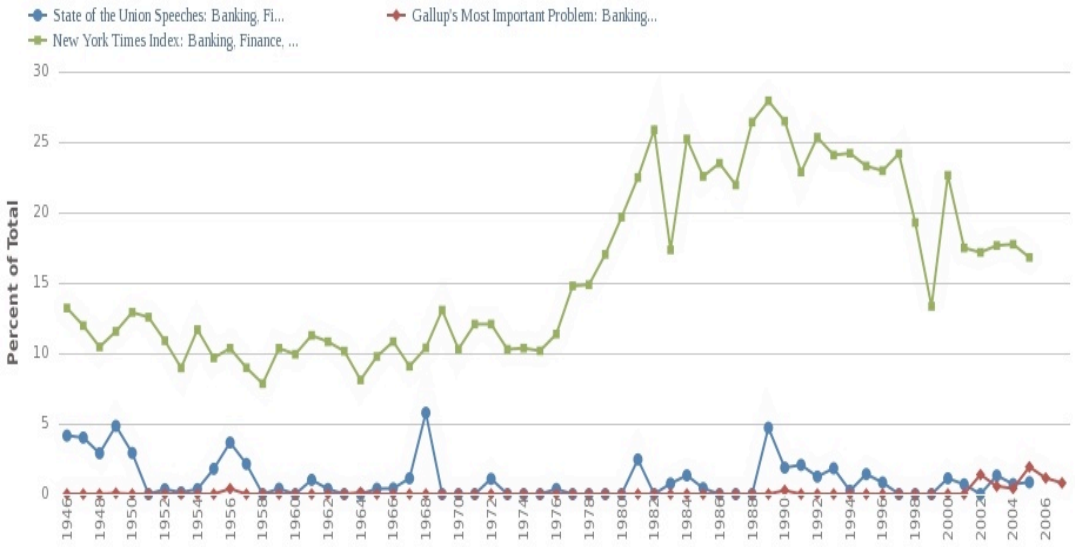
Banking and domestic commerce is a second issue area that is demonstrative of the point that an increase in the intensity of issue discussion alone will not necessarily heighten issue attention. At times where the intensity of issue discussion by the New York Times rises, little increase in presidential and public attention appears to follow.

A representation of the annual dynamics of these issues is presented in Figure 3.3. One potential reason is that much of the language used when discussing this issue area is technical in nature, with no emotional valence to it. There is a specific listing of substantive characteristics of the issue, and not cues that should activate the surveillance

system. For instance, a New York Times article by Nathaniel C. Nash dated April 18th, 1985, states the following:

> "Mr. Volcker said he thought that any new banking legislation should also give bank holding companies expanded powers, such as the right to sponsor and distribute mutual funds, to underwrite municipal revenue bonds and mortgage-backed securities and to engage in insurance and real estate brokerage."

Figure 3.3 Annual Dynamics in Attention Given to Banking and Domestic Commerce



Source: Policy Agendas Project (http://www.policyagendas.org)

Another example of this technical type of language is seen in a May 9th, 1997 New York Times article by John Markoff describing changes to finance encryption technology:

> "Besides international-funds transfers between banks, permissible applications under the new policy are expected to include privacy-protected home-banking software for banks to offer to customers worldwide. The new policy would also apply to a technology known as the Secure Electronic Transaction standard, which has been developed by Mastercard and Visa to permit consumers to send credit card information to merchants electronically."

An increase in the intensity of issue discussion using issue-specific language without an emotional tone will not activate the surveillance system. Many other actors in the political system, especially many citizens in the general public, should not find the language accessible enough to evaluate and process. Evaluating the pure intensity of issue discussion does not look at whether the language being used when discussing an issue has an emotional tone to it that decision makers can easily react to. The content of the issue discussion should matter.

Message senders using dense, descriptive language with no emotional tone to it do not offer message receivers an indication as to how to appropriately react to an issue. The notion that repeatedly discussing an issue is equivalent to an anxiety-based cue will not necessarily be appropriate. The reason is that actors in the political system will at times struggle to process the actual information within that signal. Issues will not receive an increased focus when either highly technical/abstract information is repeatedly being presented, or there is no emotional tone present in the issue discussion. Strategic political actors can maintain a policy monopoly of control over an issue by maintaining a complicated characterization of an issue. Characterizing the issue in repeatedly abstract terms could make it hard to alter how the issue is understood and discussed (Baumgartner and Jones 2009, 25-38).

This aspect might help explain why major political figures have a mixed record in directing attention to issues in past scholarship (e.g. Wood and Peake 1998; Edwards and Wood 1999; Eshbaugh-Soha and Peake 2004). Those issues where we have previously thought that the amount of noise about an issue was intense enough to direct

changes in behavior might actually be capturing something else. In actuality, it could be that these are instances where the level of usage of anxiety-based cues are intense enough to direct attention to issues. For an issue where it appears elite issue attention is not intense enough to direct attention, an alternative explanation could exist. These instances might be times where there was not enough usage of anxiety-based cues to compel movement from habitual behavior.

Decision makers can feel anxiety when they encounter something new or unique in the system (Marcus, Neuman, and MacKuen 2000, 10). Operating under the view that pure rhetorical frequency of issue discussion is an indicator of new information can result in imprecise empirical predictions about issue attention dynamics. The prediction would be that an increase in the intensity of issue mentions activates the surveillance system at a mass level, which results in a higher level of attention placed on that issue. The problem is that the mere intensity of issue discussion can fail to persuade others that something novel and worth paying attention to has entered the system.

Advanced Technology and Space Exploration

An example of this is seen with the issue area of advanced technology and space exploration. The heightened level in elite presentation of developing information following the launch of the first successful satellite launch by the Soviet Union might have been a persuasive enough signal to shift public attention. On October 7th, 1957, Sputnik I was successfully launched into orbit. Just one month later, a second satellite was successfully launched by the Soviets. There was a frequent discussion of the Soviet Union's potential military and technological capabilities (and the implication of these

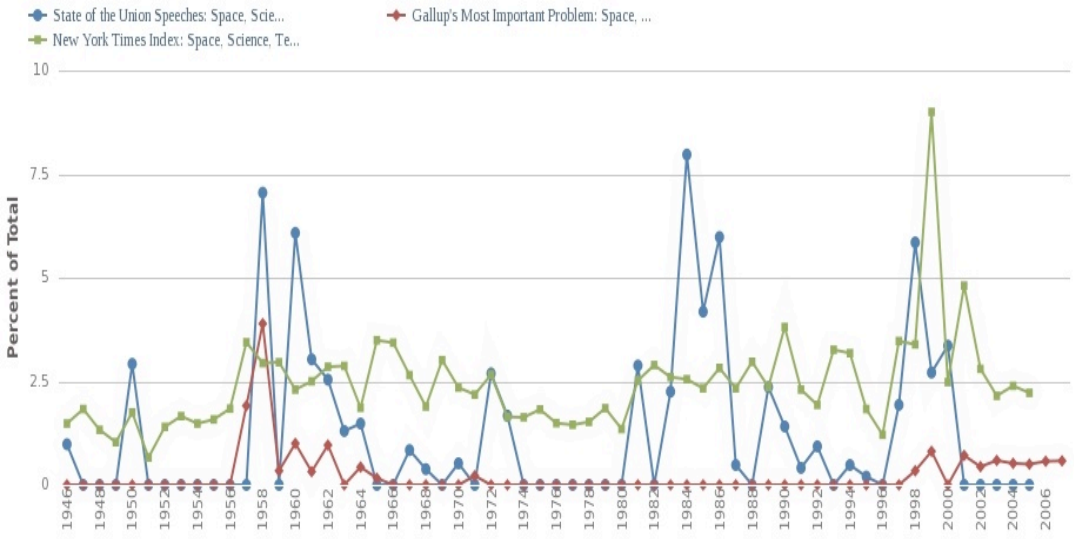
capabilities). This pervasive discussion in the political environment could have helped direct an increase in public attention toward the development of programs improving the scientific and technological capacity of the United States (Harford 1997). The initiation of the 'Space Race' could have been ignited by the intensity of new information being discussed within the system. This increased intensity of issue discussion was a result of the focusing event (Kingdon 2011, 94) of the Sputnik I and II launches. A focusing event can be a crisis, disaster, or another type of critical event that can potentially cause alarm and raise attention to a problem.

High elite intensity of issue discussion at this time, offering a description of new information as it developed, was made possible by the occurrence of an event unexpected to many within the political system. The event was perceived as a potential threat to the well being of citizens of the United States. The Soviet satellite launches raised some level of alarm that the technical capabilities of the Soviets could give them an advantage if actual physical conflict were to occur between the two states. The event signaled a threat might be present in the system, and there was a sharp increase in the presentation of new information in the aftermath of that event. These two factors could have triggered activation of the surveillance system in enough members of the public to raise attention to the issue for a brief period. This uptick in public attention during the time period is seen in Figure 3.4 displaying the annual series in this issue area.

As Kingdon (2011, 98) states, it is very rare for a focusing event alone to bring an increase in issue attention, since "(t)hey need to be accompanied by something else." Many within the political system will rely on signals from political elites as to how

major events should be interpreted. In this case, the combination of a focusing event and the discussion of developing information in the aftermath of that event could have been a sufficient enough cue to heighten the anxiety of actors within the system. What will help to ensure that feelings of anxiety are activated is the usage of anxiety-based language when presenting new information as it develops.

Figure 3.4 Annual Dynamics in Attention Given to Technology and Space Exploration



Source: Policy Agendas Project (http://www.policyagendas.org)

It is clear that anxiety-based language was a part of the issue discussion following the launch of Sputnik I and II. DeGroot (2006, 68) quotes Chicago Daily News sugges-tions that the Soviets, “could deliver a 184-pound ‘moon' into a predetermined pattern 560 miles out into space, the day is not far distant when they could deliver a death-dealing warhead onto a predetermined target almost anywhere….”

Such language, raising the possibility of dangerous consequences with increasing Soviet capabilities, compels consideration of attention towards ways in which to mitigate those concerns. Attention is given to advancing domestic technological/space capabilities to surpass Soviet capabilities.

Still, as was seen with the two prior issues, there is the possibility of little movement from predispositions in the face of increased intensity of issue discussion. This could be potentially attributable to the absence of a focusing event and/or no new substantive information discussed that information receivers can process and react to. Such an outcome will likely be the result in those periods where no significant focusing event has occurred. Without a focusing event, it is difficult to find a launching-off point to discuss unique developments regarding the issue.

One potential instance of this in the issue area occurs during the mid-1980s with Ronald Reagan's attempt to cultivate support for the creation of an American permanently manned habitat that would orbit the Earth. Referred to as Space Station Freedom, Reagan in his rhetoric touted the potential benefits of a space station to rival that of the planned Soviet space station Mir. In his 1984 State of the Union Address, Reagan offered the reasoning for a space project of this scope:

> "America has always been greatest when we dared to be great. We can reach for greatness again. We can follow our dreams to distant stars, living and working in pace for peaceful, economic, and scientific gain. Tonight, I am directing NASA to develop a permanently manned space station and to do it within a decade. A space station will permit quantum leaps in our research in science, communications, in metals, and in lifesaving medicines which could be manufactured only in space. We want our friends to help us meet these challenges and share in their benefits. NASA will invite other countries to participate so we can strengthen peace, build prosperity, and expand freedom for all who share our goals."

Reagan's persistent discussion during this time period of the potential benefits of a space station failed to resonate with the public. This is clear when reviewing the lack of movement in public attention towards the issue area of space and technology during the time period in question. Although the heightened intensity in issue discussion would conceptually imply new information is present in the system, Reagan did not appear to actually offer new substantive information about developments related to the issue. Perception of a high level of novel information in the system would warrant a scan of the information environment. There was no focusing event or novel details regarding Soviet capabilities that Reagan could use during issue discussion in the same way that elites used developments following Sputnik I and II. The Soviet satellite launches were novel and distinct enough to persuade others about the possible need for domestic space and technological development.

With the launch of Sputnik I and II, many members of the political system had no idea of what the Soviet Union was capable of. The information that was provided by intense issue discussion was novel, helping to stir feelings of anxiety. With Reagan's attempts at raising attention, members of the political system were not given a clear signal as to the demonstrable factors that necessitated a large project like the proposed space station. While Reagan heightened the intensity of discussion in this issue area, there was nothing within that signal that gave an indication that unique developments had indeed entered the system. With the lack of cues that could heighten feelings of anxiety, perceptions about advanced technology and space exploration were consistent with habit.

Anxiety-Based Cues Are Behind Changes in Issue Attention

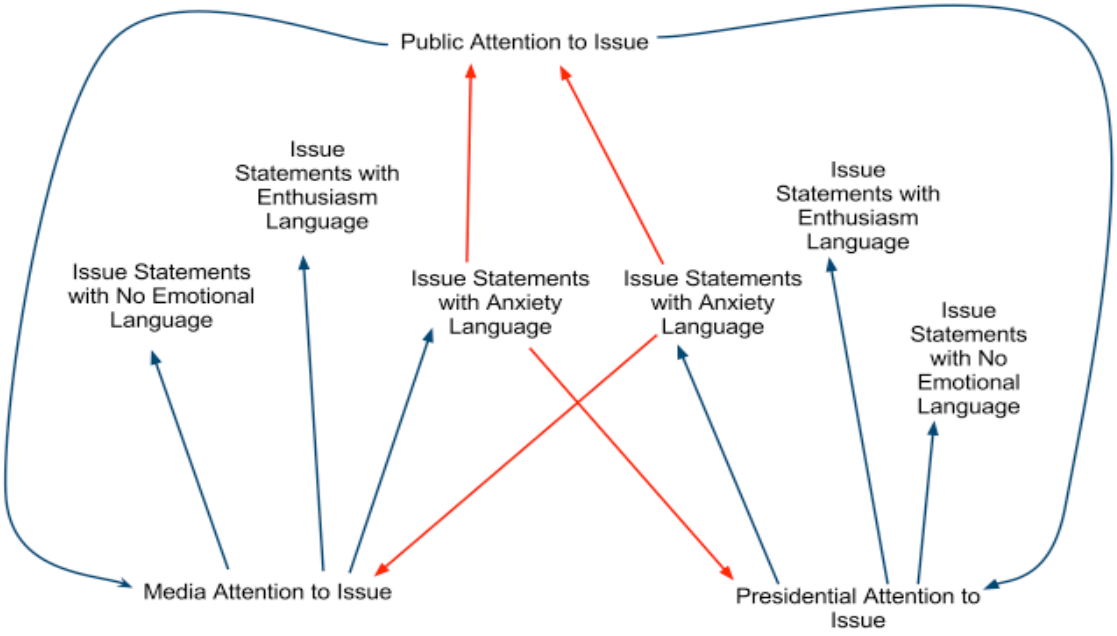
All of the above case studies raise questions about the ability of pure intensity in issue discussion to predict and determine whether elites cues can direct the level of attention placed on issues. Following the proposals of the duals systems framework, issue discussion that includes language that can raise feelings of anxiety should activate the surveillance system. When the surveillance system is activated, a scan and analysis of incoming information occurs.

In this scan, if decision makers are exposed to a high level of anxiety-based language within the system, change from habitual views can occur. If decision makers are exposed to an abundant amount of information that indicates conditions related to an issue are uncertain, unstable, or threatening, they will be more likely to view that issue as salient. Exposure to anxiety-based cues about an issue will increase the perception that an issue is a substantial problem that needs to be addressed. Figure 3.5 provides a revised assessment as to how the usage of anxiety-based cues should direct changes in issue attention.

The figure shows that changes in the level of attention the public, the president, and the media give to issues are produced by exposure to specific types of issue statements. These issue statements contain language that indicates conditions related to an issue are unique, unstable, uncertain, or potentially threatening. Such language should produce the apprehension and self-doubt necessary to heighten feelings of anxiety. Anxiety compels a survey of the information environment to determine what is the cause, or what are the qualities of the perceived cause that produce such feelings. Upon

this appraisal of the environment, decision makers can update their outlook on issues. Enthusiasm language, and language without an emotional tone, should not increase perceptions of issue salience.

Figure 3.5 The Importance of Anxiety-Based Language in Moving Issue Attention



Enthusiasm language and language without an emotional tone will not provide persuasive cues that movement from habitual behavior is necessary. The reason for this is that decision makers can develop predispositions at an early stage in life. These predispositions will be based on their socialization into the political system. One way in which these predispositions can be developed could be in the manner proposed by Sears and colleagues (Sears et. al 1980; Sears 1983; Sears, Huddy, and Schaffer 1986; Sears 2001). The hypothesis raised by Sears is that citizens at a very early stage in life learn

symbolic predispositions towards political words and objects in the environment. This means actors in the system can become conditioned to political objects, such that they can respond to information consistent with their predispositions quickly and efficiently.

The response to information should be based on how the actor feels about the symbols related to the object. The reaction to a political object is derived from the combination of affective responses to the symbols within that object. As an example, Sears (2001) says attitudes toward the issue of forced busing to promote integration will depend upon the affect placed on symbols like 'white,' 'black,' 'force,' 'busing,' and 'integration' (16-17). Perhaps the most well known examples of political symbols are party attachment and political ideology. The strength of political predispositions will depend on the pervasiveness and consistency of cues pairing the political symbols to the existing affective evaluation.

The disposition system should compare environmental feedback about political objects to predispositions or routines of a type similar to that characterized by Sears and colleagues. Political actors have predispositions. A heightened intensity of emotional language in the system suggesting actual conditions are in the direction of predispositions should perpetuate habitual behaviors. This will clearly be the case when there are no other cues present in the system that can activate feelings of anxiety.

Repeatedly mentioning an issue in a way that citizens have been already exposed to should not raise anxiety. If issues are repeatedly discussed with packaging frames decision makers know how to react to given symbolic predispositions, political actors will not react. Political actors should also not respond if substantive information in the

issue discussion is not novel or unique. If there is no indication within the system that something has changed, there is no perceivable need to move away from habit.

The surveillance system makes shifts from predisposition possible. The system should be activated by discussing an issue with previously unused packaging frames, through the presentation of new substantive information exogenous to the system, or with an increase in anxiety-based language. These three factors are aspects that indicate conditions within the system have changed in such a way that a political actor may have to reconsider their surroundings.

The proposal of the dual systems framework is that exposure to cues that produce feelings of anxiety activate the surveillance system, making opinion change possible. Either one or a combination of these cues could activate the surveillance system.

-The arrival of a novel/unique focusing event or developing substantive information (see Kingdon 2011, 90-100).

-Exposure to issues packaged with unique frames that accentuate different considerations previously unconsidered (see Nelson, Clawson, and Oxley 1997; Nelson and Oxley 1999).

-The exposure to emotional language suggesting conditions pertaining to an issue are unique, unstable, uncertain, or potentially threatening (anxiety-based language).

The focus of this project is on the usage of anxiety-based emotional language. Prior research has not measured whether this form of issue discussion is moving public issue attention, instead of the traditionally predicted absolute intensity in issue

statements. When anxious, decision makers will scan the surrounding environment for information. This project proposes that decision makers will increasingly view an issue as salient if they come across anxiety-based language about that issue. Actors will be attracted to those objects that make them feel anxious (Gray 1987).

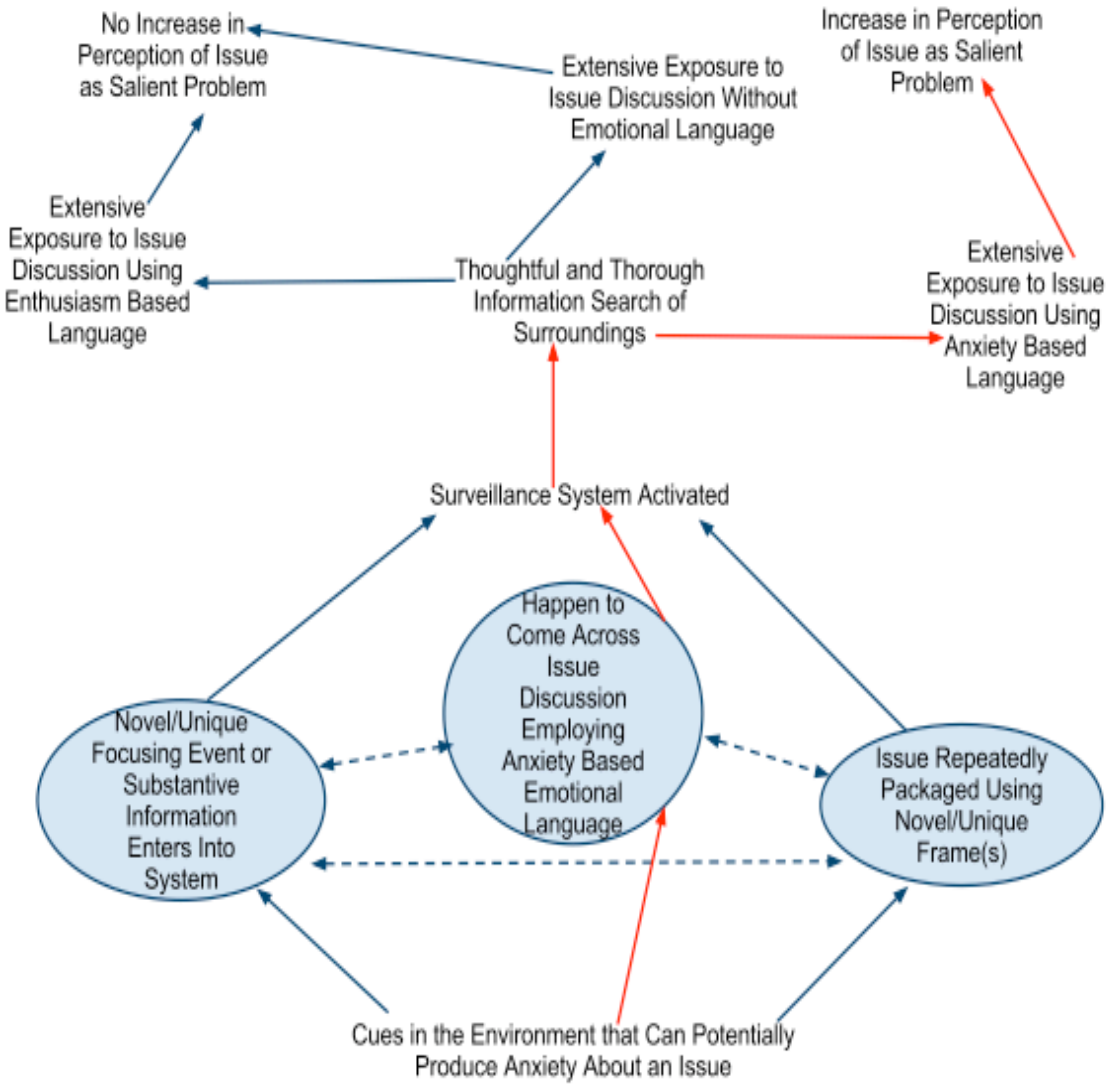
If during an information search, it is possible decision makers will come across a substantial amount of language discussing an issue with no emotional tone, or that employs enthusiasm-based cues. In these cases, following the framework of the dual systems approach, the level of attention given to that issue should not increase. Issue attention will fail to rise if there is an abundance of emotional cues about an issue suggesting conditions are stable, equivalent to expectations, or are improving. Figure 3.6 provides a diagram of all of these potential outcomes.

Anxiety cues make people reconsider how they think about an issue. A scan of surrounding information ensues. During this appraisal, if a political actor is exposed to cues about an issue congruent with those feelings of anxiety, attention will increase to that issue. The focus will heighten to that issue, as it is increasingly perceived to be the primary source of those feelings. If during an appraisal of surroundings, political actors come across cues that are divergent from feelings of anxiety, attention should not increase toward the source initially perceived to be the reason for feelings of anxiety.

The importance of encountering multiple anxiety cues in the system is that the cues can potentially serve as compelling pieces of information. The reason is that an emotion in and of itself can act as a piece of information to the decision maker. If there is the consistent expression of a particular emotion by a prominent political actor, this

will indicate that others in the system should also feel this way. There are aspects pertaining to the issue that appear to invoke a certain emotion if the same emotion is repeatedly expressed. Were the president or another major political figure to consistently express the emotion of anxiety when engaging with an issue, this should serve as an indication that others in the system should be concerned about the issue as well.

Figure 3.6 Anxiety-Based Cues Activate the Surveillance System



Given that there is a scan for information in the system, decision makers can be exposed to information they might not have reviewed previously. This could mean decision makers are influenced by prior information, as well as a discussion of current conditions, when determining which issue or issues are problems in need of formal government attention. In this way, anxiety cue usage could be a type of strategy in which elites attempt to get others in the system to consider information that seemed to be ignored previously. Anxiety cue usage might be a potential means then to get decision makers to consider the history of an issue.

Research Hypotheses

With such a framework in place, it is possible to construct empirically testable hypotheses regarding the interrelationships between political elites and the public regarding issue attention.

Hypothesis 1: Prior changes in the level of anxiety-based language by the president causes changes in future levels of public issue attention.

Hypothesis 2: Prior changes in the level of anxiety-based language by the media causes changes in future levels of public issue attention.

Hypothesis 3: An increase in elite usage of anxiety-based emotional language when discussing an issue will increase public attention to that issue.

The initial set of hypotheses specifies the predicted causal direction of elite-mass interactions. Elite usage of anxiety-based emotional language will alter the way in which the public perceives an issue. The reason why past studies have shown cases where elites appear to have a limited ability in directing attention to issues is because elites did not

use enough anxiety-based language. Anxiety-based language needs to be present in the system to an extent that can activate the surveillance system with multiple political actors. Instead, past studies on elite attempts at raising issue attention could be showing that the heightened usage of alternative forms of issue rhetoric cannot increase public attention. These could be cases where the language used in the discussion is without any emotional valence, or language intended to increase feelings of enthusiasm. These styles of discussion will not raise attention.

While the preceding three hypotheses relate elites to the public, the underlying theory should be just as applicable with interactions that elites have with each other. Changes in the level of anxiety-based language used by elites should impact the level of attention other elites give to that issue, if the proposals of dual systems theory hold.

Hypothesis 4: Prior changes in the level of anxiety-based language by the president causes changes in future levels of media attention to that issue.

Hypothesis 5: Prior changes in the level of anxiety-based language by the media causes changes in future levels of presidential attention to that issue.

One aspect that must be evaluated is whether information receivers are biased information receivers that will be resistant to incoming information depending upon the source. When evaluating the information environment, decision makers can engage in the selective exposure to information where they only seek out information that confirms prior beliefs (Lodge and Taber 2000). When faced with a decision task, decision makers will reject or avoid information that goes against their preexisting outlook.

This is biased information processing such that the message receiver is unwilling to compromise in the face of contrary evidence. Such a potential outcome is a display of a confirmation bias where actors in the political system only seek out information that reinforces their current outlook on issues (Taber and Lodge 2006; Taber, Cann, and Lodge 2009). According to dual systems theory, anxious decision makers, when posed with making a decision task, should be willing to look at information opposite from preexisting views, or which comes from a source they have a negative view of. The mechanics of the surveillance system calls for a balanced information search that explicitly considers the information available in the system. Similar to proposals of non-directional motivated reasoning (Taber, Lodge, and Glathar 2001), dual systems theory suggests decision makers do have the capacity to be even-handed in their review of surrounding information.

It is important to assess the possibility that message receivers do discount information in the environment given their predispositions. One way in which to explore this is to see if message receivers will be resistant to anxiety producing cues sent by message senders from a political background different from their own. Will a Democratic leaning message receiver maintain habitual views, despite a Republican message sender repeatedly offering anxiety-based language cues? Will a Republican leaning message receiver maintain habitual views, despite a Democratic message sender repeatedly offering anxiety-based language cues?

If predictions derived from dual systems theory hold, cues that increasingly produce feelings of anxiety should always cause a reassessment of information that can

bring about opinion change. This should be the case, regardless of negative feelings about the political actor sending out the cues. If the prediction does not hold, then elite attempts at moving the systemic agenda become even more difficult. Message senders will have to both talk about the issue in a specific way, and possess the qualities that make them an acceptable source to message receivers. Due to the possibility, several additional hypotheses merit analysis.

Hypothesis 6: An increase in anxiety-based language by a Democratic president will increase attention to that issue with decision makers that are consistently aligned with the Republican party.

Hypothesis 7: An increase in anxiety-based language by a Republican president will increase attention to that issue with decision makers that are consistently aligned with the Democratic party.

With a review of these several proposals, we can attempt to gain a better understanding of under what conditions political elites can and cannot compel the public and other elites to reconsider which issues are politically salient.

There is the question of why a political actor would bother to use anxiety cues at a low rate when it is probably not used at a pervasive enough rate to raise attention to the issue on a mass level. A potential reason is that issue discussion could be targeted at specific groups or populations in the system. A small number of anxiety cues can potentially persuade specific groups in the system that conditions related to an issue have changed and need to be addressed. This should most likely be the case when the group

already is concerned about the issue or finds it highly salient. A small number of anxiety cues might be just enough to activate these groups into action.

For instance, veterans assistance and affairs groups could modify their behavior in the face of a very small number of cues suggesting funding for veteran medical care is uncertain. Although these cues will be unlikely to resonate with most members of the system, a small change in the number of anxiety cues could be enough to drive desired behavioral change. Another example could be seen with the issue area of the environment. A minor shift in the number of anxiety cues from a formal political elite could direct environmental groups like Greenpeace or Earthwatch to act. The cues can also compel media outlets that cover the environment, such as E: The Environmental Magazine, to cover the environment in such a way that will help alter behavior. A political elite, through the usage of anxiety cues, does not necessarily have the intention of bringing a mass shift in action. Instead, the goal could be to activate the interest or effort of a specific section within the political system.

Another aspect as to why anxiety cue usage will not be a major component of issue discussion at a given point in time is that political elites at certain periods will want to make it clear that there is no reason to be concerned about the issue. An elite will want to use other forms of emotional language that do not spawn behaviors that help raise the likelihood of others viewing an issue as a problem. Such a decision will be most clear with presidential rhetoric, as the president is likely to be held accountable if conditions related to an issue are perceived as highly unstable.

If the president was to use anxiety language to heighten perception of that issue as a problem, and there is no meaningful institutional reforms or policies that follow to address concerns, the president could be punished. The president might receive lower job approval ratings, or face electoral backlash against their party. These two consequences can also result if the president raises anxiety about an issue, and decision makers disagree with the assessment offered by the president after conducting a scan of information. The usage of anxiety-based language then can be a calculated risk for an elected official like the president, perhaps more so than for the media.

These considerations provide elected officials like the president some incentive to use non-anxiety language, especially if the usage of this type of language helps mitigate concerns about specific issues. A potential strategy is to increase the usage of enthusiasm language. An increased intensity of enthusiasm language should decrease the level of attention given to an issue. Issue attention research focuses mainly on explaining when and why issues will be increasingly perceived as problems, but it could be that explaining when and why there will be a decline in issue attention can help to clarify the decision calculus of actors in the political system. Such a hypothesis is worthy of evaluation in future research.

One aspect not evaluated here is the matter of issue competition. If high levels of anxiety cues are used for several separate issues at the same point in time, the question becomes which issue will be focused upon in the system. It could be that there are so many anxiety cues in the system on a wide array of issues that political actors struggle to decide which issue is most salient. There could appear to be a slow or negligible shift in

attention given that political decision makers are unsure of which signal to respond to. This would be demonstrated by a lack of relative movement in issue attention across all issue areas. Another possibility is that the one issue that appears to have the most anxiety cues observable out of all the issues will ultimately be perceived as the most salient. If multiple issues have a high presence of anxiety cues present at the same time, elites that hope their preferred issue receives attention from others in the system will have to expand efforts at persuasion. This could lead to the offering of additional anxiety cues on their issue of interest. Future research will have to evaluate the role of issue competition in predicting issue attention dynamics.

Summary

The main proposal of this project is that a specific type of issue cue, anxiety-based emotional language, will consistently increase the level of attention actors give to issues. Such language is a more precise indicator of surveillance system activation than the absolute intensity of issue discussion. In this chapter, several brief case studies raised questions about the validity of the absolute intensity in issue discussion as an indicator of elite cues persuasive enough to direct issue attention. As seen in the case of foreign trade, public issue attention bordered on non-existent for several decades, not moving at all in the face of fluctuating issue attention by elites. Public issue attention increased with the usage of anxiety-based emotional language by several presidential administrations during the mid-1980s to the early-1990s. Public attention fell in the mid to late-1990s, despite persistent intensity in issue attention by elites. The reason could be

that enthusiasm-based language was increasingly used during this period, instead of anxiety-based language.

As a result, a breakdown of the overall intensity of issue discussion by the presence of emotional language could be necessary. Just because issue discussion is high, does not mean the issue is being discussed in a way that will attract attention to that issue. A period where it appears pure intensity in issue attention directs attention given from other actors in the system could be capturing a specific type of period in elite agenda setting. During such a period, the intensity of anxiety-based emotional language is the predominant cue offered. A period where it appears pure intensity in issue attention fails to direct attention others in the system give to issues could be capturing another type of period. In such an instance, enthusiasm-based language or language with no emotional content to it could be the type of cues frequently seen in the system. The content of the language can dictate attention dynamics.

A review of the issue area of banking and domestic commerce gives some additional weight to this claim. Issue attention on the part of the public and the president did not move much in the face of an increase in issue discussion by the media. The highly technical and detail oriented issue discussion features language that is likely difficult for many actors in the political system to evaluate and react to. Even though the level of issue discussion is high, the issue area is not discussed in an accessible enough way for message receivers to determine whether or not the issue is salient.

As seen in the area of advanced technology and space exploration, the Sputnik I and II launches allowed elites to discuss developing information in a way that could

heighten anxiety about the issue area. With the lack of a focusing event, or any discussion of unique substantive information previously unknown in the system, increased intensity in issue discussion might not have an impact in directing attention. Reagan's inability to heighten attention to the issue area when discussing plans for an American space station could be an instance of this point. Merely increasing the level of issue discussion will not be a suggestive indicator that something novel has entered the political system. This should be clear when there is no indication (either events, packaging frames, substantive information, or emotional language) of novelty present. Without cues that can raise feelings of anxiety, decision makers will maintain their habitual outlook.

Anxiety-based emotional language should be able to direct attention to issues. An increase in the usage of this language by elites should increase the level of attention other elites and the public give to that issue. This result should hold, even if the political elite offering the cues is of a political background opposite to the message sender. In the next chapter, a specification is given of the procedures taken to analyze changes in emotional language usage through time series statistical techniques. A description of the steps taken to collect original measures of anxiety and enthusiasm-based emotional language is provided.

CHAPTER IV

RESEARCH DESIGN

In this project, a comparison is being made between the level of emotional language used to discuss issues, and the level of attention actors in the political system give to these issues. To make such a comparison, information on the two types of emotional language of interest has to be collected. In addition, information about the level of attention political actors place on issues is required. This section serves as a description of the procedures used to measure and evaluate these variables statistically. The specific steps taken in the research design are distinct from the approach adopted in previous attempts to assess the dual systems framework.

Multiple Measures of Issue Attention

Systemic Attention in the Public

Measuring aggregate attention to issues is not an easy task. To assess public sentiment, it would be impossible to keep a log of how much time all citizens devote to finding information on, thinking about, and discussing with peers the multitude of issues that can potentially exist within a society. As a result, research gauging public attention has attempted to use aggregate survey data. There is the usage of overall statistics from surveys given to individual respondents asking what is the single issue they personally believe is the most pressing problem currently (Jones and Baumgartner 2005; Baumgartner and Jones 2009). When you collect all the individual responses to calculate the overall percentages of which issues the public view as salient, it is possible to see the relative breakdown within the population as to which issues are commonly seen as

problems. If many people perceive one issue as a salient problem, the assumption is that they believe this issue is worthy of government attention. Operating under this view, scholars have a measurable indicator of which issues at any given point in time a substantial number of people in the public are focused upon.

To get this issue breakdown for the population, the question most relied upon is the Gallup Organization's open-ended question prompting survey respondents to specify the following: 'What do you think is the most important problem facing this country today?' If a large portion of the public perceives an issue as a problem in the country, this issue could be perceived as one that needs to be addressed or remedied in some capacity by formal government channels.

While the usage of responses to this survey item could be a reasonable gauge of the concept of public issue attention, there is a concern with relying only on the Gallup Organization's survey instrument as the basis of the measure. The 'most important problem' question is one that has not always been asked with as much frequency in the past as it currently is. In recent years, the Gallup Organization has asked the 'most important problem' question on a monthly basis. In past decades though, it was administered in the survey instrument much less frequently. At times the question was asked by Gallup less than five times in a single year. Influenced in part by this potentially troubling gap in data points, research like Baumgartner and Jones (2009) treats public attention to an issue as an annual measure.

The predicament with treating a concept like public issue attention as an annual measure is that it can fluctuate within each year. What issues are focused upon can shift

quite quickly, as has been mentioned as potential outcomes in the agenda setting theories of Downs (1972) and Kingdon (2011). The notion that public attention will be at or near the same point each year is ignoring the possibility that information available in the information environment (focusing events, issue rhetoric, etc.) can make the level of attention rise and fall multiple times in any given year. More sharply refined information about public attention is probably necessary. Annual measures of systemic attention could be ignoring discernable shifts in issue attention that occur within each year.

In an attempt to get a more precise signal of public issue attention, a measure can incorporate data from other survey organizations that ask a question similar in style to the 'most important problem' item offered by Gallup. One benefit of this that these survey organizations can provide information about the levels of public issue attention at those times when data on public issue attention is not available from Gallup. The second benefit is that in those months where it is possible to compare both Gallup and other survey organization responses, a more precise indication of which issues the public perceive as salient in that particular month is available.

The aggregate percentages of issue attention from the separate survey organizations can be combined with the traditionally used Gallup Organization responses through a principal components analysis. The analysis provides an estimate of how the breakdown of issue attention from the multiple survey organizations best fit along a single dimension of public issue attention. What is being constructed is an overall index of public issue attention. The index is comprised of multiple survey organizations asking questions across time that are assumed to fit along a single

dimension of issue attention. The thought process behind this is similar to that seen in the work of Stimson (e.g. Stimson 1999; Erikson, MacKuen, and Stimson 2002). Stimson has developed a way in which to take survey questions from multiple survey organizations about policy preferences in multiple issue areas to create a general indication of the level of policy liberalism, or mood, the public appears to express.

The belief is that the time series derived from this statistical procedure resembles the series that would exist if all the survey organizations all asked the sample question regarding issue attention at the same time period. In other words, the statistical procedure is giving the best representation possible of the underlying movement of collective issue attention given the limitations in the availability of the data. For those periods where no survey organization asked a question similar to Gallup's 'most important problem' item, the index will provide the best estimate of aggregate movement.

To construct this index, a search through the Roper Center archives was performed to find survey questions on issue salience that used either the phrase 'most important problem' or 'most important issue.' In all, seventeen different survey collection agencies have asked an open-ended question of this nature whose responses are appropriate for inclusion in the index measure. Some, like the CBS News/NY Times and ABC News/Washington Post polling groups, employ the exact same question wording as Gallup does. Others, like the Wirthlin Quorum Survey group and National Public Radio/Greenberg Quinlan Rosner, adopt a somewhat different style of presentation: 'What would you say is the single most important problem facing the

United States today, that is, the one that you, yourself, are most concerned about?' All those organizations whose questions appear to measure the same concept (issue salience) as Gallup's 'most important problem' are included in the index. The question wordings used by all the survey organizations measured in this project are provided in Appendix A.

For each survey item found to be appropriate, information about the level of the public that specified the issues of crime, health care, poverty, and the environment as most pressing was collected. The timeframe of survey information used to construct the index was from January 1980 to January 2009.

The purpose of evaluating this particular set of issues is to explore a variety of areas that also potentially exhibit unique dynamics in attention during the time period studied. It is worthwhile to determine whether anxiety cues are even relevant for issues when they are already commonly perceived as problems by actors in the political system, as well as issues that are not as frequently viewed as salient. As will be seen when looking at each of the issue series, there is substantial variation in the level of systemic attention the issues receive.

For instance, the potential threat of crime is something that many political actors, both formal and informal, will be drawn to and concerned with. There is always the possibility of being personally affected by it, or happening to know others that can be impacted by it. There are also issues like poverty, where many political actors in the system will be highly unlikely to perceive them as a concern without external influence. The reason is that many in the political system are far removed from the potential threat

of poverty, such that they will be unlikely to think of the issue when evaluating what issues need to be prioritized. If a political actor is not living near or under the poverty line, and does not interact with others that are living at or near the poverty level, the likelihood they will perceive poverty as a threat is slim.

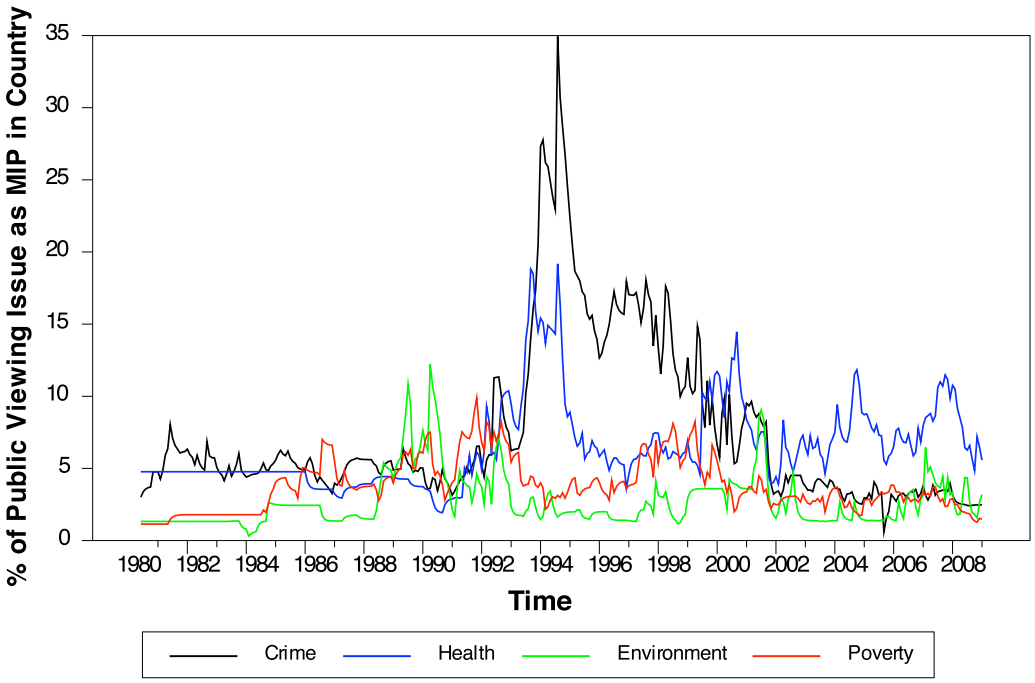
On the other hand, an issue like crime, which can touch anyone at anytime regardless of income or location, is an issue that can easily be perceived as a threat. As a result, there might be a differential in the ability of anxiety cues to persuade political actors that an issue matters, given the background qualities of the issue. Given this, it is useful to contrast multiple issues during the same time period to determine if there is a general role anxiety cues play on issue attention.

For each of the four issues, separate monthly index series were created using Stimson's WCALC program. WCALC uses an algorithm to calculate a recurvsively smoothed time series of public attention for each specific issue. The intention of smoothing is to discern common movement in the evolution in issue attention reported by the survey organizations through their 'most important problem/issue' open-ended questions. A smoothed series focuses on common movement, as opposed to shifts that might be due to random fluctuations in sampling. Ratios of smoothed values to both past and present smoothed values of the time series produces the final issue attention index. A visual display of the four recursively smoothed series is offered in Figure 4.1. The statistical breakdown of the fit each index has with the component survey series that make up that particular index is provided in Appendix B.

It should be noted that the number of surveys used for each of the issue series appears to differ because WCALC does not include values of zero into the algorithm due to its ratio-based structure (see Stimson 2008 for details). As a result, those surveys that reported no respondents expressed the view that an issue was a salient problem could not be included into the statistical index for that issue.

For each of the four issue series, we have a monthly indicator of the relative level of the public that perceived that particular issue as the most important problem in the country. Guided by information from multiple survey organizations in each year of study, a more detailed indicator of dynamics for each issue is now available.

Figure 4.1 Dynamics in Public Attention to Several Issues



The chart indicates that for two of the four issues, crime and health, there is a lot of variation in public attention over the almost thirty year timeframe. There is fluctuation such that there are periods where less than five percent of the public views these two issues as salient. There are also periods where almost twenty percent (in the case of health care), or almost forty percent (in the case of crime) view them as salient.

This stands in contrast to the issues of the environment and poverty. For these two issues, it appears that the fluctuation in the level of the public that perceives these issues as pressing problems is confined mostly within the zero to ten percent range. The hypothesis that this project offers is that the marked increase in attention given to an issue is attributable to an increase in anxiety-based language about these issues from elites. That the environment and poverty remained within the same relatively low range across an almost thirty year time span could mean that the usage of anxiety-based language was not particularly high. It could also mean anxiety-based language was not used as much compared to the usage of enthusiasm-based language.

Systemic Attention of the General Media

In terms of systemic attention measured at the elite level, we see a problem similar to that seen when attempting to gauge the level of attention the public places on specific issues. Measuring the level of attention the general media gives to an issue is an imposing task given the abundance of outlets that exist in the information environment. This has only become more complex with the rapid growth of the internet as a means of communication. This project opts to use a similar measure of media attention as that seen in other studies of agenda setting, the number of New York Times stories that cover

an issue within a specific timeframe (McCombs and Shaw 1972; Manheim and Albritton 1984). In the case of this project, the level of coverage given to an issue is measured for each month. There might be reservations about using only a single source to gauge the level of attention afforded to an issue by the general media (see Woolley 2000).

Still, research has shown that the New York Times is a media source with strong inter-media agenda setting power. The paper is one that helps to shape the level of coverage seen in other media sources, like local newspapers and network television news. This aspect is so pervasive that there appears to be convergence in the type of issues emphasized and the type of sources selected in stories by media outlets (Roberts and McCombs 1994; Bartels 1996; Reese and Danielian 1989; Rogers and Chang 1991).

For this reason, and also that the level of New York Times story coverage has frequently been used as the indicator of media attention to an issue (Walker 1977; Winter and Eyal 1981; Baumgartner and Jones 2009), this project uses the New York Times as the indicator of general media attention. The search is focused on the national news stories in Section A of the paper.

The count of coverage for each issue is calculated by performing a monthly count of stories on the issue. The count is performed after entering issue-specific keywords into the online search function of the LexisNexis Academic database. In Table 4.1, the list of keywords used to collect issue-specific sentences is provided. The online database has information about New York Times coverage starting from June 1980 onward.

There are multiple keywords for the areas of crime and the environment because the words “crime” and “environment” are often used within the discussion of other issue

areas. For instance, a sentence about unemployment could state, ‘some fear the current economic environment means no foreseeable decline in the unemployment rate.’ A statement about education could suggest, ‘it would be a crime if funding disparities between school districts cause long-term achievement disparities between racial and ethnic groups in America.’ Only using the words “crime” and “environment” as keywords will not capture much of the actual issue discussion in these areas; instead, the discussion in multiple issue areas is captured.

The opposite is true for the areas of health care and poverty. Using additional search terms appears to collect sentences not related specifically to health care or poverty. For instance, the word “poor” is a commonly used adjective in issue areas not at all related to poverty. The word “assistance” will not just pick up statements about aid for low-income citizens. Instead, numerous sentences regarding assistance for other groups (the elderly, the handicapped, military veterans) would be collected. The word “welfare” is often used in the general debate about the value of social welfare programs provided by the government. In order to avoid an abundance of sentences unrelated to the specific issue area, the keywords for the issue areas of health care and poverty are limited to the name of the issue area. These words are not commonly used in the discussion of other issues.

Table 4.1 Issue Specific Keywords List

Crime	Health Care	Poverty	Environment
crime gun death penalty victim's right sentencing sentenced criminal prison penitentiar capital punishment death row Brady bill trigger lock	health care	poverty	environment global warming climate change pollut Kyoto forestation acid rain emission smog ozone greenhouse pesticide hazardous waste superfund clean air clean water EPA toxic noxious contamin atmosphere

Issue Attention of the President

For presidential attention, we cannot measure the exact level of time an administration devotes each month to a specific issue. What can be assessed is the number of statements a president makes regarding an issue. If the executive branch is spending a considerable part of their agenda on an issue, the belief is that the administration will make a substantial number of remarks about that issue. Sentences are collected from an electronic file that contains all public remarks expressed during each presidential administration. The electronic file is comprised of all the information

contained in the *Public Papers of the President*. The issue keywords are the same as those listed in Table 4.1 above.

Systemic Attention of the Ideological Media

In terms of measuring the level of attention given to issues by ideological actors, information is collected on the level of coverage given to an issue by a liberal and a conservative newspaper. The reason that a media source is used instead of public opinion is that several of the survey organizations (e.g. Wirthlin Quorum, Fox News/Opinion Dynamics, Quinnipiac University Poll, National Public Radio/Greenberg Quinlan Rosner Research) that provide information on aggregate public issue attention information do not house downloadable data on the Roper Center archives. This does not allow researchers to break down aggregate data along specific groups such as party attachment, ideology, or gender.

For these survey agencies then, disaggregated data is not available to see the level of attention given by members of specific political affiliations to specific issues. Only the overall aggregate numbers are reported. Many of the survey organizations that do post data on Roper Center archives still do not host some iterations of the survey as a downloadable file. For instance, multiple implementations of the Gallup Organization's survey are not posted. Even for those survey organizations that do allow for the breakdown of public issue attention by groups, multiple data points are still not usable in the algorithm.

The dyad algorithm used in WCALC does not allow for zero values. There are repeated instances where either or both citizens with a Democratic or Republican

alignment do not at all view an issue as a problem. The number of actual data points used in an issue index distinguished by party affiliation would be a mere fraction of the number of surveys used in the aggregate analysis of public issue attention. Given this, an alternative approach is deemed necessary.

Scholarship in the past has discussed and contrasted the liberal and conservative leanings of media outlets (Gentzkow and Shapiro 2006; DellaVigna and Kaplan 2007; Groseclose and Milyo 2005; D'Alessio and Allen 2000; and Entman 2007). Researchers have come to the view that the varying political outlook of ideological media outlets leads to a divergence in the way issues are characterized or presented. In order to evaluate the possibility that ideology shapes whether or not a media outlet will cover a story, regardless of the level of anxiety-based emotional language offered by formal political elites, appropriate candidates for ideological media are needed.

The selection of press outlets comes from research by Ho and Quinn (2008) that measured the ideological position of editorial articles on almost five hundred non-unanimous decision Supreme Court cases. After contrasting the preferences expressed in the editorials to the vote breakdown of justices by ideology, they find the editorial positions newspapers express was correlated with the tone of non-editorial news headlines regarding President George W. Bush. This indicates the ideological positions in the editorial section of the newspaper are mirrored in the traditional news coverage of the same paper. That potentially blurs the line between news and opinion.

Ho and Quinn's study finds that the San Francisco Chronicle was far left in terms of political preferences relative to the other twenty-four newspapers studied. They also

find that the Washington Times was to the far right in terms of political preferences. Guided by this finding, the selection of these two papers as indicators of the liberal and conservative ideological press was deemed appropriate. Using the keywords presented in Table 4.1, a search on LexisNexis Academic for the number of stories each month that cover the issues of crime, health care, poverty, and the environment was performed. LexisNexis Academic hosts information about the Washington Times online from July 1989 onwards, and about the San Francisco Chronicle from October 1989 onwards. Like the story search of the New York Times, the search of these two papers was geared towards the national news coverage in the primary section of these papers.

The focus on the national section of the ideological newspapers is to control for the potential disparity in coverage between the two outlets given geographic differences. Disparities in issue coverage then should be due to the editorial decision making of the paper as to which issues are salient, and not due to specific conditions in the local region. One can make the argument that geographic factors or demographic factors of an ideological paper will shape the decision calculus as to which national stories are worth covering. Future research should contrast ideological media outlets from the same city to determine whether such a concern has any validity.

In order to see whether there is change over time in any of these indicators of issue attention relative to fluctuations in the level of emotional cues from political elites, the study has to develop and collect measures of these two forms of rhetoric.

The Need for Original Measures of Anxiety and Enthusiasm Emotional Language

The independent variables of interest in this project pertain to the usage of emotional language over time. The intention is to evaluate whether the dual systems framework is applicable for predicting and describing changes in issue attention. In order to do this, information needs to be collected that describes the level of usage in emotional language across time by political elites like the president and the media.

As discussed in the prior chapter, anxiety is a way to describe the emotional experience of concern due to a potential threat within the system. When decision makers are anxious, they are increasingly uneasy or uncertain about their status given perceptions of current conditions. An anxiety-based cue is one that can instill in decision makers the sense that something does not appear right within the system. Decision makers are automatically compelled to scan the system for information as to why they might feel this way. Upon completion of this search, decision makers might come across information that persuades them to alter their usual priorities. In the case of political issues, decision makers could move away from the issue(s) they normally prioritize, instead viewing an alternative issue as more salient. The prediction is that one type of information that can produce such a reaction is anxiety-based language. This is language that presents specific words that help to invoke a tone suggesting conditions are unique, uncertain, unstable, or potentially threatening.

The belief is that higher levels of usage in anxiety-based language when discussing an issue will increase the level of attention placed on that issue. As a basis of comparison, the consequences of changes in the level of enthusiasm-based language

within the system also need to be evaluated. The principles of dual systems theory would suggest that there should be no movement from preexisting views on issue salience with a rise in enthusiasm-based language. Enthusiasm is a sense that there is a match between goals/expectations and actual conditions/outcomes. Decision makers who believe that conditions are in line with expectations, or indicate an advancement toward their goals, will not find it necessary to reconsider the information available in the system. Enthusiasm-based language is comprised of statements featuring words with a tone suggesting conditions related to an issue are within expectations, are stable, or are improving. Continued usage of this language when discussing an issue will not produce an increase in the level of attention devoted to that issue.

To measure both anxiety and enthusiasm-based rhetoric of the president, sentences are collected from an electronic file that contains all public remarks expressed during each presidential administration. The electronic file is comprised of all the information contained in the *Public Papers of the President*. For the media, sentences are selected by a LexisNexis online database of New York Times newspaper coverage. Stories from the newspaper can be downloaded in an electronic file to perform keyword searches.

For each of the issue domains studied, a collection of keywords is used to extract sentences from the electronic files for presidential and media statements. The keywords are indicators that a statement is being made pertaining to that specific issue. Sentences are eliminated through computer and human based validation. The keywords are the same as that reported in Table 4.1 previously. Presidential statements are collected for

the issues of crime, health care, poverty, and the environment. Media statements are collected for the issues of health care and poverty.

Once the sentences have been collected for each issue dimension studied, every single sentence has to be evaluated to see whether it contains either anxiety or enthusiasm-based emotional language. In order to accomplish this, original wordlists were developed that would be representative of the two emotional systems. The reason unique wordlists were created is that previous research projects that have constructed emotional wordlists operate under a conceptual framework distinct from the disposition/surveillance system dichotomy proposed by the dual systems approach.

Scholars have in the past constructed wordlists that operate under the view that emotions are really separate and distinct emotional states (Roseman 1984; Roseman, Antoniou, and Jose 1988). Under the dual systems framework, words should either help to boost or lower the level of enthusiasm or anxiety decision makers feel. This means cues are not necessarily spawning a multitude of emotions. Other wordlists have been devised based on the view that emotions fit along two general dimensions of positive and negative affect (Watson and Tellegen 1985; Watson and Clark 1992). The issue here is that there is research that shows not all negative and positive emotion types will encourage the same reaction as those that are predicted under a dual systems framework (Tiedens and Linton 2001; Bodenhausen 1993; Lerner, Goldberg, and Tetlock 1998).

Applying positive/negative wordlists then will not necessarily be testing dual systems theory. For instance, words classified as negative in prior wordlists could lower

the enthusiasm level of the disposition system, without actually producing anxiety that can activate the surveillance system.

Regarding the usage of wordlists on discrete emotions, it would be difficult to identify and measure multiple types of emotional states separately from each other over time. As a result, to appropriately test whether the dual systems framework applies to aggregate level behavior, it is a sound strategy to develop an original wordlist. With wordlists that explicitly measure language that can potentially activate feelings of anxiety or enthusiasm, it is possible to conduct an explicit test of predictions derived from the dual systems framework.

An additional reason for the creation of original anxiety and enthusiasm-based wordlists is that the existing wordlists are very limited, and exclude a significant amount of potentially applicable words. Using wordlists from experimental studies (Denny and Hunt 1992; Kensinger and Corkin 2003) where participants are exposed to a small assortment of emotional words would only capture a subset of the possible language political elites can use when discussing issues. If the abbreviated wordlists were used, many potentially relevant words that could be used in elite political rhetoric would not be measured.

When scholars have constructed more extensive wordlists for content analyses, like the General Inquirer that uses Harvard IV-4 and Lasswell category/value dictionaries, they have only collected words on the positive and negative valence dimensions (Stone et al. 1966; Namenwirth and Weber 1987). Specific General Inquirer wordlists of arousal (comprised of 166 words) and emotion (comprised of 311 words)

have both positive and negative words within them. These wordlists then do not fit along the same enthusiasm/anxiety-based dimensions discussed in the dual systems approach. All of these reasons make it necessary to construct original wordlists.

Developing Anxiety and Enthusiasm Emotional Wordlists

To construct wordlists used to track the usage of anxiety and enthusiasm-based emotional language across time, a series of nouns, adjectives, verbs, and adverbs were selected from the New Webster's Dictionary of the English Language. There were 1440 words selected from the dictionary. A specific effort was made to collect words that by definition suggest the existence of or the potential for novel or ambiguous circumstances, a lack of stability, or the presence of a hazard or threat. These are words that could be perceived as anxiety-based emotional words. An additional focus was made to collect words that imply conditions are non-ambiguous, stable, improving, or are non-threatening. These are words that can be perceived as enthusiasm-based words. The original wordlist used to develop separate anxiety and enthusiasm emotional based wordlists is provided in Appendix C.

After selection of words from the dictionary, an effort was made to validate these words as ones that can either invoke feelings of anxiety or enthusiasm. To do this, a sample of sixty students from Texas A&M University participated in a paper-based survey. Six groups of ten students each received 240 words from the original 1440 word wordlist. To complete the survey task, students were asked to specify for each word in their abbreviated list whether they thought the president and the media using that word

would make the public at large feel anxious, enthusiastic, or neither anxious or enthusiastic about that issue.

Participants were not given working definitions of either anxiety or enthusiasm. Respondents were also not offered guidance as to what specific words within their respective list meant. The intention was to get the pure reaction respondents had to words. Reactions to the words then could be congruent with, or divergent from common interpretation. The primary goal was for each respondent to relate how he or she might feel about a word to how they think the public at large feels about that word. If a majority of respondents without any prompting agree that a word could make people feel anxious or enthusiastic, then that word is one that can potentially be used to make issue statements that produce an emotional reaction. A copy of each of the six sets of surveys is offered in Appendix D.

Once all the surveys were completed, responses were tabulated to construct separate enthusiasm and anxiety wordlists. In order to get on either of the final wordlists, a simple majority of six out of the ten respondents exposed to a given word had to agree about the emotional reaction that can be produced by that word. If at least six respondents agreed that a word when used by elites makes the public feel anxious, then that specific word was placed in the anxiety wordlist. If at least six respondents agreed that a word when used by political elites makes the public feel enthusiastic, it was placed in the enthusiasm wordlist. Upon tabulation of the responses, respondents designated 576 words as anxiety-based words, while 431 words were identified as enthusiasm-based

words. A full list of the words voted as anxiety-based words is provided in Appendix E, and a full list of words voted as enthusiasm-based words is provided in Appendix F.

Upon creation of the separate wordlists, time series of emotional language usage by elites are developed with the assistance of Perl programming language. For anxiety-based statements, Perl is directed to simultaneously look for sentences that mentioned the issue keywords from Table 4.1, as well as any of the anxiety words in Appendix E. Anxiety-based sentences were extracted from the *Public Papers of the President* using Perl programming language for the following four issues: crime, health care, the environment, and poverty. Perl was used to extract anxiety-based sentences from an electronic file of New York Times stories for the issues of health care and poverty. The procedure was repeated to extract enthusiasm-based sentences, using the words identified as enthusiasm-based words in Appendix F.

Media coverage sentences are excluded if they are exclusively a direct quote from a citizen or elected political figure. The reason for this is that the intension is to measure the way in which the specific media outlet characterizes the issue, not another actor in the system. Sentences that appear to be media attempts at paraphrasing what others have stated are included, given that the specific words or tone used to characterize another actor's statement(s) will not always be congruent with the original statement.

Upon completion of this, all files were validated through human coding to determine whether the electronic content analyses extracted sentences congruent with the assumed tone. Sentences coded by Perl as an anxiety-based sentence were evaluated to see if they actually suggest the existence of or potential for novel or ambiguous

circumstances, or imply that conditions pertaining to an issue are unstable or threatening. If a sentence did not appear to exhibit any of these qualities, they were eliminated from that specific anxiety language file. If the sentence coded by Perl as an enthusiasm-based sentence failed to suggest conditions related to an issue are non-ambiguous, stable, improving, or in line with expectations, then the sentence was eliminated from the final enthusiasm language file. Decisions about final emotional language scores were validated with the assistance of two Texas A&M undergraduate students, who would evaluate a small sample of sentences for each issue. Examples of validated sentences are provided in Appendix G.

Table 4.2 provides the breakdown of presidential emotional language usage. Information on the overall intensity of presidential and media attention for the four issues during the time period studied is also provided.

Table 4.2 Statistics on Presidential Emotional Language and General Media Coverage

Variable	Crime	Health Care	Poverty	Environment
Total Presidential Anxiety Statements	1491	387	109	327
Average Pres. Anxiety Statements per month	4.33	1.13	0.32	0.95
Total Presidential Enthusiasm Statements	1177	862	161	1562
Average Pres. Enthusiasm Statements per month	3.42	2.51	0.47	4.54
Total Presidential Statements Mentioning Issue	16660	13167	3549	13113
Average Presidential Statements per month	48.43	38.28	10.32	38.12
Total New York Times Story Mentions of Issue	12981	8259	3278	6270
Average Level of New York Times Mentions per month	37.74	24.01	9.53	18.23

This table suggests that there is a bit of a difference across issues in terms of the intensity of emotional language used by the president. The intensity of anxiety-based statements made by the president is much higher for the issue of crime than for any other issue studied. It is actually greater than the number of anxiety-based statements made for the three other issues combined. The intensity of anxiety-based language for the issue of health care is less than half the number of enthusiasm statements offered. Still, this differential is not as great as that seen with the issue of the environment.

For the issue of the environment, the number of enthusiasm-based statements by the president is almost five times the number of anxiety-based statements made. The number of emotional statements, either anxiety or enthusiasm-based, is markedly low with the issue of poverty. In fact, when one looks at the overall level of coverage given to the issue by both the president and the media, elite attention to this issue seems to be sharply less than that seen with the other issues studied. If one goes back to Figure 4.1, the level of public attention to poverty never displays much variation beyond the zero to ten percent range.

The question here is whether this lack of attention to poverty is due to the lack of elite usage of emotional cues like anxiety language that can direct focus towards the issue. In regards to the issue of the environment, if we again refer to Figure 4.1, we see public attention towards this issue does not display as much variation as crime and health care do. One potential consideration for this is that there is a much higher intensity of enthusiasm-based language by the president relative to the usage of anxiety-based language.

The consistently strong signal being sent out by the president that conditions are stable, improving, or in line with expectations does not compel people to move away from their preexisting outlook on the issue of the environment. That means that the level of attention given to the environment should not move much from prior levels of attention. The environmental series does appear to reach higher than usual levels in the mid to late 1980s, which could be attributable to major focusing events related to the issue during that time period, such as the Chernobyl nuclear disaster in April 1986, the U.S. signing of the ozone layer treaty Montreal Protocol in December 1987, and the Exxon Valdez oil spill in March 1989.

The disparity in the usage of emotional language across issues is also demonstrable when reviewing the intensity of emotional language used by the New York Times for issues that data was collected for, which are poverty and health care. The table displaying these statistics is Table 4.3 below. As seen with presidential emotional language, the intensity of anxiety-based language with the issue of poverty is clearly less than the level that is used when discussing the issue of health care. It should also be noted that the total number of sentences in the New York Times with anxiety-based language is double that used by the president, as reported in Table 4.2 previously.

Table 4.3 Statistics on General Media Usage of Emotional Language

Variable	Poverty	Health Care
Total Media Anxiety Statements	79	845
Average Media Anxiety Statements per month	0.23	2.46
Total Media Enthusiasm Statements	33	462
Average Media Enthusiasm Statements per month	0.1	1.34

Visualizing Emotional Language and Issue Attention Dynamics

Figure 4.2 plots the number of sentences offered by the president using anxiety-based language each month for the four issues measured. When visually evaluating the intensity of anxiety-based emotional language by the president over time, a substantial amount of fluctuation in the crime model is visible. There appears to be a consistently low level of intensity in anxiety language with the health care issue, save for three periods. These periods are the end of George H.W. Bush's only term in office, the initial period of Bill Clinton's first term, and by George W. Bush around the end of his first term and the beginning of his second term in office.

It is clear that the total level of anxiety-based emotional language used for health care is not as high as the level seen with crime. Nonetheless, the usage of this language is heavily concentrated within limited periods of time, such that we might see movement in the level of issue attention for health care during these periods. The usage of anxiety-based language for poverty is low throughout the duration of the series. The lack of movement in the anxiety language series for poverty is much like the relatively limited range of public systemic attention directed at this issue, as seen in Figure 4.1 above. With the environment, anxiety-based language was primarily seen during Bill Clinton's two terms in office.

Figure 4.2 Anxiety-Based Language Used by the President for Several Issues

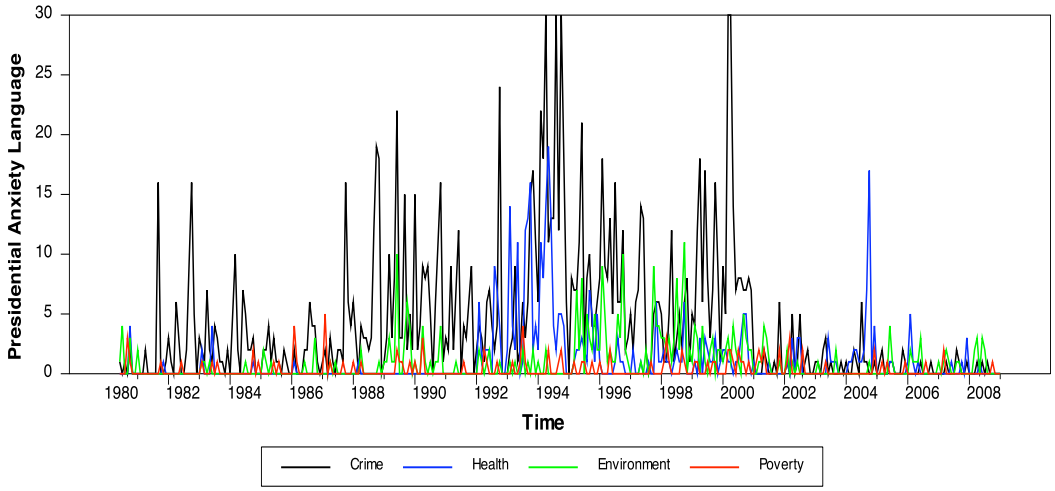
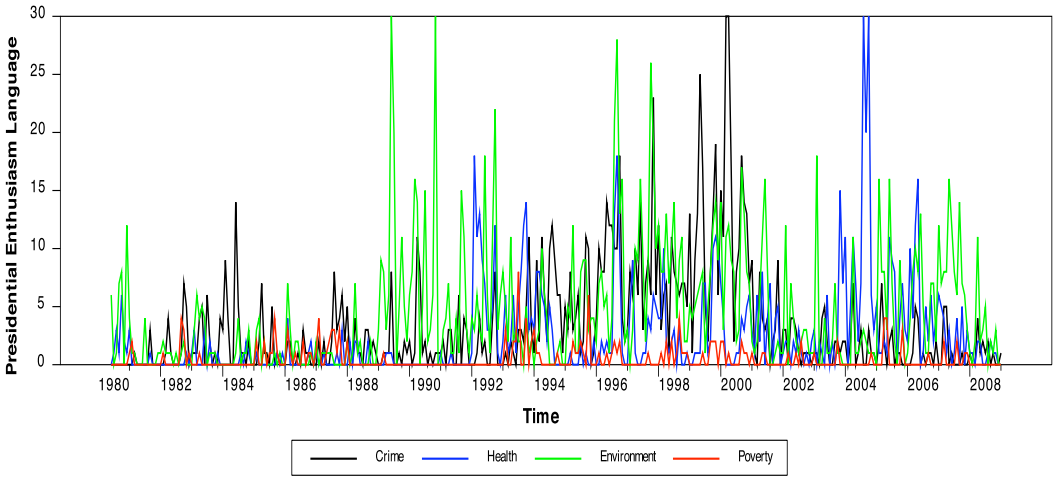


Figure 4.3 displays the number of sentences offered by the president featuring enthusiasm-based language for the same four issues. Several characteristics of the figure warrant discussion. Particularly sharp increases in the intensity of enthusiasm-based language when discussing crime are observable in the last few years of the second term of Bill Clinton's presidency. When actually reading the statements made during this period, Clinton was strategically touting reductions in the crime rate relative to past presidential administrations. If one refers back to Figure 4.1, this increased intensity in enthusiasm-based language might have helped lower public perception of crime as a problem from the markedly high levels seen in the middle of the 1990s.

Enthusiasm-based language on health care was a big part of George W. Bush's reelection campaign discussion, hence the sharp rise in this form of rhetoric during 2004. Enthusiasm-based language with poverty was not used with much pervasiveness

throughout the period of time studied. Perhaps the biggest difference in the intensity of enthusiasm language relative to the intensity of anxiety-based language is seen with the issue of the environment. Enthusiasm-based language on this issue is used with a relatively high intensity throughout several administrations.

Figure 4.3 Enthusiasm-Based Language Used by the President for Several Issues

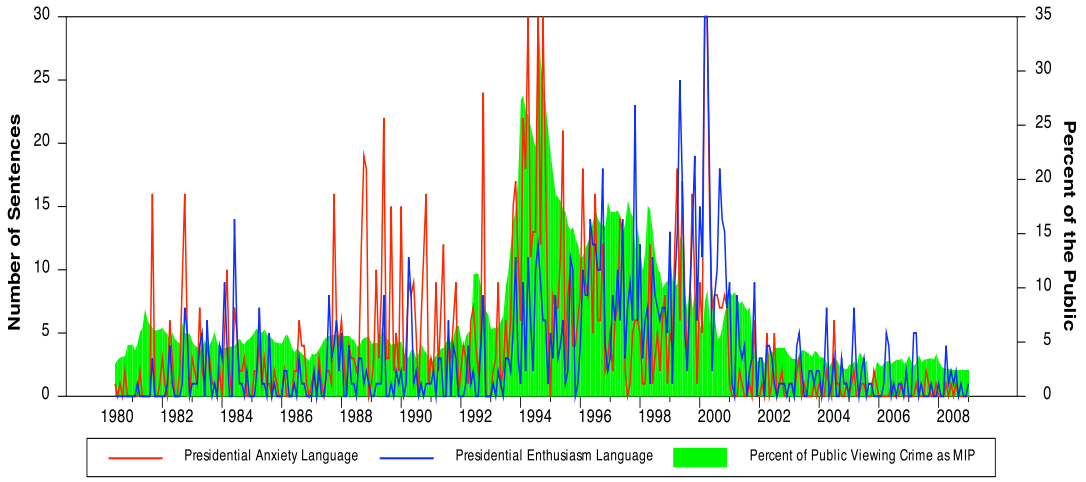


If we were to contrast issue-specific levels of presidential emotional language relative to changes in public issue attention visually, several details are worth mentioning. Figure 4.4 presents the dynamics seen in the issue of crime. It appears that a sharp rise in anxiety-based language occurs around the time public attention to that issue reaches its highest point in the mid-1990s.

Following this, as the intensity of presidential anxiety-based language begins to wane, and the intensity of enthusiasm-based language rises, the level of public attention to that issue declines. The level of public attention is very low relative to past levels

across most of the 2000s, a period where the usage of presidential anxiety-based language is used the least. It should be noted that when enthusiasm-based language is at its highest intensity in the late 1990s, public attention to crime is not close to the levels observed in the middle of the decade. This basic visual review of the series appears to match predictions made under the dual systems framework. Perception of an issue as a problem increases with the rise of cues that activate the surveillance system. There is not an increased perception of an issue as a problem when there are pervasive cues in the information environment that can be processed through the disposition system.

Figure 4.4 Presidential Emotional Language and Public Attention for Crime

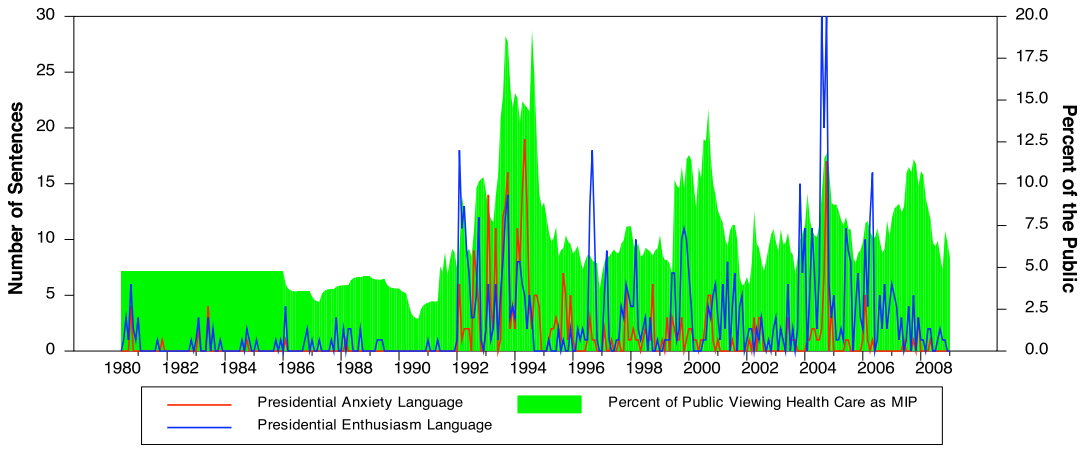


The dynamics of presidential emotional language and public attention to health care are presented in Figure 4.5. With the issue of health care, the 1980s are a decade where the usage of anxiety-based language by the president is very low, bordering on non-existant. The usage of enthusiasm-based language is not particularly pervasive

either, but is still greater than the levels seen in the usage of anxiety-based language. The key feature of this series is that when we start to see an increase in anxiety-based language during the Clinton administration, we see public attention to health care surge.

Still, this same period is a time where there is also an increased intensity in the usage of enthusiasm-based language. In addition, there is a high intensity in enthusiasm language by George W. Bush during his 2004 re-election campaign, and in the early portion of his second term. This appears to be a period where there is a slight uptick in public attention to health care. The question here is whether an increased intensity in enthusiasm-based language from the president in the information environment is moving the public away from predisposition, something not proposed under the dual systems framework. Statistical analyses need to be conducted to determine which form of emotional language might be driving the changes in public issue perception.

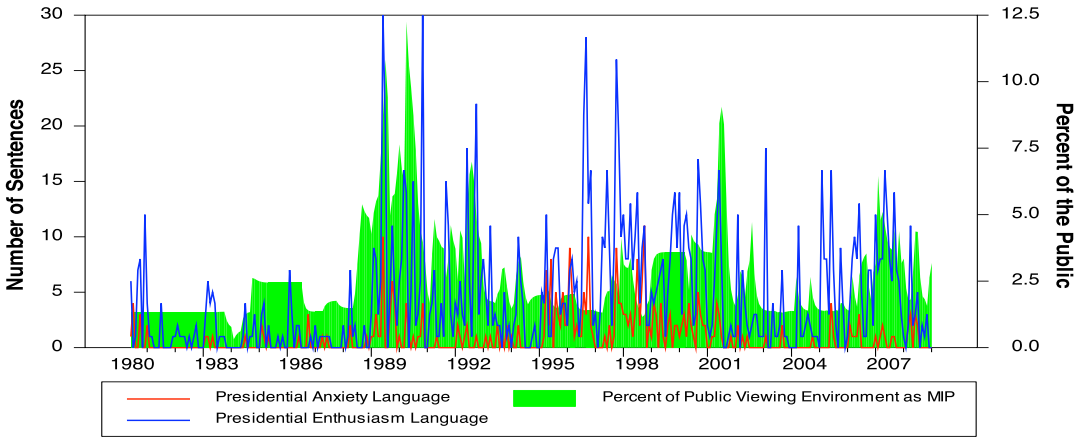
Figure 4.5 Presidential Emotional Language and Public Attention for Health Care



With the issue of the environment, the usage of enthusiasm language by the president is much more prevalent across the period of time studied than anxiety language. As seen in Figure 4.2 previously, the usage of anxiety-based language on the environment is not as pervasive as that seen with other issues. There are multiple months where the president makes more than fifteen statements with enthusiasm language, and less than five statements with anxiety language. These are points in time the president seems to be offerering a fairly clear signal that conditions pertaining to the issue are stable, or are congruent with expectations. The aspect to consider here is that increases in public attention do not appear to be visible in most of these periods.

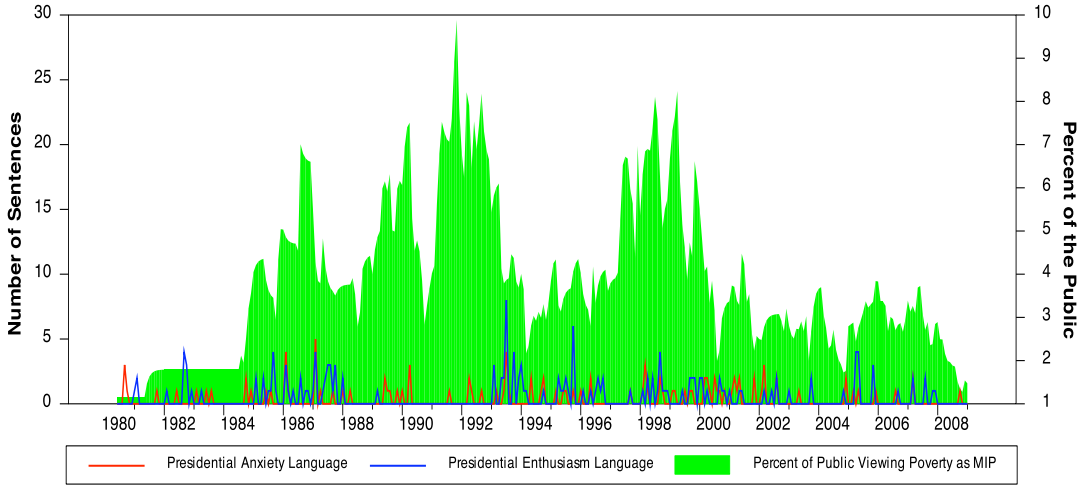
The only time where there appears to be an increase in attention to the environment in the face of heightened enthusiasm-based language is at a time where multiple potential focusing events occurred (Exxon Valdez, the Montreal Protocol, and Chernobyl). Based on a basic visual depiction of the series, a clear signal suggesting information receivers should feel enthusiastic about an issue often fails to produce an increase in public attention. This consideration is in line with predictions made under a dual systems framework. Figure 4.6 presents changes in the usage of emotional language by the president and in public attention about the environment.

Figure 4.6 Presidential Emotional Language and Public Attention for Environment



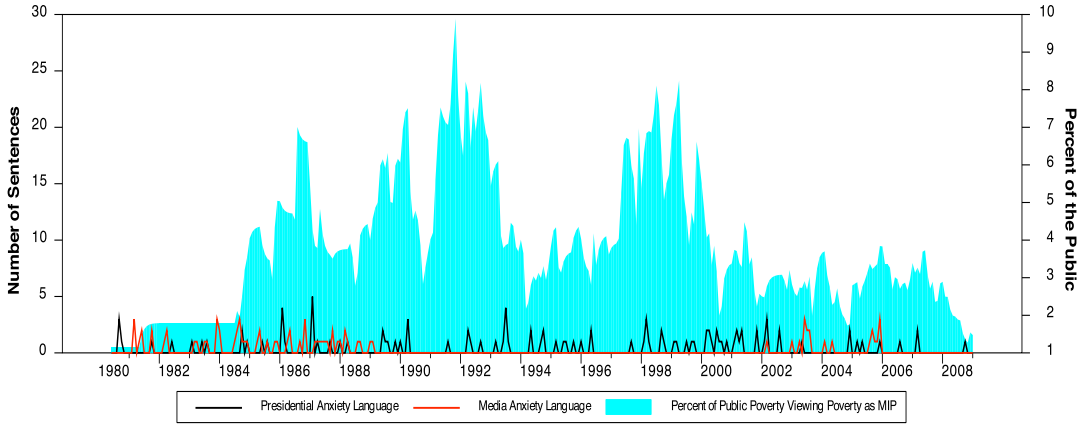
The visualization of the poverty issue indicates that shifts in public attention are likely not attributable to changes in intensity of anxiety-based language by the president. Any movement in public attention does not appear to follow a substantial increase in anxiety-based language. Perhaps the reason for this is that the usage of anxiety-based language is very limited. There is no period where a heightened intensity in anxiety-based language is discernable to the extent seen in some of the other issues studied. Operating under a dual systems framework, an increase in cues that are anxiety-based activate the surveillance system, causing decision makers to reassess the information environment. These cues appear to be absent during the time period studied. It is also clear that multiple administrations refrained from using enthusiasm-based language. Poverty is an issue that failed to receive a substantial level of emphasis by the president within the timeframe studied. Figure 4.7 presents the observable movement in presidential emotional language and public attention for the issue of poverty.

Figure 4.7 Presidential Emotional Language and Public Attention for Poverty



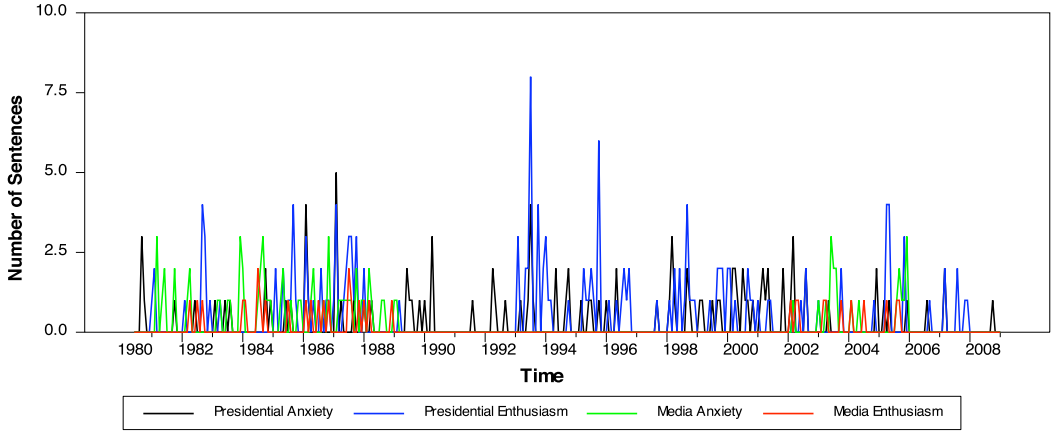
Presidential language does not appear to be a factor in moving public attention to poverty. Based on Figure 4.8, it appears that anxiety-based language is not used at all by the media when the level of public attention reaches its highest point. The number of sentences within the New York Times featuring anxiety-based emotional language represents general media coverage. Although there are brief spikes in anxiety language by the media in the 1980s and early 2000s, it is not clear that any increase in public attention during the time period is preceded by media-based emotional cues. During the 1990s, the media does not offer many anxiety-based cues.

Figure 4.8 Contrasting Presidential and Media-Based Anxiety Cues for Poverty



When comparing both anxiety and enthusiasm-based emotional cues offered by political elites, as seen in Figure 4.9 below, it appears the general media did not offer many emotional cues about poverty during the 1990s. There is though more of a presence of enthusiasm-based presidential cues than other forms of emotional language during this time period.

Figure 4.9 Emotional Language Usage by the President and Media for Poverty



For health care, media usage of emotional language is much more persistent. As indicated in Figure 4.10, the usage of anxiety-based language by the media is at its highest level during the period in which presidential anxiety-based language is at its peak of intensity. During this period, public attention is also at its highest level. Statistical analyses are necessary to determine whether public attention is a function of either or both of these elite political actors.

Figure 4.10 Contrasting Presidential and Media-Based Anxiety Cues for Health Care

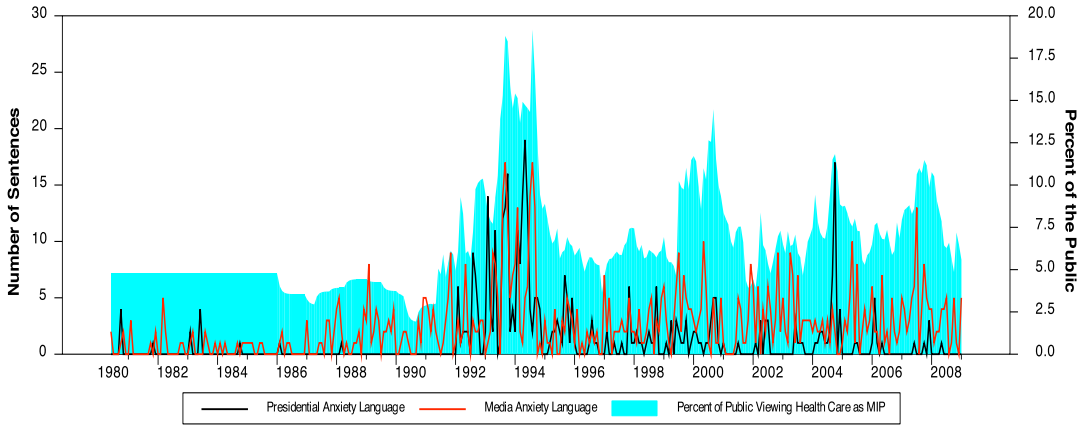
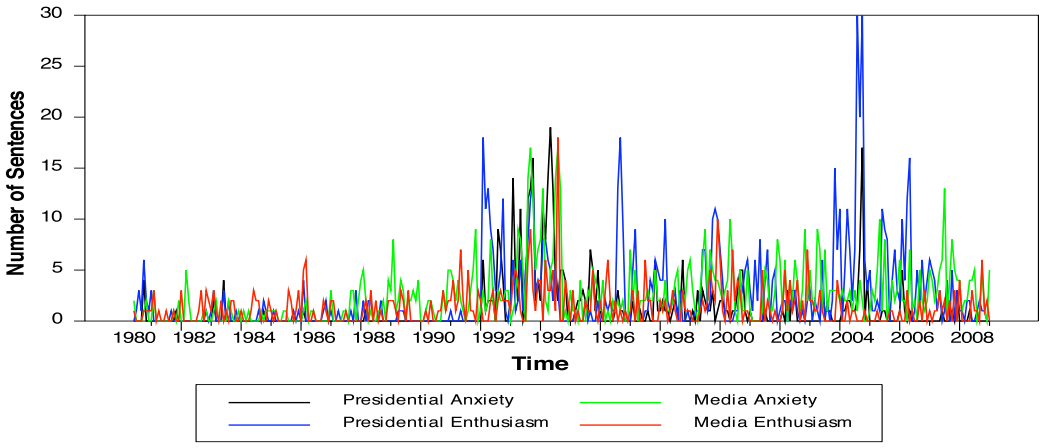


Figure 4.11 offers a visualization of the dynamic usage rates of both forms of emotional language for the issue of health care. The plot indicates that the time period wherein emotional language usage is most intense is during the first term of Clinton's presidency. This is the period in which the Clinton administration attempted a national reform of health care. Emotional language usage by the general media is also intense during this period.

A concern presented in the theory chapter was that an increase in absolute intensity of issue discussion is not the most precise signal elites can offer to heighten levels of issue attention. Based on the proposals of the dual systems framework, decision makers have a tendency to maintain their habitual outlook on issue salience. Decision makers have the potential to revise their views when they are presented with cues that make them anxious. The absolute intensity in issue discussion itself should fail to heighten feelings of anxiety.

Figure 4.11 Emotional Language Usage by the President and Media for Health Care



Within the overall level of issue discussion, there could be an extensive amount of language that suggests conditions related to an issue are consistent with expectations, stable, or are improving. This could heighten feelings of enthusiasm, which should perpetuate the reliance on habit, not activate a rapid scan of surrounding information. An

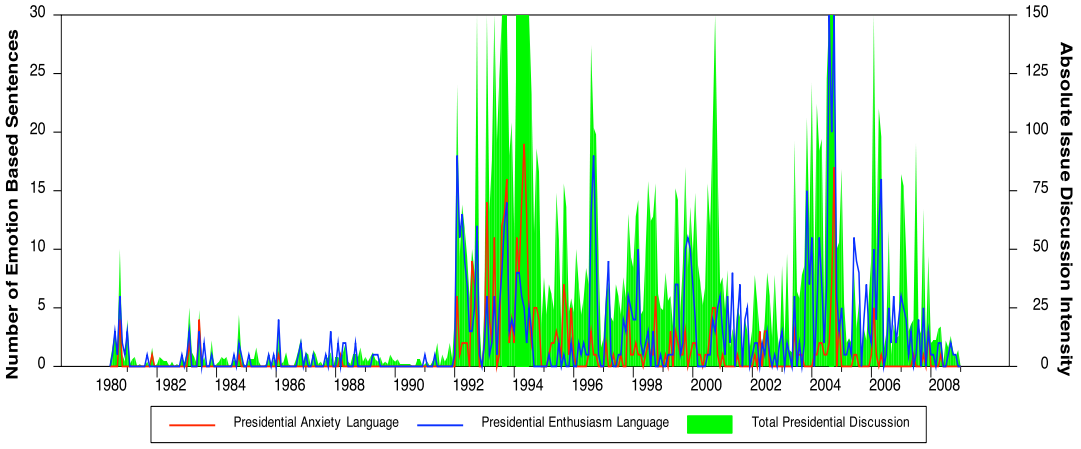
increase in issue discussion could also contain language that has no emotional tone to it whatsoever. With no emotional content in the discussion, decision makers will not be sure how to appropriately process and react to the information. The pure intensity of issue discussion will not be reflective of the level of anxiety-based cues available in the system.

Support of this view comes when comparing actual dynamics of presidential anxiety-based language, enthusiasm-based language, and overall level of issue discussion for each of the four issues studied. We see times where the overall intensity of issue discussion is high, yet the level of anxiety-based language is low. There are also periods where the level of absolute issue discussion is high, yet both the level of anxiety-based and enthusiasm-based language is low. This suggests the level of emotional cues being offered in the system at that time is low. Based on a review of the four issues, it is not appropriate to claim that anxiety-based language and overall issue discussion will move in tandem with each other in the same direction and to the same extent over time.

With the issue of health care, there are several periods where the high intensity in issue discussion appears to be made up of mostly enthusiasm-based language. The movement in the three series is presented in Figure 4.12. In 1992, late 1996, late 1999, late 2003, early 2004, and mid-2006, there is a substantial presence of enthusiasm language. The presence of anxiety-based language is relatively low in comparison. These time periods are ones where the overall level of issue discussion is elevated. This suggests that the discussion by the president was oriented around cues designed to persuade others that conditions pertaining to an issue were not alarming or potentially

threatening. One other time period bears mentioning. In mid to late 2000, the overall level of presidential issue discussion reaches one of its highest levels in intensity, yet the usage of either anxiety or enthusiasm-based language is not nearly as elevated.

Figure 4.12 Breaking Down Presidential Language Dynamics for Health Care

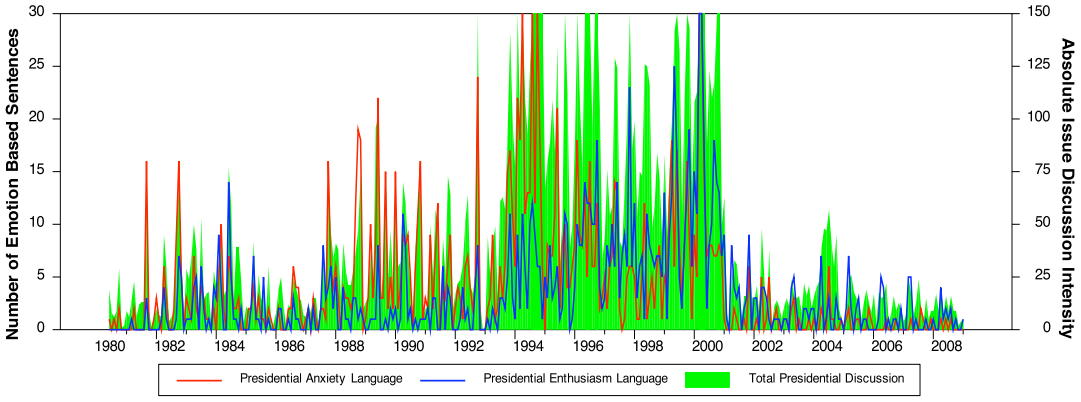


With the issue of crime, there is a lengthy portion of the anxiety language and overall issue intensity series that indicates that they move in tandem. Presidential language dynamics for crime are presented in Figure 4.13. Periods where the overall intensity of issue discussion is high are also periods where the level of usage in anxiety-based language is elevated. This might make some comfortable with the overall intensity in issue discussion being used as an indicator of anxiety cues in the environment.

The problem is that the common movement does not persist for much of the rest of the series. In early 1998 and late 2000, there are instances where both enthusiasm-based language and overall issue intensity are elevated, but anxiety-based usage is not.

That is the concern with general issue discussion being used as an indicator of anxiety cues in the system. There will be periods where general issue discussion is high, while the specific usage of anxiety-based language is low. For this reason, a breakdown of overall issue intensity along emotional tone might be a more exact way to measure the type of cues available in the system.

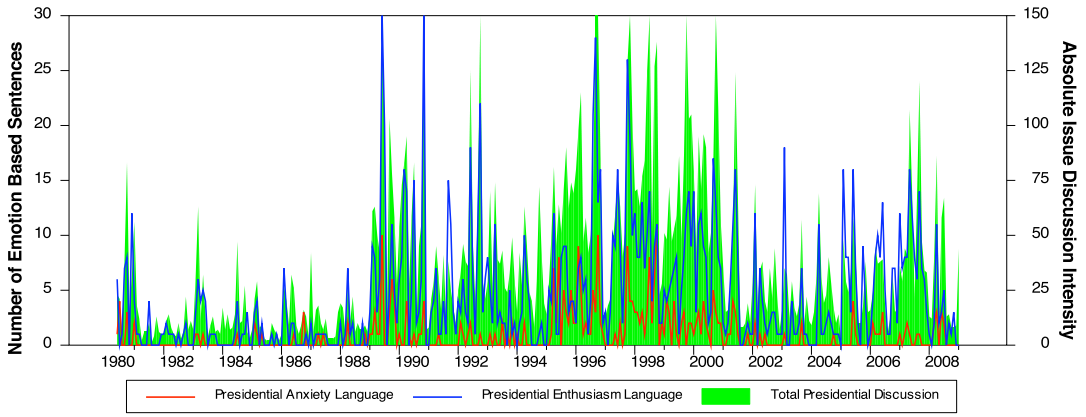
Figure 4.13 Breaking Down Presidential Language Dynamics for Crime



The issue of the environment is one that demonstrates the value of breaking down the absolute intensity of issue discussion by the emotional content used. Figure 4.14 visually contrasts presidential emotional language to overall intensity of issue discussion. For a major portion of the time frame studied, the level of usage of enthusiasm language is markedly high when the overall intensity of issue discussion is high. It could be that enthusiasm-based language was a central facet of the rhetoric used by several

presidential administrations. For most periods of high discussion of the environment by the president, the predominant emotional tone is enthusiasm-based, not anxiety-based.

Figure 4.14 Breaking Down Presidential Language Dynamics for the Environment



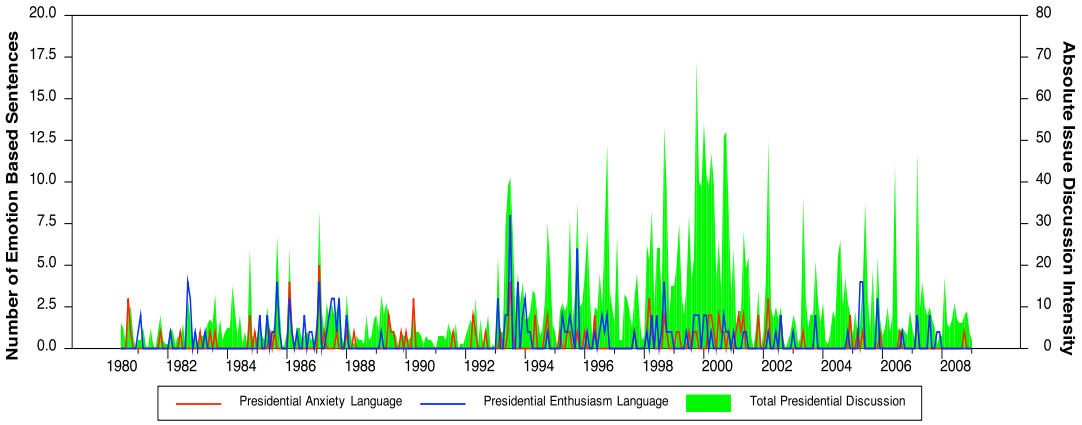
Public issue attention to the environment does not approach the level of attention seen in the issues of crime and health care. As a substantial amount of presidential issue discussion for the environment employs enthusiasm-based language, there are few cues being provided that should compel decision makers to reassess their habitual outlook. Suggesting overall intensity in issue discussion is somehow equivalent to the level of anxiety-based language present in the system is wholly inaccurate for this issue. With the environment, the intensity of issue discussion is indicative of attempts at raising enthusiasm, not anxiety.

With the issue of poverty, the overall level of presidential issue discussion frequently does not feature an enthusiasm or anxiety-based tone. Figure 4.15 presents the

dynamics for the issue of poverty. From 1999 to 2001, early to mid-2004, and early to mid-2006, we see periods where the president appears to discuss the issue of poverty along neither of the dimensions of emotion studied. Other periods appear to have low and equivalent levels of intensity for both anxiety and enthusiasm-based issue statements. Neither type of emotional language is likely to have an impact, since they appear to cancel each other out. Rarely is there a predominant style of emotional language used at any given point in time. There does not appear to be rhetorical cues offered by the president that others in the system can process and react to accordingly. This can explain why public attention to poverty does not appear to move much throughout the time period. Citizens are not being provided with a clear signal that poverty matters.

Based on the comparisons breaking down overall presidential issue discussion by emotional language content, one thing is clear. Statistical analyses should contrast the ability of intensity of anxiety language, intensity of enthusiasm language, and intensity of overall issue discussion to predict dynamic change in issue attention. Contrasting the capacity of these three indicators of presidential issue discussion can help clarify which type of issue discussion (if any) has the capacity to direct the level of attention both the media and the public provide to an issue. Similarly, contrasting the level of media-based anxiety language and enthusiasm language will clarify which type of emotional language can direct issue attention in both the president and the public. All of this is possible through time series statistical procedures. In the next section, a description of the specific techniques used to evaluate the dynamic series is offered.

Figure 4.15 Breaking Down Presidential Language Dynamics for Poverty



Description of Statistical Procedures

The analyses of the project measure dynamic data. Given this, there is a possibility of multidirectional relationships over time. In other words, there is the possibility that one variable, such as presidential anxiety-based language usage, significantly predicts change over time in a second variable, public issue attention. There is also the possibility that public issue attention significantly predicts change in presidential anxiety-based language. To determine whether such multidirectional relationships exist, time series methods need to be used that consider the possibility of either positive or negative feedback between variables.

One straightforward approach to estimate these types of relationships is a VAR analysis. VAR models are multivariate applications of the Box-Jenkins causal model (Freeman, Williams, and Lin 1989; Freeman et al. 1998). In a VAR model, each of the variables measured in the model are treated as endogenous variables. Each variable is

regressed both on lags (past values) of itself, and lags of the other variables in the system. The VAR model can determine the direction of causal relationships between variables, and also whether multidirectional causal relations exist.

Under a VAR model, all variables are brought together into a single vector, with the vector represented as a linear function of its own lagged values, as well as an error vector. Then, estimation is conducted by running separate regressions for each variable. In these regressions, each endogenous variable is set to be equal to lagged values of itself and all the other variables in the system (Kennedy 2003, 321-323).

Hypothesis testing is done through the performance of Granger (1969) tests for the joint significance of coefficients for each variable in each equation. This is performed by the usage of F tests. The test is on the restriction that all lags of a variable do not significantly enter into the regression of the endogenous variable. Through the Granger (1969) causality test, it is possible to determine whether the lags of a variable can collectively affect the endogenous variable. With the Granger test, a statistically significant block of coefficients implies a Granger causal relationship exists between that particular variable and the designated endogenous variable in the system.

In order to evaluate whether the appropriate lag length is being used, multiple VAR's of varying lag lengths are compared over the same timeframe. A model with the lowest Akaike Information Criterion value is ideal, as this is an indicator of the model's goodness of fit (Enders 1996). Sequential likelihood ratio tests are used to contrast pairs of VAR models, with one model possessing a smaller number of lags than the second

model. The test evaluates whether the number of lags added by the second model are statistically significant.

Several of the hypotheses in this project (Hypotheses 2, 3, 4, and 5) make a specific prediction about the causal direction between variables. These hypotheses predict prior changes in the usage of anxiety-based language by either the president or the media changes future levels of attention actors in the political system give to issues. Prior to issue attention movement, the usage of anxiety-based cues is believed to have changed.

The VAR approach helps to clarify whether prior changes in anxiety-based emotional language significantly predict changes in issue attention. It also does this without imposing parameter restrictions by suggesting a unidirectional equation system. In other words, the VAR does not place a theoretical restriction in the analysis on which variables should be a priori exogenous, even if we do have a theory as to how anxiety language relates to issue attention. As Enders (1996, 106) puts it, "VAR treats all variables symmetrically, without making reference to the issue of dependence versus independence." The VAR approach also allows the ability to control for history by incorporating several lags of each variable in the system. This is important, as past studies like Wood and Peake (1998) and Edwards and Wood (1999) indicate that history plays a substantial role in issue salience dynamics. VAR models, with the inclusion of multiple lags into the system, help control for the inertial characteristics of each variable (Sims 1980).

When evaluating a VAR model, it is important to evaluate whether each series incorporated in the model is stationary. A series can be considered covariance stationary if specific properties do not change with respect to time. First, the mean value function is constant, such that the mean is not affected by changes in time origin. Another characteristic is that the autocovariance function (which evaluates the linear dependence between points on the same series) is not affected by a change in time origin (Shumway and Stoffer 2006, 22-24; Enders 1996, 23). Stationary series should be stochastic processes with respect to time.

If a series is not stationary, there is trending behavior such that it will not revert to the mean. This means the series can wander away from the mean of that series. When conducting a VAR analysis, the presence of a non-stationary series is appropriate so long as the set of variables are not cointegrated. In other words, hypothesis testing with non-stationary series can occur if endogenous variables are not cointegrated (Phillips 1986). Cointegration means there are variables that share a common trend across time (Wood 2009a, 171).

In order to evaluate this, each series used in the study is evaluated with multiple tests that can help determine the presence of stationarity. The procedures used were sets of augmented Dicky-Fuller (1979), Phillips-Perron (1988) and KPSS (Kwiatkowski et al. 1992) tests. The reason for the usage of these multiple procedures is that, in regards particularly to the augmented Dicky-Fuller and Phillip-Perron tests, there is a concern about the lower statistical power of these tests. What is at issue is whether these tests fail

to reject the null hypothesis of non-stationarity too frequently. The KPSS test performs a hypothesis test evaluating the null of stationarity, instead of a null of non-stationarity.

Comparing the findings of multiple tests helps ascertain whether tests for cointegration are necessary. For those instances where a non-stationary variable might be present in the system, an Engle-Granger (1987) test was performed to assess for cointegration. The Engle-Granger test essentially performs a unit root test to regression residuals involving the variables within a system. Cointegration does not appear to exist in any of the systems tested. A standard VAR approach is deemed an appropriate procedure for the multiple systems of variables evaluated in the project.

VAR techniques are useful to determine the direction of causal relations. Still, the Granger causality tests used in these techniques are limited. It is not possible to determine polarity (whether the relationship is positive or negative). It is also not possible to determine the magnitude of relationships. Hypothesis testing through the Granger approach does not provide actual coefficient estimates that are particularly informative. Given the number of lags in the VAR system, coefficient estimates are going to exhibit multicollinearity.

One way in which to estimate the scope of dynamic interrelationships between variables is to adopt a vector moving-average representation (MAR). In doing this, a simulated shock is induced on the coefficients, and then the dynamics of that shock are tracked over time. With a moving average representation, we get a sense of what will happen to one variable after a change is induced on another variable in the system. In the

simulation, a variable is shocked mathematically to see how other variables in the system respond.

Through this process, we gain a sense as to whether there will be an increase or decrease in one variable following the shock to another variable in the system. It is possible to get an idea of the size of the change in a variable in response to a shock in another variable by looking at the coefficients of the impulse response functions. To create a more intuitive interpretation of the coefficient, all variables are standardized, meaning each variable is rescaled to have a mean of zero and a standard deviation of one. This process helps to provide useful information to evaluate Hypotheses 1, 6, and 7.

One aspect that has to be accounted for when using a moving average representation is that this approach assumes no correlation in the errors of the VAR process. A concern is that there might be a contemporaneous correlation between the residuals in the VAR system. In order to address this, Choleski decomposition is used. This factorization imposes a restriction that the first variable in the system ordering is not contemporaneously correlated with all the other variables in the system (Enders 1996, 131-132). This essentially orthogonalizes the variables in the system to ensure that innovation responses to shocks are independent.

If there is significant contemporaneous correlation between the residuals in a system, the results of any vector moving-average representation analysis will be influenced by the specific ordering of the endogenous variables in the system. This makes it necessary to check the contemporaneous covariance matrix of disturbances. When it appears that residuals are highly correlated, the order of the Choleski

factorization matters, since a substantial amount of the variance in one variable in the system can be explained by other variables in the system. It is important to check if alternative orderings of the variables in the system alters observed results. In doing so, this can determine how robust results are.

The review suggests that measuring a large number of variables in a system, as we would if we were to include multiple indicators of presidential and media in the system simultaneously, can produce MAR results sensitive to variable ordering. For instance, a system incorporating both anxiety and enthusiasm language usage by the president and the general media, as well as public opinion, is sensitive to variable ordering in the system. More theoretically focused systems that feature a single emotional language or issue attention indicator for each political actor appear to be less volatile to the ordering of variables. Given this, results from models that incorporate an anxiety language indicator in the system are contrasted to results from models that incorporate an enthusiasm language indicator into the system.

Due to the possibility that there are major events related to an issue that can help direct attention to that issue, it is important to control for them in any statistical analysis. There are multiple potential focusing events during the time period studied that need to be accounted for. Indicators for major pieces of legislation or events are accounted for in the models by designating the month in which the focusing event occurred. For health care, the Emergency Medical Treatment and Active Labor Act, the initiation of the White House Task Force on Health Reform, the Health Insurance Portability and Accountability Act, and the Medicare Drug Improvement and Modernization Act are

factored in. In the issue area of the environment, the Chernobyl nuclear accident, U.S. signage of the Montreal Protocol, the Exxon Valdez oil spill, the Kentucky coal waste spill, Hurricane Katrina, and Hurricane Rita are the events measured. Models for crime factor in the potential effect of the Brady Bill signing and the Columbine school shooting on attention to aspects related to the issue area. Poverty does not incorporate a focusing event indicator for the time period studied.

Summary

In this chapter, the steps taken to conduct the time series analyses performed for the project were described in detail. Past research on emotional cues employ limited wordlists that do not explicitly fit along the anxiety/enthusiasm dimensions of the dual systems framework. Given this, original wordlists were developed to measure emotional language usage by political elites.

Past attempts to measure public attention to issues uses data from only one survey organization, Gallup. This survey organization did not always ask the 'most important problem' question with enough consistency to accurately gauge whether changes in public issue attention occur between averaged annual data points. As a result, a more refined measure is created for this project, incorporating information from multiple survey organizations.

Due to concerns about data availability on issue attention with ideological members of the public, the study measures issue attention in ideological actors through issue coverage by two media outlets with a consistent and distinct political ideology. These outlets are two newspapers, the Washington Times and San Francisco Chronicle.

The New York Times serves as a measure of the absolute level of attention given by the general media.

Causal relationships between variables are assessed using vector autoregression techniques. The magnitude and polarity of relationships are assessed through vector moving-average representation techniques.

The next chapter of the project presents the results of the analyses conducted. Theoretical propositions of the dual systems framework, traditionally used to describe individual behavior, can to some degree help explain aggregate issue attention dynamics. The extent to which the dual systems framework can be of use to describe issue attention dynamics does appear to vary though, depending upon the specific issue area studied. This raises concern about the capacity of the dual systems framework to explain aggregate behavior.

CHAPTER V

RESEARCH FINDINGS

In this chapter, the results of the performed time series analyses are presented. The statistical procedures help evaluate the applicability of the dual systems framework to predict and describe change in issue attention. The chapter is divided into three sections.

The first section describes whether presidential anxiety language is more likely than enthusiasm cues and overall issue discussion to predict change in both public and general media issue attention. The results indicate anxiety-based presidential cues, at conventional significance levels, can predict future values of public attention. Enthusiasm cues and absolute intensity of issue discussion, in all issue areas studied, do not predict future values of general media and public issue attention. There is very limited evidence that presidential anxiety guides general media coverage to issues.

When assessing the direction of the relationship between presidential anxiety and public attention, an increase in presidential anxiety usually produces a relatively short-lived increase in public attention. Any positive impact presidential anxiety has on public attention is likely abbreviated.

In the second section of the chapter, the impact of media-based emotional language on public and presidential attention is evaluated. The results indicate the media struggles to direct presidential attention. This, in conjunction with the results of the first section, raise questions as to whether elites through anxiety language can direct other elites to focus on specific issues over others. There is some indication that media-based

usage of anxiety language has the ability to both significantly predict and increase public issue attention levels.

The third section of this chapter on empirical findings indicates that ideological decision makers are resistant to cues from message senders commonly perceived to advance the values of an opposing political ideology. In other words, Democratic presidential administrations will lack success in directing conservative decision makers to focus on issues through anxiety cues. Republican presidential administrations will also be limited in their ability to persuade liberal decision makers that an issue is salient through an increased intensity in anxiety cues. A review of the response of liberal decision makers to Democrat anxiety cues, and conservative decision makers to Republican anxiety cues, suggests decision makers are slightly more responsive to elites of a similar political background. Such findings can support the view that biased information processing and directional motivated reasoning are aspects of the political system that hinder presidential attempts at agenda setting.

Impact of Presidential Emotional Language on Media Attention and Public Opinion

Vector Autoregression Analyses – Health Care

The first vector autoregression system is comprised of variables measuring the intensity of presidential anxiety language, New York Times intensity of coverage, and public opinion. The Granger tests (results presented in Table 5.1) show that each dependent variable in the system is inertial. That means there is a dynamic history to each dependent variable. Blocks of coefficients of each dependent variable significantly

predict future values of that variable. Past values of the dependent variable shape future values of that variable.

The analysis suggests presidential anxiety language Granger-causes itself and public opinion. General media intensity Granger-causes itself and public opinion. Public opinion Granger-causes all variables in the system. Hypothesis 1 is confirmed when evaluating health care, while Hypothesis 4 is not confirmed. For the issue of health care, prior changes in anxiety-based language by the president cause movement in future levels of public issue attention. Still, at conventional significance levels, prior changes in the level of presidential anxiety language does not appear to cause change in future levels of media attention to that issue.

Table 5.1 Granger Tests for Presidential Anxiety, General Media Intensity, and Public Opinion System (Health Care)

Independent Variable		Dependent Variable	p-value
Presidential Anxiety Language	=>	Presidential Anxiety Language	0.00
General Media Intensity			0.11
Public Opinion	=>		0.00
Presidential Anxiety Language		General Media Intensity	0.30
General Media Intensity	=>		0.00
Public Opinion	=>		0.00
Presidential Anxiety Language	=>	Public Opinion	0.01
General Media Intensity	=>		0.00
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Emergency Medical Treatment and Active Labor Act, initiation of the White House Task Force on Health Reform, the Health Insurance Portability and Accountability Act, and the Medicare Drug Improvement and Modernization Act. Each of the independent variables includes five lags to control the inertia of the variables.

In terms of the dual systems framework, the suggestion is that the presence of anxiety-based language in the system can activate the surveillance system. Upon activation, decision makers can come across information that can ultimately shift issue attention. As proposed in the previous chapter, fluctuations in the presence of enthusiasm language, or the absolute intensity of issue language, should not activate the surveillance system. To evaluate these predictions, vector autoregression analyses should be performed that insert these variables into a dynamic system.

Table 5.2 Granger Tests for Presidential Enthusiasm, General Media Intensity, and Public Opinion System (Health Care)

Independent Variable		Dependent Variable	p-value
Presidential Enthusiasm Language	=>	Presidential Enthusiasm Language	0.00
General Media Intensity			0.48
Public Opinion	=>		0.03
Presidential Enthusiasm Language		General Media Intensity	0.54
General Media Intensity	=>		0.00
Public Opinion	=>		0.00
Presidential Enthusiasm Language		Public Opinion	0.59
General Media Intensity	=>		0.00
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Emergency Medical Treatment and Active Labor Act, initiation of the White House Task Force on Health Reform, the Health Insurance Portability and Accountability Act, and the Medicare Drug Improvement and Modernization Act. Each of the independent variables includes five lags to control the inertia of the variables.

Table 5.2 inserts presidential enthusiasm language into the system as an indicator of presidential cues. Presidential enthusiasm cues are measured in place of anxiety language from the prior vector autoregression system. As would be predicted by the dual systems framework, at conventional significance levels, prior changes in the level of enthusiasm-based language by the president does not cause change in future levels of

other variables in the system. Presidential enthusiasm cues do not Granger-cause either general media intensity (New York Times coverage) or public opinion (the percent of the public that views health care as the 'most important problem' in the country). As seen in Table 5.3, prior changes in the level of absolute intensity of issue discussion by the president does not appear to focus the media or the public's attention to the issue.

Granger causality tests, while informative, still do not indicate anything about the polarity (positive or negative direction) or magnitude of potential causal relationships between variables in systems. It is also important to realize that the lack of a Granger causal relation does not necessarily mean there is no cause and effect relationship present (Lutkepohl 1993). The reason for this is that there could be simultaneous feedback that can hide causal relationships. Moving-average responses can help to flesh out the polarity and magnitude of relationships.

Table 5.3 Granger Tests for Presidential Issue Intensity, General Media Intensity, and Public Opinion System (Health Care)

Independent Variable		Dependent Variable	p-value
Presidential Absolute Intensity	=>	Presidential Absolute Intensity	0.00
General Media Intensity			0.18
Public Opinion	=>		0.00
Presidential Absolute Intensity		General Media Intensity	0.16
General Media Intensity	=>		0.00
Public Opinion	=>		0.00
Presidential Absolute Intensity		Public Opinion	0.24
General Media Intensity	=>		0.00
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Emergency Medical Treatment and Active Labor Act, initiation of the White House Task Force on Health Reform, the Health Insurance Portability and Accountability Act, and the Medicare Drug Improvement and Modernization Act. Each of the independent variables includes six lags to control the inertia of the variables.

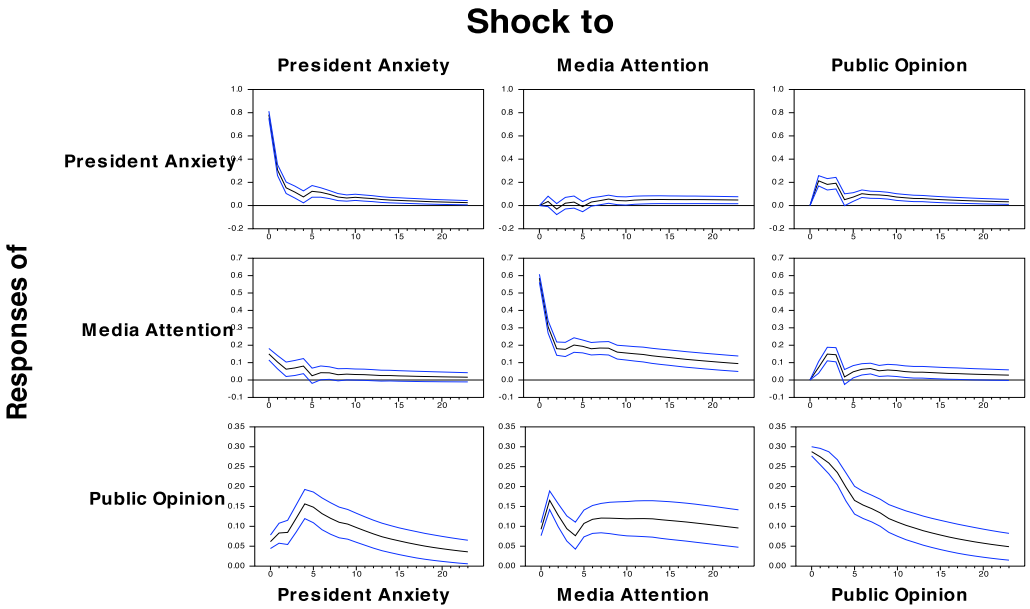
Vector Moving-Average Representation (MAR) Analyses – Health Care

Plots of the response to simulated shocks in the variables presidential anxiety language, general media attention, and public opinion are presented in Figure 5.1. The variable being shocked is the same within each of the three separate columns of the figure. For example, in the first column, the variable being shocked is presidential anxiety. The response to this specific shock for each of the three variables is presented in one of the three rows corresponding to that column.

With row one, the response of presidential anxiety to a shock in itself is presented. In row two, the response of general media attention to a shock in presidential anxiety is displayed. For row three, there is a demonstration of the response to public opinion following a shock to presidential anxiety. The number of months following the shock is measured along the horizontal axis of each plot. The positive or negative standard deviation shift from the standardized mean is measured along the vertical axis.

A one-standard-deviation-shock to presidential anxiety appears to induce an increase in public attention to health care in the four months following the shock (see row three, column one of the figure). The positive shift gradually decays over time. Still, an increase in presidential anxiety does appear to significantly increase the level of public attention directed to health care.

Figure 5.1 Impulse Responses for Presidential Anxiety, General Media Intensity, and Public Opinion System (Health Care)



After two months, a one-standard-deviation-shock to presidential anxiety induces almost a 0.10 standard deviation increase in the public viewing health care as the most important problem in the country. After four months, a one-standard-deviation-shock to presidential anxiety appears to induce about a 0.15 standard deviation increase in the public viewing health care as the most important problem in the country. Such a finding provides support for Hypothesis 3 of this project. The prediction was that an increase in elite anxiety-based language increases public attention to an issue. In the case of this specific MAR analysis, a simulated shock to the level of presidential anxiety in the system induces an increase in the level of the public that perceives health care as the most important problem in the country.

As reported in the VAR results in Table 5.1, presidential anxiety language does not Granger-cause general media attention. The plot of the impulse responses indicates (see row two, column one) that while a shock to presidential anxiety induces a contemporaneous increase in general media attention, this increase fails to persist for long after the shock. The level of media intensity gradually reverts back to the standardized mean of zero. Any increase in media attention to health care attributable to heightened presidential anxiety is likely immediate and very brief.

The other panels of Figure 5.1 clarify the relationship between variables in the system. Remember that general media intensity did not Granger-cause presidential anxiety in the results reported in Table 5.1. The limited response of presidential anxiety language for health care following a change in intensity of media coverage is reflected in the plot of the impulse responses. As seen row one, column two of Figure 5.1, a simulated shock to media intensity fails to move presidential anxiety away from its mean. This indicates that a one-standard-deviation-shock in general media intensity produces no statistically significant increase in presidential anxiety language. It does though appear that a shock in media intensity does result in an increase in public attention towards health care.

The last column of Figure 5.1 suggests that there is a brief uptick in both general media attention and presidential anxiety language for the first quarter of the year following a simulated shock in public opinion. Any response though to a shift in public opinion appears to level off after this period. From this MAR analysis, it does appear that positive feedback is a presence in the system.

There is support in these analyses for the proposal that an increase in elite anxiety cues heighten public attention to health care. Support is limited for the proposal that institutional elite anxiety cues heighten non-formal elite attention.

Vector Autoregression Analyses - Environment

Assessing emotional cue usage for the environment suggests an absence of movement in media attention to presidential anxiety cues. There is though a modest response of public opinion to presidential anxiety cues. Even after controlling for several major focusing events, changes in the intensity of anxiety-based language by the president Granger-causes itself and public opinion. General media intensity Granger-causes itself and public opinion. Public opinion Granger-causes itself, as well as general media intensity. Results of this VAR system is different from the VAR results for health care in that public opinion does not Granger-cause presidential intensity in anxiety language. A similar finding between the VAR systems is that general media coverage of the two issues, at conventional significance levels, is unresponsive to prior movement in anxiety-based language by the president. As was the case in the health care vector autoregression analysis, Hypothesis 1 is confirmed, while the proposal of Hypothesis 4 is not supported. Change in anxiety language predicts future levels of public opinion, but does not appear to predict future levels of media intensity.

Table 5.4 Granger Tests for Presidential Anxiety, General Media Intensity, and Public Opinion System (Environment)

Independent Variable		Dependent Variable	p-value
Presidential Anxiety Language	=>	Presidential Anxiety Language	0.00
General Media Intensity			0.20
Public Opinion			0.14
Presidential Anxiety Language		General Media Intensity	0.61
General Media Intensity	=>		0.00
Public Opinion	=>		0.00
Presidential Anxiety Language	=>	Public Opinion	0.07
General Media Intensity	=>		0.03
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Chernobyl nuclear accident, U.S. signage of the Montreal Protocol, the Exxon Valdez oil spill, the Kentucky coal waste spill, Hurricane Katrina, and Hurricane Rita. Each of the independent variables includes six lags to control the inertia of the variables.

In terms of presidential enthusiasm language, again it appears that this form of emotional language is not particularly effective in moving either public attention or media coverage. While prior change in the level of public attention directed to an issue causes change in future levels of presidential enthusiasm language, presidential enthusiasm language fails to Granger-cause public attention. Predictions derived from the dual systems framework would suggest the usage of enthusiasm cues does not compel movement from predisposition. The results of the vector autoregression analysis confirm this proposal. Table 5.5 presents the results of this specific system.

Granger tests where the absolute intensity of presidential discussion is measured in a VAR system indicate neither the media nor the public is responsive to overall intensity in presidential attention. All the dependent variables in the system are highly inertial, such that each dependent variable appears to Granger-cause itself. There is a lack of general media or public responsiveness to the intensity of presidential issue

discussion. Public opinion Granger-causes all variables in the system. General media intensity Granger-causes itself and public opinion. Table 5.6 describes the vector autoregression results when presidential absolute intensity of issue discussion is measured in a vector autoregression system.

Table 5.5 Granger Tests for Presidential Enthusiasm, General Media Intensity, and Public Opinion System (Environment)

Independent Variable		Dependent Variable	p-value
Presidential Enthusiasm Language	=>	Presidential Enthusiasm Language	0.00
General Media Intensity			0.73
Public Opinion	=>		0.02
Presidential Enthusiasm Language		General Media Intensity	0.70
General Media Intensity	=>		0.00
Public Opinion	=>		0.03
Presidential Enthusiasm Language		Public Opinion	0.36
General Media Intensity			0.14
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Chernobyl nuclear accident, U.S. signage of the Montreal Protocol, the Exxon Valdez oil spill, the Kentucky coal waste spill, Hurricane Katrina, and Hurricane Rita. Each of the independent variables includes four lags to control the inertia of the variables.

Table 5.6 Granger Tests for Presidential Issue Intensity, General Media Intensity, and Public Opinion System (Environment)

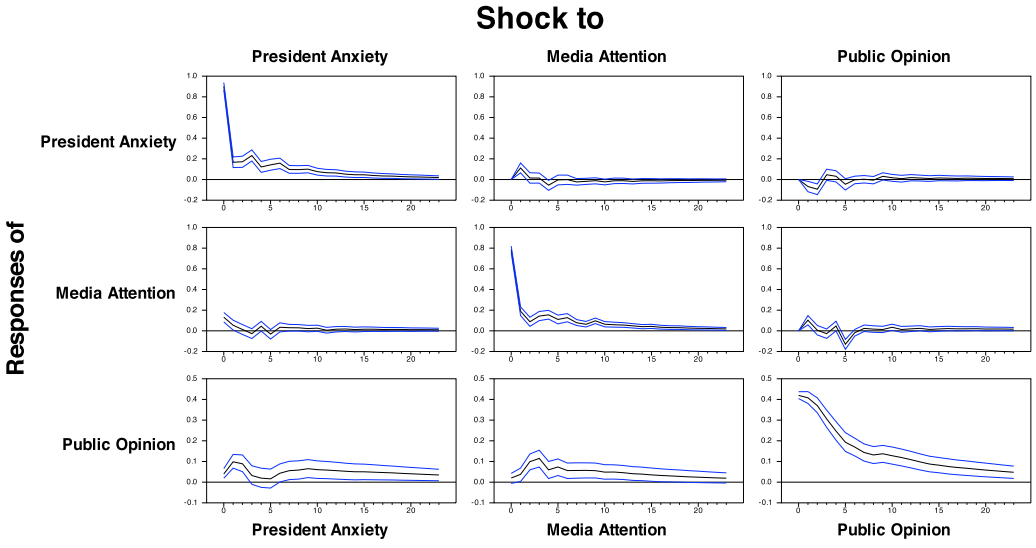
Independent Variable		Dependent Variable	p-value
Presidential Absolute Intensity	=>	Presidential Absolute Intensity	0.00
General Media Intensity			0.45
Public Opinion	=>		0.04
Presidential Absolute Intensity		General Media Intensity	0.71
General Media Intensity	=>		0.00
Public Opinion	=>		0.10
Presidential Absolute Intensity		Public Opinion	0.23
General Media Intensity	=>		0.02
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Chernobyl nuclear accident, U.S. signage of the Montreal Protocol, the Exxon Valdez oil spill, the Kentucky coal waste spill, Hurricane Katrina, Hurricane Rita. Each of the independent variables includes five lags to control the inertia of the variables.

Vector Moving-Average Representation (MAR) Analyses - Environment

In the MAR analysis where the system comprises of anxiety language, general media attention, and public opinion, the results show that any increase in attention within the system following a shift in anxiety language is not particularly sizable or prolonged. In row three, column one of Figure 5.2, a positive shock to presidential anxiety induces a 0.05 standard deviation contemporaneous increase in public opinion. A positive shock to presidential anxiety induces a 0.175 standard deviation contemporaneous increase in general media attention (refer to row two, column one). After one month, the shock to presidential anxiety induces public opinion to be 0.10 standard deviations above its mean, while general media attention begins to decline toward the standardized mean of zero.

Figure 5.2 Impulse Responses for Presidential Anxiety, General Media Intensity, and Public Opinion System (Environment)



Remember that in Table 5.4, presidential anxiety language does not Granger-cause general media intensity. As seen in the plot of the impulse responses, after the small contemporaneous increase in media attention following the shock to presidential anxiety, media coverage does not move much away from the standardized mean for the rest of the period studied. Presidential anxiety language does not appear to have much of an effect on media coverage. Such a finding does not offer much support to Hypothesis 4, which proposes that a formal political elite through heightened anxiety cues can lift the attention non-formal political elites provide to an issue.

In terms of public opinion, the peak level of attention following the shock to presidential anxiety is seen in the initial month after the shock. While there does appear to be a discernible increase in public opinion following an increase in presidential anxiety language, this increase is confined to the period immediately after a shift in presidential anxiety language. Any positive effect presidential anxiety cues have on public opinion is detectable shortly after a heightened intensity of this form of emotional language. The positive effect of anxiety language is less easy to distinguish after this period.

Row three, column two of Figure 5.2 suggests that general intensity in media coverage can produce an increase in public attention to the environment for the first three months following a shift in media coverage. A shock to media intensity does not appear to move presidential usage of anxiety language much beyond the first month of the shock (refer to row one, column two). As indicated in Table 5.4, general media intensity does not Granger-cause presidential anxiety language. The limited role of

general media coverage in explaining changes to presidential anxiety language is confirmed in the plot of impulse responses. Increased media attention to the environment does not direct the president to use anxiety-based language in discussing this issue.

The third column of Figure 5.2 evaluates the response in the system to a simulated shock in public opinion. There appears to be a drop in presidential anxiety in the two months following a one-standard-deviation-shock to public opinion (as indicated in the plot in row one, column three). Such a result would imply that an increase in public concern about the environment would lead to a drop in formal elite usage of anxiety cues about the issue. It should be noted though that following this period, presidential anxiety language usage briefly goes above zero, then gradually decays toward zero. This suggests no significant effect at all for public opinion on presidential anxiety. This would reinforce the results of the VAR analysis indicating that public opinion does not Granger-cause presidential anxiety language usage.

In terms of the response to media coverage following a shock in public opinion, there is about a 0.125 standard deviation increase in media coverage in the month following a one-standard-deviation-shock to public opinion (as seen in row two, column three). Following this, public opinion does not appear to induce much of an increase in media coverage. General media intensity and public opinion Granger-cause each other; any positive effect each variable has on the other is relatively short-lived. The results indicate presidential anxiety language can lead to a slight increase in public attention to the environment. There is no indication of an increase over time in media attention due to presidential anxiety cues.

Vector Autoregression Analyses - Crime

Contrary to the results seen in the instances of health care and the environment, crime is an issue where prior change in presidential anxiety-based language does not appear to impact future levels of public attention to the issue. Another difference is that with crime, general media intensity is responsive to prior change in anxiety-based language by the president. The prediction of Hypothesis 1 is not supported by the analysis, while Hypothesis 4 is supported by the analysis.

As was the case in the area of health care, prior change in public opinion predict presidential anxiety language levels. When public opinion is the dependent variable, the only variable that appears to predict public opinion is itself. This result is intriguing, given that the previous chapter's review of the dynamic series for crime gave an indication that changes in presidential anxiety comes before changes in public issue attention. The actual Granger tests though, when controlling for focusing events related to crime and violence, do not appear to validate this preliminary view.

Table 5.7 Granger Tests for Presidential Anxiety, General Media Intensity, and Public Opinion System (Crime)

Independent Variable		Dependent Variable	p-value
Presidential Anxiety Language	=>	Presidential Anxiety Language	0.00
General Media Intensity			0.32
Public Opinion	=>		0.00
Presidential Anxiety Language	=>	General Media Intensity	0.10
General Media Intensity	=>		0.00
Public Opinion			0.22
Presidential Anxiety Language		Public Opinion	0.67
General Media Intensity			0.36
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Brady Bill signing and the Columbine school shooting. Each of the independent variables includes five lags to control the inertia of the variables.

When presidential enthusiasm language is evaluated (results presented in Table 5.8), each dependent variable Granger-causes itself. There is no evidence provided that enthusiasm cues can guide general media coverage or public attention to crime. This result is congruent with expectations of the dual systems framework. There is nothing within the content of enthusiasm language that will activate the surveillance system. In order for decision makers to move away from their habitual positions, the surveillance system needs to have been activated.

Table 5.8 Granger Tests for Presidential Enthusiasm, General Media Intensity, and Public Opinion System (Crime)

Independent Variable		Dependent Variable	p-value
Presidential Enthusiasm Language	=>	Presidential Enthusiasm Language	0.00
General Media Intensity			0.68
Public Opinion			0.28
Presidential Enthusiasm Language		General Media Intensity	0.79
General Media Intensity	=>		0.00
Public Opinion			0.80
Presidential Enthusiasm Language		Public Opinion	0.67
General Media Intensity			0.33
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Brady Bill signing and the Columbine school shooting. Each of the independent variables includes five lags to control the inertia of the variables.

When overall presidential issue intensity is evaluated (as seen in Table 5.9), there is no indication that presidential absolute intensity directs media coverage and public opinion. As suggested in chapter three, mere change in the number of times an issue is mentioned should not move attention. Cues have to provide something that can activate the surveillance system of decision makers. General issue discussion does not offer a signal comprised of information that can be easily processed, or can quickly invoke emotional reactions that help produce behavioral change. For this reason, general issue discussion is not going to persuade decision makers that a reassessment of the system is necessary. Prior change in public opinion though does Granger-cause future levels of overall intensity in presidential issue discussion.

Table 5.9 Granger Tests for Presidential Issue Intensity, General Media Intensity, and Public Opinion System (Crime)

Independent Variable		Dependent Variable	p-value
Presidential Absolute Intensity	=>	Presidential Absolute Intensity	0.00
General Media Intensity			0.99
Public Opinion	=>		0.00
Presidential Absolute Intensity		General Media Intensity	0.68
General Media Intensity	=>		0.00
Public Opinion			0.74
Presidential Absolute Intensity		Public Opinion	0.73
General Media Intensity			0.37
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Brady Bill signing and the Columbine school shooting. Each of the independent variables includes five lags to control the inertia of the variables.

Vector Moving-Average Representation (MAR) Analyses - Crime

When plotting the responses to shocks in a system comprised of presidential anxiety language, general media intensity, and public opinion, it appears that the series within the system are not sensitive to change in other variables within the system. Shocks to a single variable do not induce much of a response from other variables within the system. With the first column of Figure 5.3, there is a one-standard-deviation-shock placed on presidential anxiety language. This shock induces about a 0.175 standard deviation contemporaneous increase in media intensity, and a 0.05 standard deviation contemporaneous increase in public opinion.

Following the shock, the level of media intensity remains above its mean for two more months before there is a drop to levels below the mean (see row two, column one). This raises the interesting possibility that presidential anxiety language has an immediate positive effect on media intensity that gradually leads to a lower level of media

coverage. The level of media coverage to crime could drop over time following a positive shift in presidential anxiety language.

This possibility would complicate the traditional dual systems framework. Anxiety-based cues might help to increase issue attention in the short-term, and possibly help decrease issue attention in the long-term. If this happens to be the case for certain issue areas, formal political elites have to be very strategic in terms of selecting the most effective time to use anxiety language. An actor like the president will have to consider using anxiety-based language at those times when they feel there is the best chance for immediate movement from the current policy equilibrium.

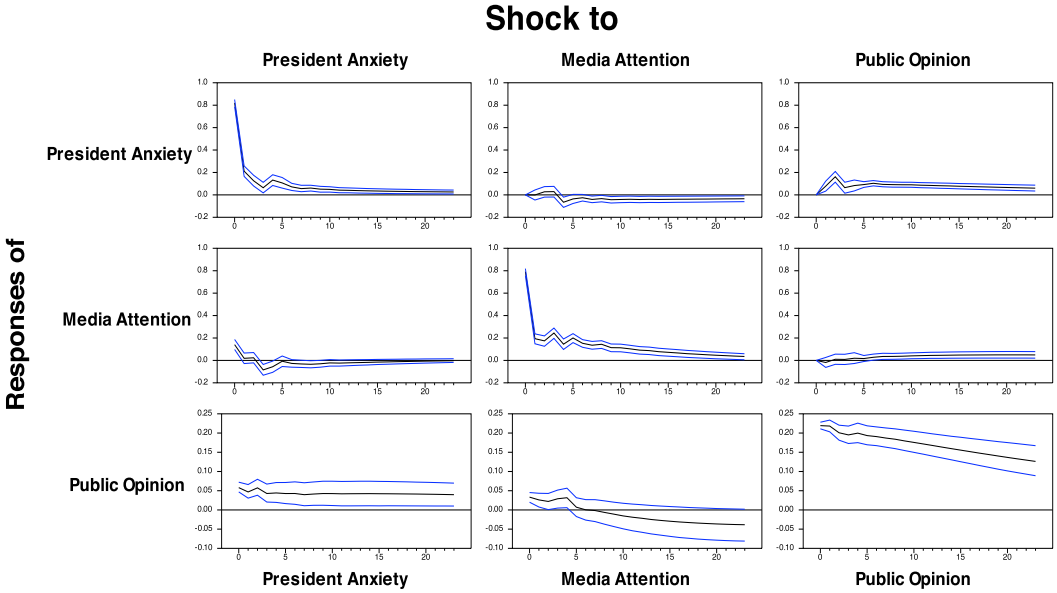
The potential reason for this is that attention to an issue will gradually wane following an increase in anxiety-based language. Such a quality would heighten the difficulty of introducing change to the institutional agenda. Ultimately though, based on the limited number of analyses performed, it is not clear whether such a possibility holds in multiple issue areas. More extensive research in the future will be necessary.

In terms of changes to public attention in response to a shock in presidential anxiety, there does not appear to be much change in public attention following any initial effect (refer to row three, column one). The results of Table 5.7 indicate that presidential anxiety language fails to Granger-cause public opinion. Upon examining the plot of impulse responses, presidential anxiety language does not play a persistent role in heightening public attention to crime.

It appears that there is an increase in presidential anxiety language in the first two months following a shock in public opinion (as seen in row one, column three). After

two months, a one-standard-deviation-shock in public opinion induces a 0.20 standard deviation increase in presidential anxiety language. Following this period, there does not appear to be much shift in presidential anxiety language attributable to a shock to public opinion. Any effect that prior change in public opinion has on future levels of anxiety language by the president appears to be abbreviated, as presidential anxiety levels off at 0.10 standard deviations above the mean three months after a shock to public opinion.

Figure 5.3 Impulse Responses for Presidential Anxiety, General Media Intensity, and Public Opinion System (Crime)



Vector Autoregression Analyses - Poverty

In the case of poverty, intensity in anxiety language fails to direct public or media-based issue attention. An interesting aspect is that presidential anxiety language is not highly inertial. Only blocks of coefficients for public opinion are significant when

presidential anxiety language is the dependent variable in the system. General media intensity does appear to Granger-cause itself, and public opinion also Granger-causes itself. The results are presented in Table 5.10 below.

Table 5.10 Granger Tests for Presidential Anxiety, General Media Intensity, and Public Opinion System (Poverty)

Independent Variable		Dependent Variable	p-value
Presidential Anxiety Language		Presidential Anxiety Language	0.42
General Media Intensity			0.67
Public Opinion	=>		0.05
Presidential Anxiety Language		General Media Intensity	0.64
General Media Intensity	=>		0.00
Public Opinion			0.63
Presidential Anxiety Language		Public Opinion	0.59
General Media Intensity			0.51
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant. Each of the independent variables includes five lags to control the inertia of the variables.

Public opinion and general media intensity do not appear responsive to presidential enthusiasm language, which is a common finding across all the issues studied. Public opinion, in all issue areas save for crime, directs the usage of presidential enthusiasm language for the issues studied. Again, inertia plays a role in explaining changes in the dependent variables within the system. Past values of a dependent variable predict future values of a dependent variable. Presidential enthusiasm cues, which suggest that conditions related to an issue are stable, congruent with expectations, or happen to be improving, should fail to activate the surveillance system. The surveillance system is a conduit to a shift from predisposition. There is no indication

here that changes in enthusiasm cues are activating the surveillance system. Table 5.11 describes the results of the vector autoregression system comprised of enthusiasm language, general media attention, and public opinion.

Table 5.11 Granger Tests for Presidential Enthusiasm, General Media Intensity, and Public Opinion System (Poverty)

Independent Variable		Dependent Variable	p-value
Presidential Enthusiasm Language	=>	Presidential Enthusiasm Language	0.00
General Media Intensity			0.18
Public Opinion	=>		0.07
Presidential Enthusiasm Language		General Media Intensity	0.58
General Media Intensity	=>		0.00
Public Opinion			0.65
Presidential Enthusiasm Language		Public Opinion	0.78
General Media Intensity			0.56
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant. Each of the independent variables includes five lags to control the inertia of the variables.

Presidential efforts to move media or public attention by altering the level of overall statements made about an issue will fail to move attention to issues. This prediction was confirmed in the Granger causality tests across the several issues studied, including poverty. Table 5.12 indicates that the absolute intensity of presidential statements does not predict movement in general media attention or public opinion.

Table 5.12 Granger Tests for Presidential Issue Intensity, General Media Intensity, and Public Opinion System (Poverty)

Independent Variable		Dependent Variable	p-value
Presidential Absolute Intensity	=>	Presidential Absolute Intensity	0.00
General Media Intensity	=>		0.03
Public Opinion			0.55
Presidential Absolute Intensity		General Media Intensity	0.49
General Media Intensity	=>		0.00
Public Opinion			0.63
Presidential Absolute Intensity		Public Opinion	0.83
General Media Intensity			0.68
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant. Each of the independent variables includes five lags to control the inertia of the variables.

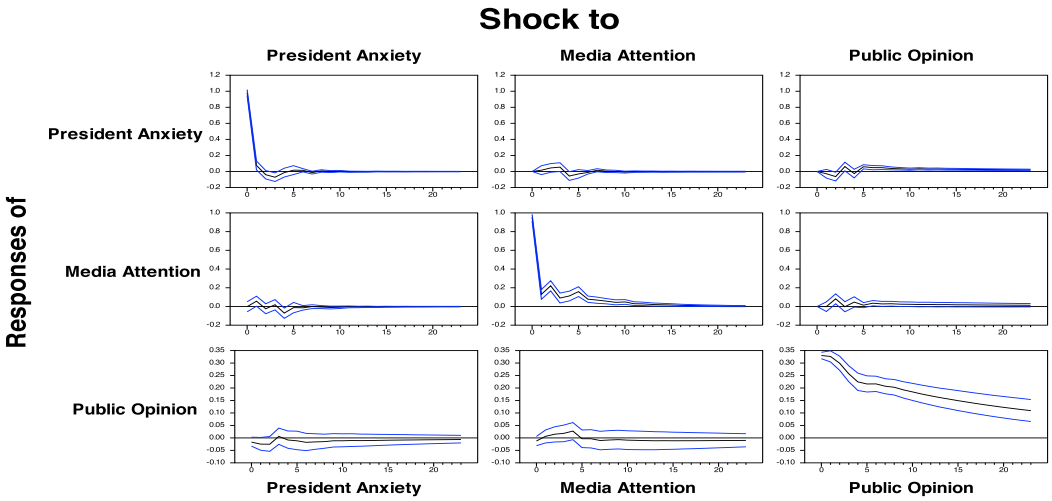
There is no support in any issue area studied that alterations in the level of absolute intensity of issue discussion serves as a persuasive indicator that change from habit is necessary. In none of the issue areas does the absolute intensity of presidential issue discussion precede changes in either media coverage or public opinion.

Vector Moving-Average Representation (MAR) Analyses - Poverty

Anxiety-based emotional language does not appear to Granger-cause either media intensity or public opinion. Based on the impulse responses, plotted in Figure 5.4, a shock to presidential anxiety does not significantly increase media intensity or public opinion. In the issue area of poverty, there does not appear to be much support for the proposals of Hypothesis 1, 3, and 4 regarding presidential anxiety language. Anxiety-based language does not appear to guide issue attention in the system. This could though be an artifact of the time period studied. As discussed in Chapter 4, the intensity of issue

discussion on poverty is very limited relative to the other issue areas studied. The amount of anxiety-based cues when discussing the issue is limited.

Figure 5.4 Impulse Responses for Presidential Anxiety, General Media Intensity, and Public Opinion System (Poverty)



With a lack of anxiety-based cues offered in the system, the likelihood that a mass activation of the surveillance system could be unlikely. Other eras where poverty was more a focal point of political debate, such as during Lyndon B. Johnson's 'War on Poverty,' could present different dynamics than that seen in this analysis. Unfortunately, given the limitations of the data available, it is not clear if a threshold in usage of anxiety language needs to be crossed before actors in the political system respond in ways congruent with predictions derived from the dual systems framework.

Discussion

The analyses provide some support for predictions made under a dual systems framework. One prediction was that anxiety cues will shift issue attention, while enthusiasm cues or general issue discussion do not shift issue attention. To evaluate this, multiple vector autoregression systems were contrasted. The only difference in these systems was whether presidential anxiety language, enthusiasm language, or overall intensity of discussion was being measured. Based on these analyses, the only type of presidential cue that was found to predict public or media-based issue attention were anxiety cues. Enthusiasm language and overall issue discussion fail to predict attention change.

For health care and the environment, presidential anxiety Granger-causes public opinion. This means past changes in presidential anxiety can change future levels of public opinion. When evaluating the simulated shock in presidential anxiety, there is an increase in public attention, but this increase is mainly confined to the immediate period after the shock. In the issue area of crime, public opinion is not predicted by changes in presidential anxiety, but the level of media coverage is shaped by presidential anxiety cues. When evaluating a simulated shock in presidential anxiety, there is an instant increase in coverage, but over time, media coverage drops to levels below the mean. Determining whether anxiety cues can initially heighten attention, then gradually help to lower attention, is a possibility that will need to be examined in future research. For the issue area of poverty, there is no movement in public attention or media coverage attributable to presidential anxiety.

It appears that an increase to issue attention following an increase in presidential anxiety language is fairly immediate, and also relatively short-lived. While the direction of the relationship is as predicted, the effects of anxiety presidential language are more abbreviated than what might be expected. Given that the media appears, generally speaking, to be resistant to anxiety cues from the president, it is worthwhile to evaluate how the president responds to media-based anxiety cues.

Impact of Media-Based Emotional Language on Presidential Attention and Public Opinion

General Findings

While it does appear that media-based anxiety has the potential to impact public attention to an issue, presidential attention appears resistant to anxiety cues from the media. The results of the analyses do not provide compelling evidence that political elites through anxiety language can direct the attention other political elites give to an issue. After performing the moving-average representation (MAR) analyses, media anxiety and presidential attention do not exhibit the predicted positive relationship.

Vector Autoregression Analyses – Health Care

The president is not responsive to changes in anxiety language usage by the general media. Nonetheless, prior changes in the level of anxiety-based language by the media causes change in future levels of public issue attention. The Granger causality tests for this system support Hypothesis 2, but do not support Hypothesis 5. An interesting aspect worth noting is that presidential intensity in issue discussion Granger-causes the usage of anxiety in general media coverage.

Such a result indicates the usage of anxiety language by the media is guided by the frequency of issue discussion by the president. Referring back to Table 5.1, presidential anxiety language does not appear to direct changes in general media coverage of health care. But changes in overall presidential issue discussion shifts anxiety language usage by the media.

Table 5.13 Granger Tests for General Media Anxiety, Presidential Issue Intensity, and Public Opinion System (Health Care)

Independent Variable		Dependent Variable	p-value
General Media Anxiety		General Media Anxiety	0.30
Presidential Absolute Intensity	=>		0.09
Public Opinion	=>		0.10
General Media Anxiety		Presidential Absolute Intensity	0.12
Presidential Absolute Intensity	=>		0.00
Public Opinion	=>		0.02
General Media Anxiety	=>	Public Opinion	0.01
Presidential Absolute Intensity			0.90
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the initiation of the White House Task Force on Health Reform, the Health Insurance Portability and Accountability Act, the Medicare Drug Improvement and Modernization Act, and ideological media coverage. Each of the independent variables includes six lags to control the inertia of the variables.

General media enthusiasm (as indicated in Table 5.14) fails to impact the level of presidential issue intensity and public opinion on health care. These results are congruent with the analysis of presidential enthusiasm language. Again, the intensity of presidential issue discussion Granger-causes media enthusiasm levels on health care. At least for health care, the usage by the media of both forms of emotional language appears to be responsive to prior movement in overall issue discussion by the president.

Table 5.14 Granger Tests for General Media Enthusiasm, Presidential Issue Intensity, and Public Opinion System (Health Care)

Independent Variable		Dependent Variable	p-value
General Media Enthusiasm		General Media Enthusiasm	0.28
Presidential Absolute Intensity	=>		0.07
Public Opinion			0.15
General Media Enthusiasm		Presidential Absolute Intensity	0.47
Presidential Absolute Intensity	=>		0.00
Public Opinion	=>		0.05
General Media Enthusiasm		Public Opinion	0.29
Presidential Absolute Intensity			0.91
Public Opinion	=>		0.00

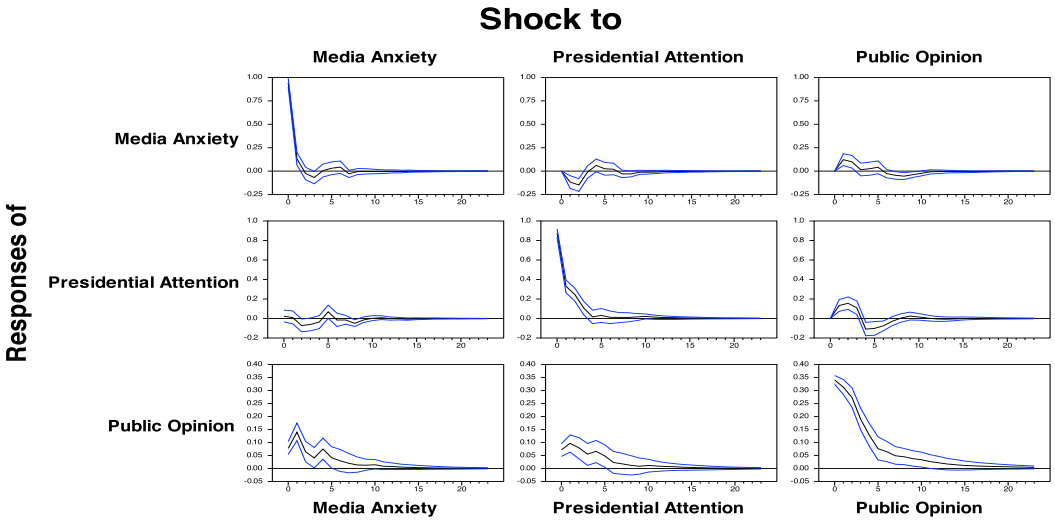
Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the initiation of the White House Task Force on Health Reform, the Health Insurance Portability and Accountability Act, the Medicare Drug Improvement and Modernization Act, and ideological media coverage. Each of the independent variables includes six lags to control the inertia of the variables.

Vector Moving-Average Representation (MAR) Analyses – Health Care

Figure 5.5 presents the plots of the impulse responses for a system comprised of general media anxiety, presidential intensity of attention, and public opinion. A one-standard-deviation-shock in general media anxiety induces a 0.08 standard deviation contemporaneous increase in public opinion (see row three, column one). One month after a shock to media anxiety, public opinion is 0.14 standard deviations above its mean. At four months, public opinion is 0.07 standard deviations above its mean, but thereafter the response decays. There does appear then to be a period wherein there is an increase in public attention to health care following an increase in media anxiety language. This indicates some additional support for Hypothesis 3, which proposed that political elites can heighten public attention to issues.

Presidential attention does not appear to be impacted following a shock to general media anxiety, as the contemporaneous increase in presidential attention following the shock has a negligible difference from zero (refer to row two, column one). After two months, presidential attention is 0.10 standard deviations below its mean following a shock in media anxiety. Prior change in media anxiety does not bring about major change in future levels of presidential attention. There is not much evidence here that an increase in media-based anxiety language will direct or increase presidential attention to an issue. There is not much support for Hypothesis 5 in the issue area of health care.

Figure 5.5 Impulse Responses for General Media Anxiety, Presidential Issue Intensity, and Public Opinion System (Health Care)



Remember from Table 5.13 that intensity of absolute presidential attention Granger-causes media anxiety. As seen in row one, column two of Figure 5.5, a negative relationship between the two is likely. In the three months following a shock in presidential intensity, the level of media anxiety is beneath the mean. Media anxiety does rise above the mean briefly, and then decays to zero. There is not extensive evidence of a positive shift in media anxiety following a change in overall intensity in issue discussion. In the VAR analysis, public opinion Granger-causes both media anxiety and presidential attention. Based on the plots in the third column of Figure 5.5, any increase in media anxiety and presidential attention from a shock to public opinion is confined to within the first three months of the shock.

Vector Autoregression Analyses - Poverty

In the issue area of poverty, the usage of anxiety-based language by the media does not appear to play a role in changing presidential or public attention to an issue. Based on the results presented in Table 5.15, media anxiety cues do not direct public or presidential attention. The three dependent variables are inertial, such that each is found to Granger-cause itself. There is little support for Hypothesis 2 here, which proposes media-based anxiety language can predict public issue attention. There is also no evidence that validates Hypothesis 5, which proposes that prior values of media-based anxiety language can predict future values of presidential anxiety language.

Table 5.15 Granger Tests for General Media Anxiety, Presidential Issue Intensity, and Public Opinion System (Poverty)

Independent Variable		Dependent Variable	p-value
General Media Anxiety	=>	General Media Anxiety	0.00
Presidential Absolute Intensity			0.36
Public Opinion			0.67
General Media Anxiety		Presidential Absolute Intensity	0.97
Presidential Absolute Intensity	=>		0.00
Public Opinion			0.85
General Media Anxiety		Public Opinion	0.86
Presidential Absolute Intensity			0.74
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant and indicators for ideological media coverage. Each of the independent variables includes five lags to control the inertia of the variables.

The inertial nature of the dependent variables is also demonstrated in the analysis of a system that measures general media enthusiasm. The results, displayed in Table 5.16, indicate that enthusiasm language from the media fails to move presidential or public attention to poverty. Enthusiasm language, as predicted under the dual systems framework, should not help to produce change in issue attention. Still, in the case of poverty, anxiety language also failed to direct issue attention.

Table 5.16 Granger Tests for General Media Enthusiasm, Presidential Issue Intensity, and Public Opinion System (Poverty)

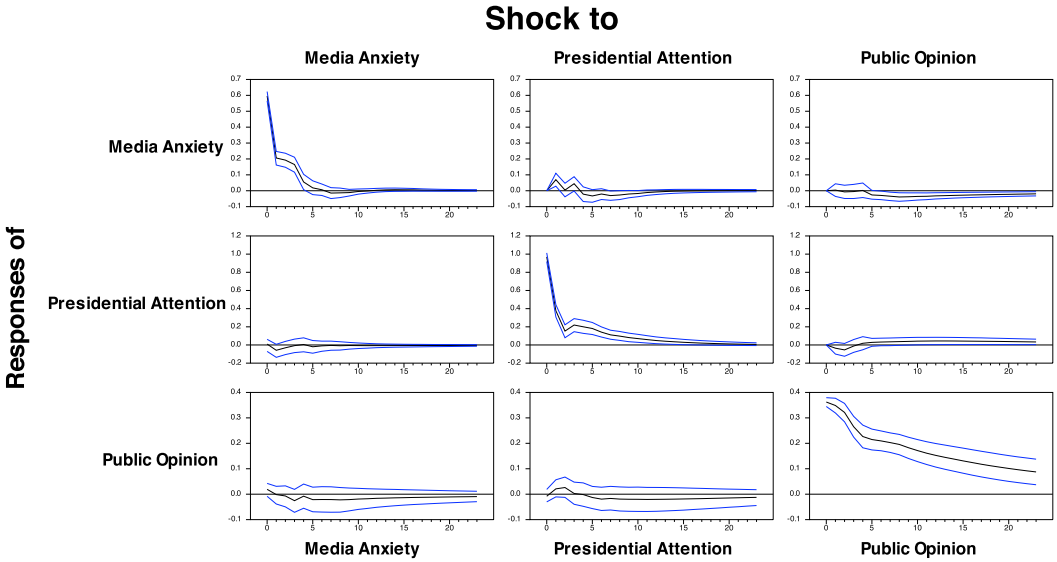
Independent Variable		Dependent Variable	p-value
General Media Enthusiasm	=>	General Media Enthusiasm	0.03
Presidential Absolute Intensity			0.37
Public Opinion			0.52
General Media Enthusiasm		Presidential Absolute Intensity	0.33
Presidential Absolute Intensity	=>		0.00
Public Opinion			0.85
General Media Enthusiasm		Public Opinion	0.93
Presidential Absolute Intensity			0.78
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant and indicators for ideological media coverage. Each of the independent variables includes five lags to control the inertia of the variables.

Vector Moving-Average Representation (MAR) Analyses - Poverty

Just like what was seen in response to changes in presidential anxiety-based language, there does not appear to be much movement in the political system to shifts in media-based anxiety language. Figure 5.6 plots the impulse responses when simulated shocks are given to media-based anxiety language, intensity in presidential issue attention, and public opinion. Following a shock to media-based anxiety language on poverty, there is little shift from the mean throughout the period studied for both presidential attention and public opinion (based on the corresponding plots in column one). This result reinforces the vector autoregression findings suggesting that media-based anxiety does not Granger-cause either presidential or public attention. Media anxiety cues fail to bring about change in attention at either the institutional or systemic levels to the issue of poverty.

Figure 5.6 Impulse Responses for General Media Anxiety, Presidential Issue Intensity, and Public Opinion System (Poverty)



Discussion

Given that media anxiety language is studied for only two issue areas, it is difficult to craft a general outlook on the role of this type of emotional cue on issue attention. Regardless, it does not appear that anxiety cues offered by the media direct presidential attention in the issue areas studied. In one of the two issue areas, media anxiety language does significantly direct public opinion. The overall project does not offer much support for the proposal that political elites can influence each other through anxiety language. There is though some evidence that elite anxiety cues can guide public attention in a fashion predicted by the dual systems framework.

The dual systems framework also predicts that political message receivers will be responsive to anxiety cues, regardless of how they might feel about the message sender.

As seen in the next section, it appears that, contrary to predictions derived from the dual systems framework, there is some resistance to anxiety cues from message senders that could be of an opposing political ideology.

Impact of Anxiety Emotional Language on Partisan Message Receivers

General Findings

The previous analyses looked at whether emotional cues can direct attention to issues. There was no analysis though of whether partisans are resistant to emotional language cues coming from political actors of another political background. If biased information processing exists, message receivers should not be persuaded by cues from those message senders they have a negative impression of. The performed vector autoregression analyses show for the most part a lack of responsiveness by partisan message receivers to emotional cues from message receivers of an alternative political viewpoint. Plotting the impulse responses to shifts in anxiety cues does not show a consistent positive increase across issue areas in the level of attention ideological media outlets pay to media attention. These results help reinforce the view that biased information processing can be present in the political system.

Democratic Message Sender and Conservative Media – Health Care

In the vector autoregression analysis, Democratic administration anxiety cues do Granger-cause conservative media attention. At conventional significance levels, prior change in anxiety language during a Democratic administration does predict change in future levels of conservative media attention to health care. Conservative media attention also appears to Granger-cause anxiety language usage by a Democratic president.

Table 5.17 Granger Tests for Democrat Anxiety, Conservative Media Attention, and Public Opinion System (Health Care)

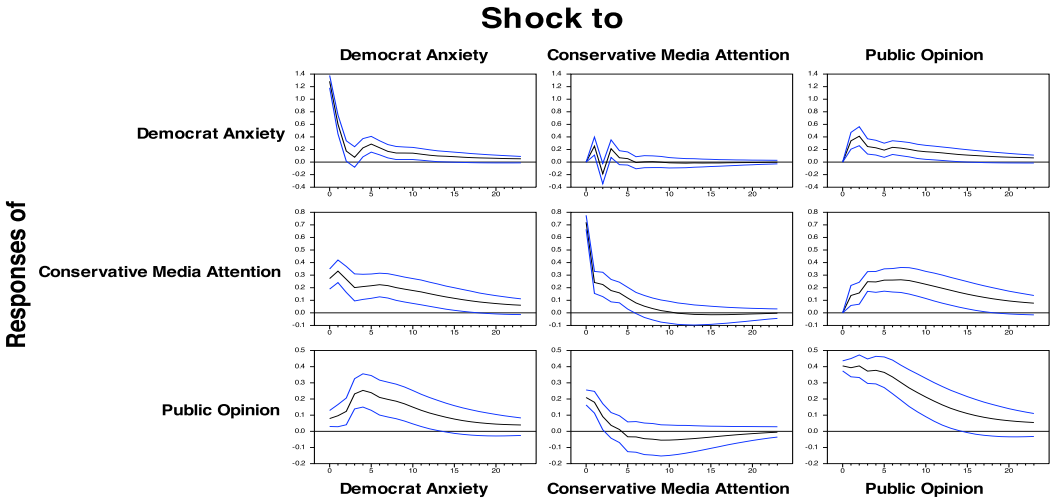
Independent Variable		Dependent Variable	p-value
Democratic President Anxiety Language	=>	Democratic President Anxiety Language	0.01
Conservative Media Attention	=>		0.01
Public Opinion	=>		0.01
Democratic President Anxiety Language	=>	Conservative Media Attention	0.04
Conservative Media Attention	=>		0.00
Public Opinion	=>		0.07
Democratic President Anxiety Language	=>	Public Opinion	0.02
Conservative Media Attention			0.14
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the initiation of the White House Task Force on Health Reform and the Health Insurance Portability and Accountability Act. Each of the independent variables includes three lags to control the inertia of the variables.

Following a shock to Democratic anxiety language, there is a 0.275 standard deviation contemporaneous increase in conservative media attention (refer to row two, column one in Figure 5.7). One month following the shock, there is about a 0.3125 standard deviation increase in the level of conservative media attention devoted to the issue. This is the peak level of change in conservative media attention following a shock to Democratic anxiety language. In this case, any positive effect an opposing political elite has on the issue attention of a conservative political actor is going to be most pronounced immediately after the shift in elite behavior. The positive effect Democratic anxiety language has on conservative media attention is short-lived in the issue area of health care for the period studied. There is some support in this analysis for Hypothesis 6. An increase in Democratic anxiety language is responsible for a short-term increase in conservative media attention.

In contrast, there appears to be a reduction in Democratic anxiety language usage following the first month of a shift in conservative media attention (as seen in row one, column two of Figure 5.7). While there is a 0.225 standard deviation increase in anxiety language one month after a shift in conservative media attention, the level of anxiety language is 0.20 standard deviations below the standardized mean. There is a return above the mean in the next month, and then decays toward zero. As a result, there is no clear movement in Democratic anxiety language as the result of a change in conservative media attention. If there is positive feedback between Democratic administration anxiety cues and conservative media attention, it will not necessarily be for an extended period. A similar conclusion can be made regarding the relationship between Democratic anxiety language and public opinion. An increase in either of these variables following a shift in the other variable is very short lived.

Figure 5.7 Impulse Responses for Democrat Anxiety, Conservative Media Attention, and Public Opinion System (Health Care)



Republican Message Sender and Liberal Media – Health Care

The VAR that evaluates Republican anxiety language and liberal media attention shows anxiety language usage does not Granger-cause liberal media attention. At conventional significance levels, prior change in the level of Republican anxiety cues does not predict future levels of liberal media attention to that issue. The only variable in the system that predicts change in liberal media attention is itself. These findings raise concern of biased information processing in the system. Liberal media attention does not appear to be responsive to emotional cues that help produce behavioral change. Anxiety cues should activate the surveillance system, regardless of the background of the message sender. If there is a lack of responsiveness to anxiety cues given a message sender's political background, the ability to shape the systemic agenda is stymied.

Table 5.18 Granger Tests for Republican Anxiety, Liberal Media Attention, and Public Opinion System (Health Care)

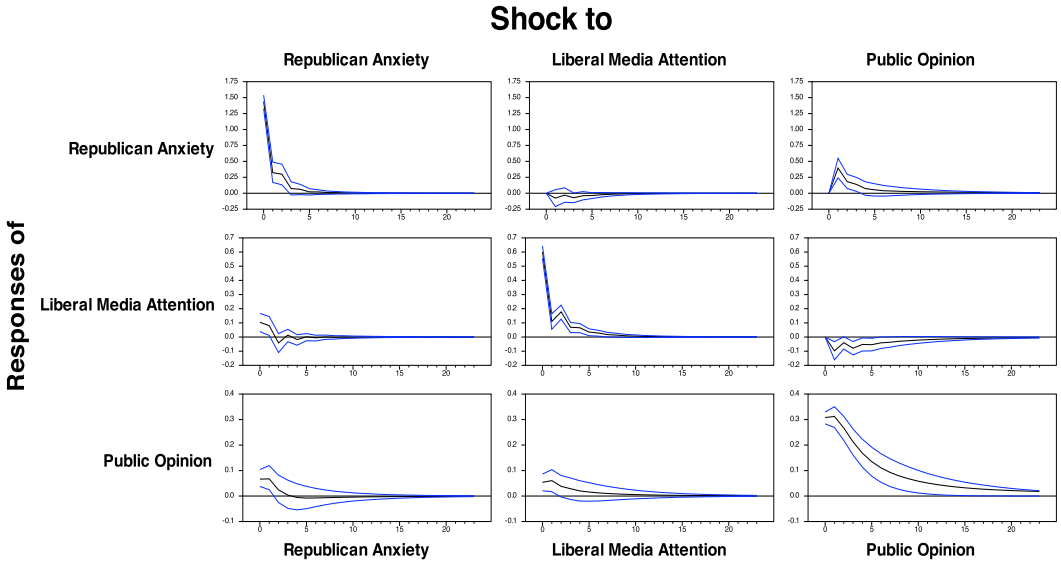
Independent Variable		Dependent Variable	p-value
Republican President Anxiety Language	=>	Republican President Anxiety Language	0.04
Liberal Media Attention			0.38
Public Opinion	=>		0.03
Republican President Anxiety Language		Liberal Media Attention	0.22
Liberal Media Attention	=>		0.00
Public Opinion			0.23
Republican President Anxiety Language		Public Opinion	0.62
Liberal Media Attention			0.84
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and an indicator for the Medicare Drug Improvement and Modernization Act. Each of the independent variables includes two lags to control the inertia of the variables.

When reviewing the plot of the impulse responses in Figure 5.8, a shock to Republican anxiety cues does initially induce an increase in liberal media attention above the standardized mean. Shortly afterward, attention drops below the mean (refer to row two, column one). If there is any increase in liberal attention to Republican anxiety cues, the response is immediate and brief. There is limited support for Hypothesis 7 with this specific system of variables.

A shift in Republican anxiety cues does not result in a persistent increase in liberal media attention. Liberal media attention levels do not move beyond the standardized mean eight months following a shock to Republican anxiety. There is no consistency in the dynamics before this point to suggest that liberal media attention responds positively to a shift in Republican administration anxiety language. It should be noted that public opinion does induce an increase to Republican administration anxiety language, but not to the extent seen when evaluating the system that measures Democratic administration anxiety language (see row one, column three).

Figure 5.8 Impulse Responses for Republican Anxiety, Liberal Media Attention, and Public Opinion System (Health Care)



Democratic Message Sender and Conservative Media - Environment

Democratic administration anxiety language does not Granger-cause conservative media attention in the issue area of the environment. Table 5.19 presents the results of the vector autoregression analysis. Change in public opinion does Granger-cause conservative media attention. Contrary to dual systems theory, there is no indication that conservative media issue coverage is influenced by prior change in anxiety language by a Democratic administration. The political background of the elite actor providing the anxiety cues should not play a role in decision making unless biased information processing is present in the system.

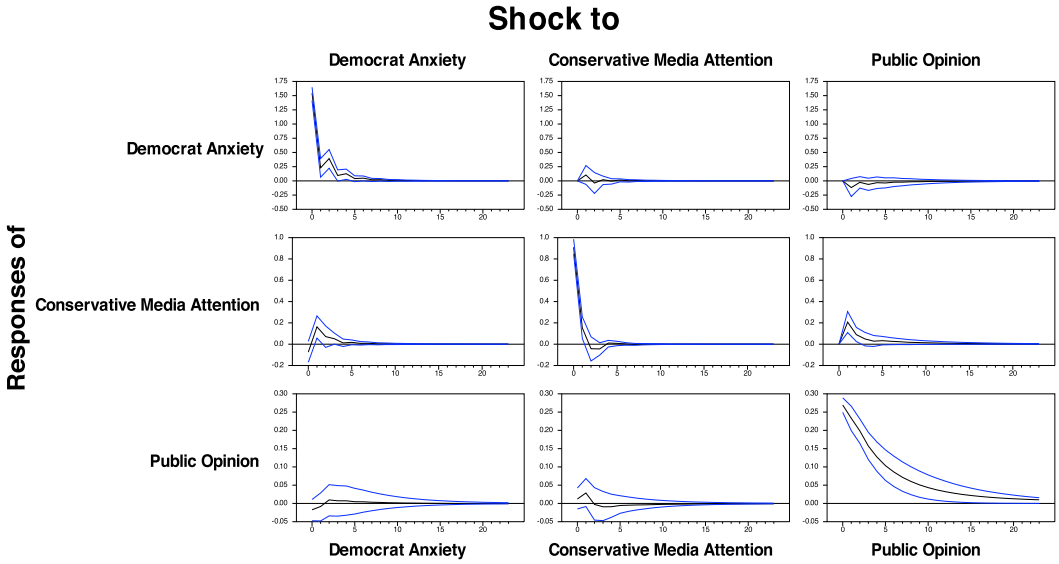
Table 5.19 Granger Tests for Democrat Anxiety, Conservative Media Attention, and Public Opinion System (Environment)

Independent Variable		Dependent Variable	p-value
Democratic President Anxiety Language	=>	Democratic President Anxiety Language	0.03
Conservative Media Attention			0.79
Public Opinion			0.73
Democratic President Anxiety Language		Conservative Media Attention	0.14
Conservative Media Attention			0.28
Public Opinion	=>		0.05
Democratic President Anxiety Language		Public Opinion	0.88
Conservative Media Attention			0.59
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Kentucky coal waste spill. Each of the independent variables includes two lags to control the inertia of the variables.

When evaluating the plot of impulse responses (as seen in Figure 5.9), after a one-standard-deviation-shock in Democratic anxiety language, there is a contemporaneous decrease in both conservative media and public issue attention. There is a 0.05 standard deviation contemporaneous decrease in conservative media attention following the shock (refer to row two, column one). One month after the shock, conservative media attention does rise to about 0.20 standard deviations above its mean. Following this increase, conservative media attention gradually decays to zero. There is not much evidence in this instance to support Hypothesis 6. In the time period studied, the usage of anxiety language by a Democratic presidential administration does not appear to play an extended influence on the level of attention a conservative-leaning political actor provides to an issue.

Figure 5.9 Impulse Responses for Democrat Anxiety, Conservative Media Attention, and Public Opinion System (Environment)



Republican Message Sender and Liberal Media - Environment

The VAR analysis, as reported in Table 5.20, shows that Republican anxiety cues do not Granger-cause liberal media attention. Change in liberal media attention Granger-causes itself; none of the other two variables predict change in liberal media attention. Once again, liberal decision makers are not responsive to prior change in the level of anxiety cues offered by a Republican political elite.

Table 5.20 Granger Tests for Republican Anxiety, Liberal Media Attention, and Public Opinion System (Environment)

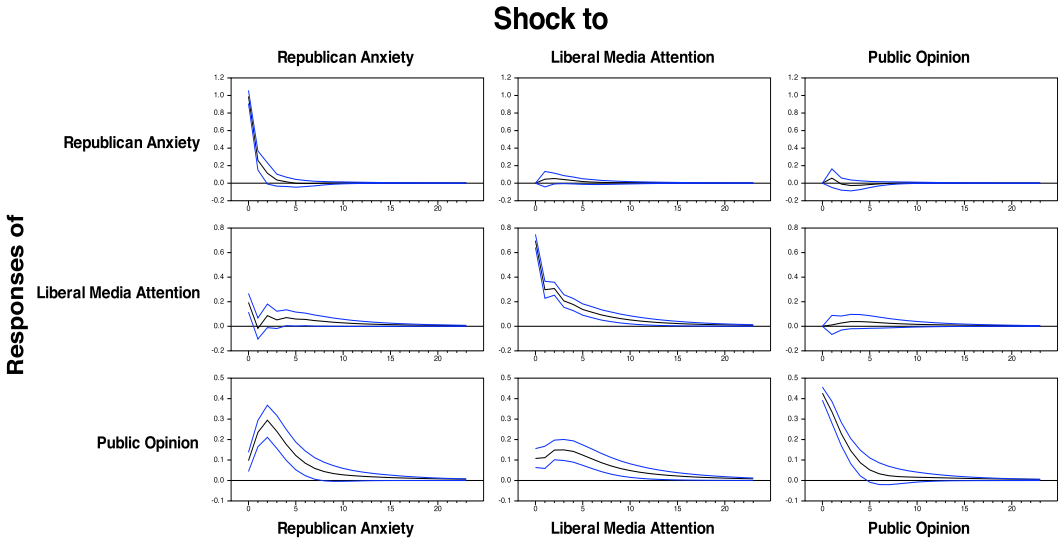
Independent Variable		Dependent Variable	p-value
Republican President Anxiety Language	=>	Republican President Anxiety Language	0.08
Liberal Media Attention			0.70
Public Opinion			0.75
Republican President Anxiety Language		Liberal Media Attention	0.41
Liberal Media Attention	=>		0.00
Public Opinion			0.81
Republican President Anxiety Language	=>	Public Opinion	0.00
Liberal Media Attention	=>		0.05
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for Hurricane Katrina and Hurricane Rita. Each of the independent variables includes two lags to control the inertia of the variables.

When evaluating the plot of impulse responses in Figure 5.10, a positive shock to Republican anxiety cues actually appears to slightly lower liberal media attention in the first month after a shock to Republican anxiety language. While there is a contemporaneous increase in liberal media attention, there is a sharp drop in attention the following month (refer to row two, column one). This is opposite of predictions derived from the dual systems framework. The response suggests that a Republican president using language that signals an issue is a pressing concern can compel a liberal political actor to focus attention away from that issue. If the dual systems framework is an accurate description of behavior, Republicans sending a signal that an issue is important should not drive a decline in liberal attention to that issue. An increase in anxiety cues from a message sender should heighten attention, regardless of feelings about the message sender. There is not much support in this system of variables for this proposal.

Motivated reasoning proposes decision makers will interpret information by the preexisting positive/negative affective views held about political objects in the system. Should liberal decision makers have a strong negative affect towards conservative political figures, the cues being sent by these figures could fall on deaf ears. The results of the MAR analysis match predictions made under frameworks of motivated reasoning and biased information processing. Hypothesis 7 is not clearly supported in the issue area of the environment.

Figure 5.10 Impulse Responses for Republican Anxiety, Liberal Media Attention, and Public Opinion System (Environment)



Democratic Message Sender and Conservative Media - Crime

When evaluating the VAR system, Democratic presidential anxiety language fails to Granger-cause conservative media attention. Each dependent variable in the system Granger-causes itself. Conservative media attention is predicted by changes in

itself and public opinion. Table 5.21 presents the results of the analysis. It does not appear that the conservative media is responsive to emotional cues from a Democratic administration suggesting conditions related to an issue are unique, unstable, or potentially threatening.

Table 5.21 Granger Tests for Democrat Anxiety, Conservative Media Attention, and Public Opinion System (Crime)

Independent Variable		Dependent Variable	p-value
Democratic President Anxiety Language	=>	Democratic President Anxiety Language	0.08
Conservative Media Attention			0.54
Public Opinion			0.74
Democratic President Anxiety Language		Conservative Media Attention	0.99
Conservative Media Attention	=>		0.00
Public Opinion	=>		0.04
Democratic President Anxiety Language		Public Opinion	0.53
Conservative Media Attention			0.83
Public Opinion	=>		0.00

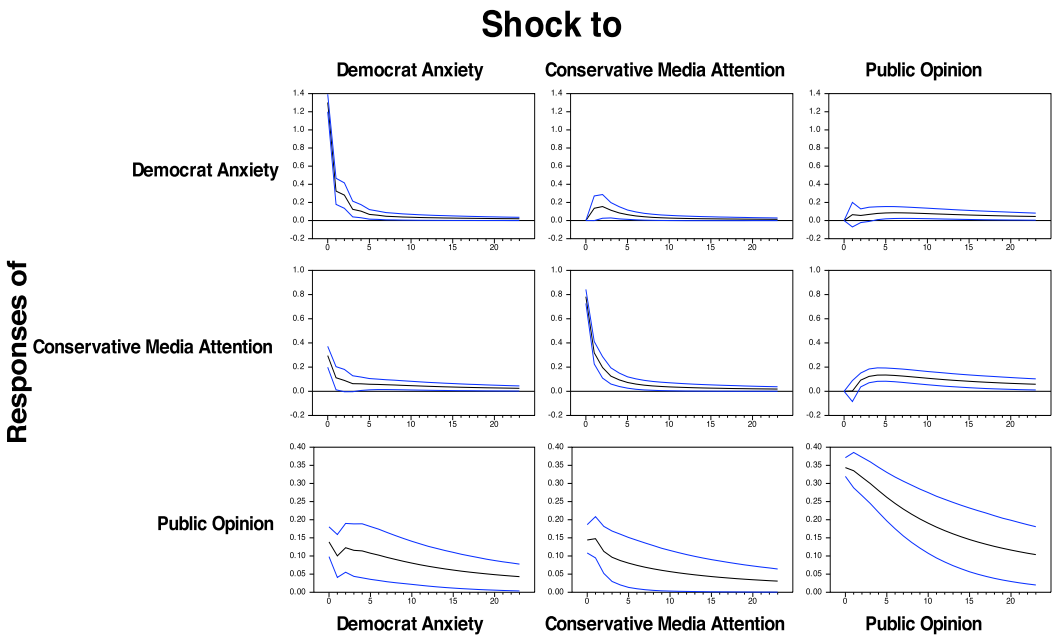
Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant, and indicators for the Brady Bill signing and the Columbine school shooting. Each of the independent variables includes two lags to control the inertia of the variables.

The plot of the impulse responses suggests that there might be a contemporaneous increase in both conservative media attention and public opinion following a shock to Democratic anxiety. There does not appear though to be a persistent increase over time. Conservative attention has an immediate positive response to a shock in Democratic anxiety, but this effect is not significant over time (see row two, column one). Any increase in conservative attention after a shock to Democratic elite usage in anxiety language occurs fairly immediately. There is very little impact on conservative attention after the immediate shift.

There does not appear to be pervasive change in conservative attention following a shift in Democratic anxiety language. The same assessment can be made when looking at the response of public opinion to a shock in Democratic anxiety language (refer to row three, column one). There is not much of an increase in public attention to crime after the initial contemporaneous increase.

If there is non-directional motivated reasoning in the system, a partisan actor like a conservative media outlet should be able to update their perception on an issue if cues increasingly suggest an issue is a problem. This should occur whether or not they perceive the message sender favorably or unfavorably. Given the vector autoregression analysis and the plot of impulse responses, conservative media attention does not appear to be very responsive to cues from a message sender of an alternative political orientation. For this reason, the analysis does not provide substantial support for Hypothesis 6.

Figure 5.11 Impulse Responses for Democrat Anxiety, Conservative Media Attention, and Public Opinion System (Crime)



Republican Message Sender and Liberal Media - Crime

A review of the vector autoregression system indicates that Republican presidential anxiety language does not Granger-cause liberal media attention. Past change in Republican administration anxiety cues do not appear to cause change in future levels of media attention in this issue area. Only prior change in liberal media attention appears to predict itself. The liberal decision maker in this instance appears to ignore the cues being offered by a conservative message sender.

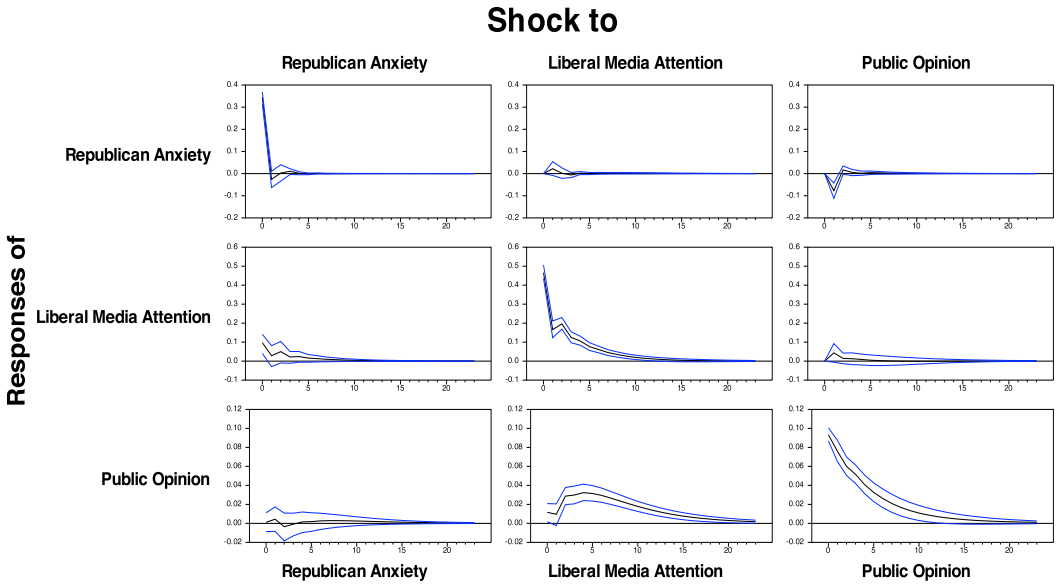
Table 5.22 Granger Tests for Republican Anxiety, Liberal Media Attention, and Public Opinion System (Crime)

Independent Variable		Dependent Variable	p-value
Republican President Anxiety Language		Republican President Anxiety Language	0.68
Liberal Media Attention			0.45
Public Opinion	=>		0.08
Republican President Anxiety Language		Liberal Media Attention	0.98
Liberal Media Attention	=>		0.00
Public Opinion			0.67
Republican President Anxiety Language		Public Opinion	0.48
Liberal Media Attention	=>		0.00
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant. Each of the independent variables includes two lags to control the inertia of the variables.

After a scan of the plots presented in Figure 5.12, it is apparent that liberal media coverage is not significantly influenced by a change in Republican anxiety cues. There is very little movement in liberal media attention to crime in the face of a shift to anxiety cues from a Republican administration (refer to row two, column one). While there might be a contemporaneous positive effect, any positive impact does not at all persist for an extended period of time. A shock to Republican anxiety is unlikely to produce a statistically significant shift in liberal media attention from its mean. There is not much support here for Hypothesis 7.

Figure 5.12 Impulse Responses for Republican Anxiety, Liberal Media Attention, and Public Opinion System (Crime)



Democratic Message Sender and Conservative Media - Poverty

In the vector autoregression analysis, Democratic administration anxiety language does not Granger-cause conservative media attention. Prior changes in Democratic anxiety language do not predict future changes in conservative media attention. Anxiety-based cues should direct attention, regardless of potential differences in political attachment. Instead, conservative media attention predicts change in Democratic administration anxiety language.

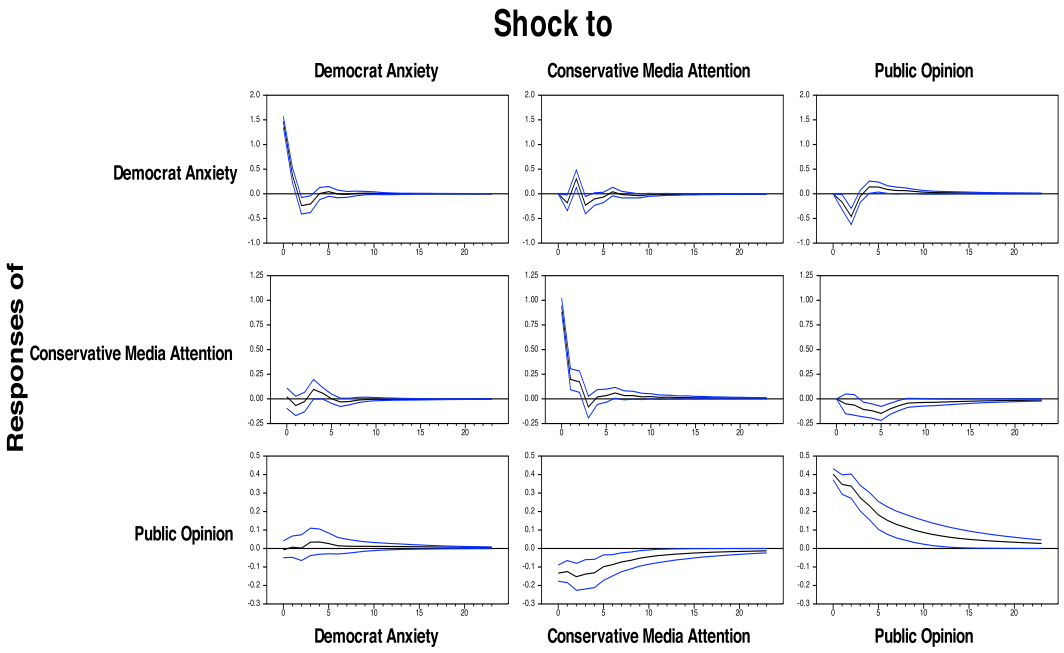
Table 5.23 Granger Tests for Democrat Anxiety, Conservative Media Attention, and Public Opinion System (Poverty)

Independent Variable		Dependent Variable	p-value
Democratic President Anxiety Language	=>	Democratic President Anxiety Language	0.01
Conservative Media Attention	=>		0.04
Public Opinion	=>		0.03
Democratic President Anxiety Language		Conservative Media Attention	0.54
Conservative Media Attention			0.11
Public Opinion			0.24
Democratic President Anxiety Language		Public Opinion	0.90
Conservative Media Attention			0.91
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant. Each of the independent variables includes three lags to control the inertia of the variables.

The plot of impulse responses indicates that a shock to Democratic anxiety cues does not increase conservative media attention to poverty for almost the entire period studied. In reality, in the first two months after a shock to Democratic anxiety, the level of conservative media issue attention is below the standardized mean (see row two, column one). Only three and four months after the shock to Democratic anxiety is conservative media issue coverage to poverty clearly above the standardized mean. Again, there is not an abundance of evidence that Democratic anxiety cues help to raise issue attention in actors that might have a predisposition against Democrats, such as a conservative leaning media outlet. Conservative media attention does not exhibit a clear response to Democratic administration anxiety cues in a way the dual-systems framework would predict.

Figure 5.13 Impulse Responses for Democrat Anxiety, Conservative Media Attention, and Public Opinion System (Poverty)



Republican Message Sender and Liberal Media - Poverty

When evaluating the role of anxiety-based language of a Republican message sender on liberal media coverage, the vector autoregression results suggest that Republican administration anxiety cues do not Granger-cause liberal media attention. Instead, Republican anxiety cue usage is influenced by prior changes in liberal media attention. The liberal decision maker is not guided at all by either anxiety cues or public sentiment. Liberal issue attention is highly inertial, as past values of liberal media coverage predict future values of liberal media coverage. Again, partisan political actors seem unresponsive to cues from opposition message senders.

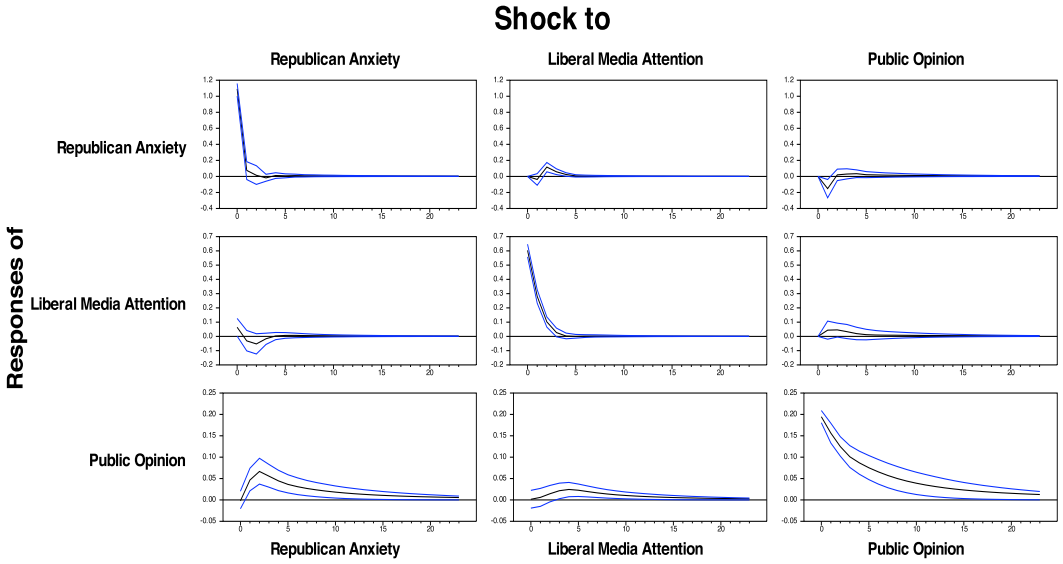
Table 5.24 Granger Tests for Republican Anxiety, Liberal Media Attention, and Public Opinion System (Poverty)

Independent Variable		Dependent Variable	p-value
Republican President Anxiety Language		Republican President Anxiety Language	0.76
Liberal Media Attention	=>		0.09
Public Opinion			0.36
Republican President Anxiety Language		Liberal Media Attention	0.48
Liberal Media Attention	=>		0.00
Public Opinion			0.71
Republican President Anxiety Language	=>	Public Opinion	0.03
Liberal Media Attention			0.44
Public Opinion	=>		0.00

Note: The arrows represent Granger causality from the block of coefficients for the independent variable to the dependent variable based on 0.10 significance levels. The p-values are from F tests for the null hypothesis of no Granger causality. The system includes a deterministic constant. Each of the independent variables includes two lags to control the inertia of the variables.

Upon reviewing the impulse responses, it appears that a shock to Republican anxiety language plays a negligible role on heightening liberal attention to poverty following the positive contemporaneous effect (refer to row two, column one). This becomes apparent when comparing the shift in public opinion in the face of a shock in Republican anxiety cues (see row three, column one). In the three months following the shock to Republican anxiety cues, the level of public attention to poverty clearly increases. The results here offer little evidence that refutes suggestions of partisan information processing. Liberal media attention appears to be resistant to an increase in Republican administration anxiety cues.

Figure 5.14 Impulse Responses for Republican Anxiety, Liberal Media Attention, and Public Opinion System (Poverty)



The analysis in this section has evaluated whether the political background of the political elite offering anxiety cues determines whether ideological actors respond to those cues. Based on the analysis, there seems to be ideological resistance to anxiety cues coming from those of an opposing background. As a result, the following question arises: are ideological actors more responsive to anxiety cues from those perceived to be of the same ideological orientation?

To evaluate this, the procedures used in the past analyses are replicated, except in this instance, system of variables were matched on whether the elite message sender and ideological message receiver were likely to be of the same partisan background. Public opinion is again the third variable in the system. Table 5.25 summarizes the results of these analyses. In three of the eight analyses, ideological media outlets were responsive

to the anxiety cues of a political elite of a similar orientation. This is more frequent than the number of times issue attention of an ideological media outlet was predicted by prior change in the level of anxiety cues from a political elite of an opposing background.

Table 5.25 Summarizing Response to Anxiety Cues from Presidents of a Similar Background

Issue Area	Political Elite	Ideological Outlet	Does Anxiety Language Significantly Predict Media Attention?	Movement in Issue Attention of Media After Shock to President
Health Care	Democratic Anxiety Language	Liberal Media Attention	Significant 0.08<0.10 3 lags	Increase in media attention one to three months after shock. Peak of 0.30 standard deviations three months after shock
Health Care	Republican Anxiety Language	Conservative Media Attention	Not Significant 0.13>0.10 2 lags	No contemporaneous increase, positive increase after one month, decline afterwards
Environment	Democratic Anxiety Language	Liberal Media Attention	Not Significant 0.55>0.10 3 lags	No increase at all for months after shock
Environment	Republican Anxiety Language	Conservative Media Attention	Significant 0.04<0.10 2 lags	Contemporaneous increase, increase one month after shock, decrease afterward
Crime	Democratic Anxiety Language	Liberal Media Attention	Not Significant 0.73>0.10 2 lags	Negligible contemporaneous increase that quickly decays
Crime	Republican Anxiety Language	Conservative Media Attention	Not Significant 0.68>0.10 5 lags	0.20 standard deviation contemporaneous increase that returns to standardized mean after two months. Shift under standardized mean between four and six months
Poverty	Democratic Anxiety Language	Liberal Media Attention	Not Significant 0.45>0.10 2 lags	Contemporaneous decrease in media attention after shock. Movement in standardized mean shortly afterward
Poverty	Republican Anxiety Language	Conservative Media Attention	Significant 0.04<0.10 3 lags	Very small contemporaneous increase, but shift upward from first month to third month. Peak of 0.38 standard deviations at third month

Still, with only three of the eight cases in Table 5.25 matching the prediction of dual systems theory that anxiety cues will influence others in the political system, there is again not overwhelming support for the theory. In particular, for those cases where elite anxiety cues do significantly predict issue attention levels of ideological actors of the same background, the increase in issue attention was meager at best. A positive shift in elite anxiety cues appears to result in a very brief upward shift in issue attention from ideological outlets of the same background. This is similar to the dynamics observed in the two other main empirical sections evaluating the response following a positive shift in anxiety cues. The impact of anxiety on issue attention consistently appears to be abbreviated in the analyses.

The first empirical section, studying attention levels of the general media, also suggested a lack of responsiveness of the media to presidential anxiety cues. In actuality, the results could be indicating a lack of responsiveness to ideological cues from all media outlets across the ideological spectrum. It could be that the media is not as persuadable as the general public. A potential reason is there is a disparity in background political information. The media has the capacity to easily contrast anxiety cues to actual conditions, while the public has less of this capacity. Future research, evaluating additional issue areas and in different time periods, could help to clarify the responsiveness of multiple types of media outlets to presidential anxiety cues.

Discussion

The performed analyses fail to demonstrate decision maker responsiveness to emotional cues from message senders that could belong to an opposing political

ideology. There is little indication that liberal and conservative media outlets will be responsive to anxiety cues from a presidential administration commonly perceived to belong to a rival political ideology. If the dual systems framework is an accurate description of behavior, political decision makers should be responsive to anxiety cues in the system, regardless of their feelings about the political actor sending out the cues. Instead, the results arguably fit with predictions made by theories of motivated reasoning and biased information processing. Instead of non-directional motivated reasoning, it seems that ideological decision makers are evaluating incoming information and making decisions based on preexisting ideological values or views.

For most of the issue areas, there is only a contemporaneous increase in ideological media attention following a shift in opposition party anxiety cues. The positive movement in ideological media attention does not appear to persist over time. If anything, the initial increase in attention could represent a rapid attempt to discount or critique the way the administration is characterizing an issue. For some of the areas studied, we actually see a decline in attention following anxiety cues.

In the issue areas of health care, the environment, and poverty, following a shift in Republican anxiety language, there is a period where liberal attention briefly declines below the standardized mean. For the issue area of poverty, conservative media attention also briefly declines following a shift in Democratic administration anxiety language. A decline in attention, when there is an increase in the type of issue discussion that should theoretically heighten attention, implies decision makers are discounting the issue

information cues being offered. There is not enough evidence here to suggest the dual systems framework can predict and describe the behavior of partisan political actors.

Summary

The results of the analyses show the dynamics of political issue attention do not always move in a manner predicted under a dual systems framework. Some of the findings though are congruent with the prediction that anxiety cues are the type of issue discussion most likely to move issue attention. Based on the vector autoregression analyses, anxiety producing language is the only form of presidential discussion that was able to predict future values of public issue attention. At conventional significance levels, presidential enthusiasm language and general intensity of issue discussion fail to predict change in public attention. This was observable across all issue areas. Such findings support the view that anxiety-based cues will activate the surveillance system, which makes movement from habitual views possible. Presidential enthusiasm cues and absolute issue discussion do not offer the necessary signal for surveillance system activation.

Still, when evaluating the moving-average representation analyses, the positive effect of anxiety language on public attention is mostly confined to the period shortly after a shift in anxiety cues. That could mean the positive effect of anxiety-based language on public issue attention is abbreviated. If anxiety language only has a short-term role in shifting public attention towards an issue, it could be highly difficult for political elites to shape the systemic agenda in such a way that can contribute to changes on the institutional agenda. A limited ability to alter the systemic agenda might hinder

the ability to shape which issues formal political institutions focus on. If the public or the media is not increasingly focused on an issue, there could be a lowered perception that the issue needs to be addressed by government structures.

When studying anxiety language usage by the general media, an increase in media-based anxiety language produces a significant increase in public issue attention in one of the two issue areas studied. Media-based enthusiasm language fails to predict changes in public attention. It is difficult to develop a general outlook on how media anxiety cues impact public issue attention given the limited number of issues analyzed. Regardless, it does appear that enthusiasm cues of the media consistently fail to direct public attention to issues. Enthusiasm cues tell message receivers that usage of the disposition system is appropriate, meaning a reliance on habit is likely to occur. Movement in issue attention should not (and does not) occur.

Upon evaluating interactions between the general media and the president, political elites appear to stuggle in directing other elites to focus on issues. Presidential anxiety language predicts change in general media coverage for only one issue area, crime. A positive shift in presidential anxiety increases general media coverage of crime initially, then leads to a small decline in media coverage. Anxiety cues should consistently increase issue attention under a dual systems framework. Media anxiety language in the two issue areas studied does not predict change in the overall level of attention the president gives to an issue.

When comparing the ability of presidential anxiety cues to increase issue attention of ideological actors, the findings do not match initial expectations. Presidential

administrations appear incapable of directing issue attention in decision makers likely to adhere to an opposing political ideology. Ideological media outlets are resistant to cues of presidential administrations from a rival political background. If partisan decision makers are biased in how they respond to cues presented in the information environment, they are less capable of being persuaded. If decision makers are not biased in the way they process information, they will respond appropriately to the cues in the system, regardless of whether they have a positive or negative affect towards the message sender. There is not much support provided here for such a perspective.

Given the mixed results of the analyses, continued research in this area is necessary. It is not totally clear based on the findings how applicable theories of dual systems reasoning are in describing elite and public issue attention. Alternative approaches, in conjunction with a more extensive analysis of issues using the procedures applied in this project, should provide a more refined outlook. A discussion of the potential avenues for future exploration are presented in the next chapter.

CHAPTER VI

CONCLUSION

Overview of Project

The impetus of this project was to determine whether political elites have to discuss an issue in a specific fashion before others in the political system take notice of that issue. This topic is relevant given that past research (e.g. Wood and Peake 1998; Eshbaugh-Soha and Peake 2004) has found repeated discussion of an issue will not necessarily heighten perceptions of issue salience. Although it is logical to think political actors will increasingly think an issue is important if they are exposed to repeated discussion of that issue, that is not how the process should work in reality. All actors in the political system are limited information processors (Simon 1983; Nisbett and Ross 1980). As a result of this, actors in a political system cannot process, evaluate, and respond to all the political messages being communicated at a given point in time. Most political actors will not be capable of assessing and evaluating the level of discussion a single issue receives relative to all other issues in the system. There is likely little capacity to assess the overall shift in total issue emphasis within the system over time.

While all information in the system cannot be processed in its entirety, political actors are still expected to express opinions and make formal decisions regarding issues within the system. In order to do this, there should be a reliance on habitual outlooks, or predispositions developed relatively early on in life (e.g. Sears et. al 1980; Sears 1983; Rahn 1983; Conover and Feldman 1986). With a reliance on preexisting views, there is not a continual need to assess new information in the system. This is demonstrated in

part by findings that citizens do not consistently follow politics, and often lack specific factual knowledge about political figures and affairs (Campbell et al. 1960; Delli Carpini and Keeter 1996). How then can political elites make an actor in the system move away from a reliance on prior information, opinions, and behaviors?

The theory offered here, influenced by the scholarship on the dual systems model (Petty and Cacioppo 1986; Chaiken 1987; Marcus, Neuman, and MacKuen 2000; Evans 2003; Pryor et al. 2004), is that political actors have the potential to move away from predisposition when they are made to feel anxious. Under the dual systems framework, human reasoning is comprised of two systems, a belief-based system and a deliberative system. The belief-based system, also known as the disposition system, regulates routine and learned behaviors. The deliberative system, also known as the surveillance system, is activated whenever an actor is anxious.

Anxiety is a sense of unease about one's current status. When made to feel anxious, dual systems theory suggests the surveillance system rapidly scans the environment for information. If during this information search, a political actor comes across a substantial amount of information that suggests conditions related to an issue are unstable or potentially threatening, their focus could be directed to that issue. This can ultimately produce movement away from the issue or issues they traditionally think matter most. Derived from this, the major prediction here is that when discussing an issue, an increase in the usage of language that induces anxiety will direct attention to that issue. Certain words, when used in issue discussion, will serve as cues that actors in the system should be concerned about that issue. Heightened feelings of anxiety can

change political behavior. If political elites increasingly discuss an issue in a way that makes others in the political system anxious about that issue, there will be an increased likelihood that the issue will be perceived as a problem that needs to be resolved by government.

Any rational adjustment in opinion or behavior given cues in the system would indicate non-directional motivated reasoning is possible (Taber, Lodge, and Glather 2001). This type of reasoning is accuracy driven; decision makers are compelled to make an optimal decision, regardless of pre-existing judgment. A heightened intensity of anxiety-based language should automatically lead decision makers to perform a careful scan of their surroundings for information. This will help them make what they believe is a correct decision as to which issue is the most pressing problem that needs to be addressed.

It would also suggest, similar to models of Bayesian learning (Gerber and Green 1999), that decision makers can incorporate incoming information to update their assessment of the political system. If actors are persuadable such that they are open to adopting alternative viewpoints given the current content of issue discussion, then anxiety-based cues should matter. An increase in the usage of these cues could drive decision makers in the system to reconsider and update their outlook on issue salience. This is different than predictions that biased information processing (Redlawsk 2002; Lodge and Taber 2005; Taber and Lodge 2006; Taber, Cann, and Kucsova 2009) makes decision makers resistant to information that is either contrary to their predispositions, or is offered from a source they have a negative impression of.

Past research on the dual systems framework has primarily looked at changes in individual behavior when receiving cues that fit along either the disposition or the surveillance systems (for instance, see Dijksterhuis and Nordgren 2006; De Neys 2006). There is no reason though why the framework cannot be applied in attempts to determine group behavior over time.

If the president or the media repeatedly characterize an issue using words that invoke feelings of anxiety, theoretically, a public shift in issue attention should be possible. Since both the president and the media are prominent figures, cues being offered by them should produce discernible change in perceptions by the mass public regarding issue salience. Political elites should also be able through anxiety cues to influence the level of attention other elites give to issues. The focus of the project, aggregate and elite level behavior in response to emotional cues along dimensions of the dual systems setup has surprisingly not been subject to much empirical scrutiny. As a result, the contribution of this project is that it takes a framework traditionally used to predict and describe individual behavior, and applies it to the analysis of mass behavior.

To carry out this task, information spanning the past three decades was collected regarding issue discussion and issue attention. The information measures over time issue dynamics for the president, the media, and the public. The areas studied in the project were health care, crime, the environment, and poverty. Wordlists representing anxiety and enthusiasm language were constructed based on responses to a survey. The survey asked participants how they think citizens would respond if either the president or the media uses a specific word. Aided by these wordlists and issue-specific keywords,

emotional language sentences were extracted from electronic files of presidential and media-based issue rhetoric. Public attention to issues was gauged by combining survey information from multiple organizations asking citizens what they felt was the most pressing problem in the country.

Using collective responses from multiple organizations provides a precise estimate of actual public perception of issue salience at specific points in time. To evaluate whether biased information processing hinders the responsiveness to anxiety cues in ways predicted by the dual systems framework, information on issue coverage by ideological newspapers was also collected.

The results of the statistical analyses give mixed support for the dual systems framework's ability to explain dynamic shifts in attention at the aggregate level. Prior change in the usage of anxiety-based language by the president and the media does exhibit the capacity to predict change in public issue attention levels. In no instance does enthusiasm language by the president or the media predict change in public issue attention. These two findings are congruent with expectations of dual systems models of reasoning. A shift in anxiety cues will capture the interest of decision makers, and cause a reassessment of the environment. This makes opinion change possible. A shift in enthusiasm cues will not capture the interest of decision makers. There is nothing within the content of enthusiasm-based issue discussion that compels the decision maker to reconsider their outlook. If a political elite does want an issue they view as salient to be a part of the systemic agenda, they should discuss the issue in such a way that makes others in the system anxious about conditions related to that issue.

When actually looking at the direction and magnitude of the relationship between presidential anxiety language and public opinion, generally speaking, there is a small and short-lived increase in public attention after an increase in presidential anxiety language. Most of the shift in attention occurs immediately following a shift in presidential anxiety language. Although an equivalent number of issue areas were not studied when evaluating media-based anxiety, there is evidence of a positive shift in public attention after a shift in this type of emotional cue.

Any positive impact on public issue attention attributable to anxiety cues is not prolonged. If this result is also observable in issue areas not studied here, this characteristic should shape the decision calculus of political elites. A strategic political elite that intends to use issue rhetoric to move attention from the systemic agenda to the institutional agenda must then be selective as to the timeframe in which they employ anxiety language. The brevity of the response to anxiety cues would necessitate usage when it is perceived to be most conducive to formal legislative attention. The window of opportunity for a political elite to get their preferred issue to reach formal agenda status through anxiety cue usage should be abbreviated. The usage of anxiety cues might be most consequential at those times where a small uptick in public attention is a significant aide in having the issue achieve formal agenda status.

For example, if legislators are known to perceive an issue as important, but are unsure if legislation in the area would be worthwhile, an increase in public attention to the issue could be enough to convince them to initiate the process of legislation. A political elite will have to determine whether conditions in the political system make the

usage of anxiety-based language worthwhile. If the political environment is conducive to policy change, the usage of anxiety cues could be useful. A brief uptick in public demand for an issue to be formally addressed might, under the right circumstances, be enough to initiate consideration by formal government institutions.

While it does appear that the president and the media can shape public attention to an issue through anxiety language, there is no evidence in the analyses that elites can influence each other. It could be that unlike many members of the public, the president and the media have a substantial body of factual background knowledge about major political issues. This background knowledge can be contrasted with incoming information cues. Although the president might increasingly characterize an issue as a problem, members of the media can quickly reject this characterization by evaluating factual background information regarding actual issue conditions. The same can apply to the response by the president to media-based anxiety cues.

Political elites could be less susceptible to emotional language effects than the general public. The general public, as suggested in research like Delli Carpini and Keeter (1996), do not necessarily possess substantial factual background knowledge that can help to quickly dispel characterizations of an issue as uncertain or unstable. This will likely be the case if there is not a prominent and easy to understand indicator or measure of conditions available in the system for members of the public to follow. The media and the president could be limited in the ability to persuade each other by offering anxiety-based cues. This could be a result of the higher level of political knowledge elites possess. Anxiety cues might be ineffective with politically sophisticated groups.

Another finding from the analyses is that biased information processing could limit the ability of political elites to heighten attention to issues. The statistical analyses of the project show that a Democratic president cannot shift conservative media attention to issues. Nor can a Republican president shift liberal media attention to issues. Zaller (1992) in his Receive-Accept-Sample model says that politically aware actors can process a large number of considerations. Given their political sophistication, the considerations these politically aware actors maintain in their memory is likely going to be ideologically consistent, as well as consistent with their predispositions.

Less politically aware actors are not as likely to resist inconsistent considerations. Politically aware actors with ideological leanings could have a greater ability to resist the discourse coming from actors of a different ideological persuasion. Consistency in ideological views is made possible by screening out cues that can be potentially contradictory. An efficient tool in screening out information is to ignore the issue discussion offered by political actors of a rival political background.

"Hot-cognition" allows for the assessment of incoming information by quickly tying this information to already held feelings (Redlawsk 2002; Kahneman 2003). If cues are coming from a political actor a decision maker has a negative impression of, the cue can be easily ignored, regardless of the content of the information within that cue. This makes it possible for ideological actors to reject anxiety-based cues from elites in the system.

As a result of these findings, dual systems theory clarifies some, but not all of the lingering questions regarding elite and public issue attention. Political elites can

influence the level of attention the general public gives to issues through anxiety cues, but do not appear to be able to influence other elites through anxiety cues. Enthusiasm cue usage does not at all predict change in issue attention. Political elites appear to struggle in moving ideological actors away from predisposition, despite a shift in issue discussion that would theoretically drive a move away from habit. Given the mixed record of the dual systems framework in explaining dynamic issue attention at the aggregate level, continued research is necessary. Studies should continue to delve into whether anxiety-based cues are needed before political actors reassess their surroundings, and potentially change their outlook on issues. Alternative approaches, as discussed in the next section, should help to clarify the role of anxiety cues on issue attention.

Future Paths of Inquiry

The project evaluated cues that fit along the dimensions of enthusiasm in the disposition system, and anxiety in the surveillance system. Continued work can evaluate whether the impact of emotional cues on attention dynamics seen in the project are observable in other issue areas. A review of issues like foreign policy, unemployment, and education, among others, can help determine whether the limited positive effect of anxiety cues holds across issues areas. Issues where there can be a consistently measurable indicator of actual conditions, such as the national unemployment rate with the issue of unemployment, will be particularly worthwhile to study. Although this project incorporated controls for actual events that occurred within an issue area, there was no assessment of the role of dynamic shifts in actual conditions related to an issue

over time. Only the characterization of issue conditions was measured. It will be interesting to see if either anxiety or enthusiasm cues are responsive to changes in conditions.

For instance, when the unemployment rate increases, is there a difference in how elected and unelected political elites respond in terms of the usage of emotional cues? An elected official like the president could be held accountable for worsening conditions. Wood, Owens, and Durham (2005) and Wood (2007) do demonstrate that the president speaking optimistically about the economy can cause others in the system to think more positively about the economy. Still, we do not know how emotional cues that fit along the dual systems framework impact issue attention when actual economic conditions are measured. In order to ameliorate concern, does the president increasingly respond with enthusiasm cues? Since the media is not held accountable for worsening unemployment, are they more willing to use anxiety cues when characterizing the issue? Given the potentially diverse set of cues being offered to the public, determining whether emotional language cues are as relevant in predicting opinion dynamics in the face of actual conditions is an intriguing area of study.

Whether emotional language cues are relevant when measuring conditions in the political environment can clarify the role of issue rhetoric on moving political actors from their habitual views. Circumstances related to an issue might have a greater impact on attention dynamics than the characterization of those circumstances. It could also be that there is an interactive effect between the two. The public could be more likely to perceive an issue as a problem if issue discussion reflects issue conditions. If indicators

related to an issue suggest conditions are unstable or threatening, and elites in their issue rhetoric reinforce this outlook, the magnitude and duration of the increase in public attention could be different from other periods. Issue rhetoric employing anxiety cues might be most effective if there is a high-profile barometer of issue conditions providing information that matches the tone of this type of issue discussion. A clear match between discussion and conditions could be necessary before a prolonged increase in issue attention is observable.

Two related aspects not evaluated in depth empirically by the project involve issue competition and elite congruence in anxiety cues. In terms of issue competition, elites might heighten the usage of anxiety language about multiple issues within the same time period. Actual events that have a bearing on multiple issue areas could also happen within the same timeframe (e.g. a terrorist attack and a sharp plunge on the stock market). When there are multiple issues in the system that political actors can feel anxious about, what will be focused upon?

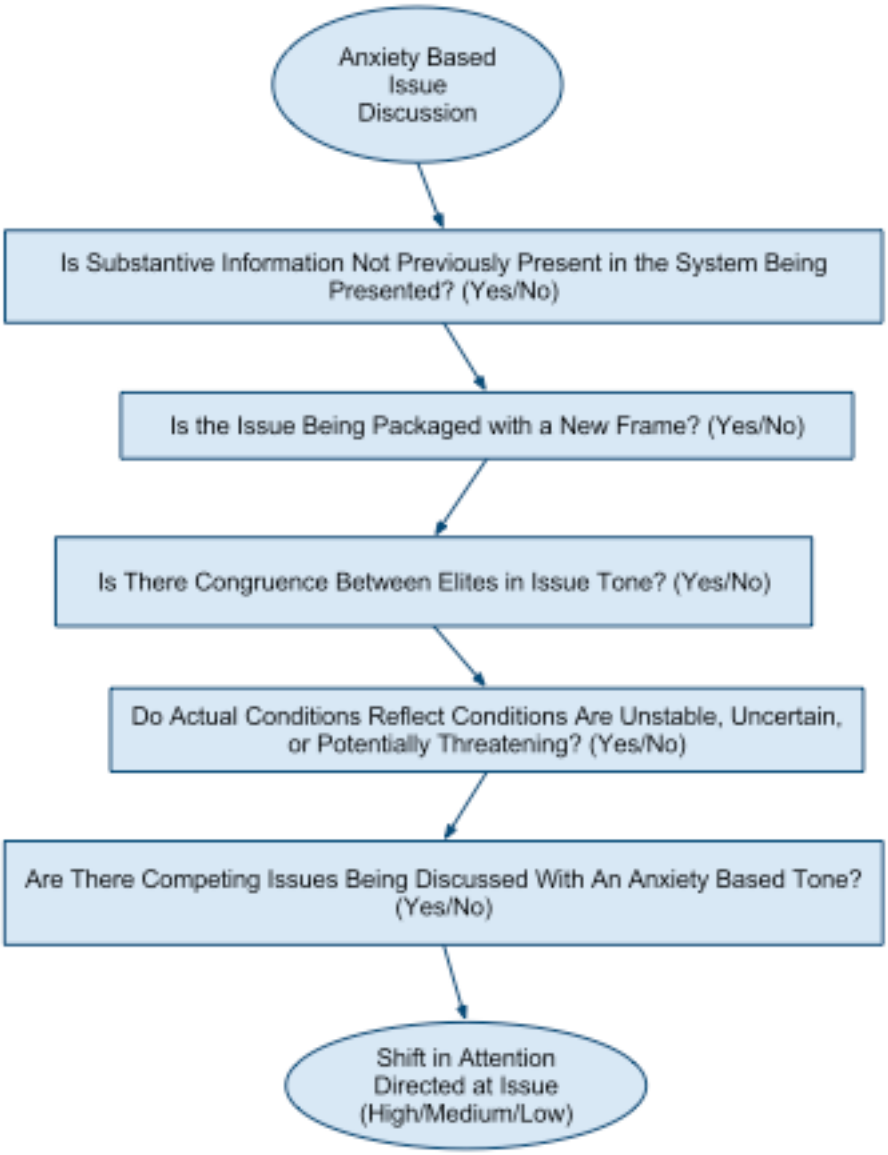
If decision makers are scanning the information environment and notice that multiple issues are characterized as unstable or uncertain, how will the choice be made as to which issue needs to be focused upon? It could be that there are so many issues to choose from that decision makers, plagued with a high level of uncertainty, will be slow to react to cues in the system. Issue attention levels remaining consistent with prior levels would illustrate a delayed reaction. This would imply that just because attention to an issue does not increase following an increase in anxiety cues about that issue, it does not mean that those cues are wholly ineffective. In reality, there can be multiple issue

areas where there are strong signals offered along an anxiety-based dimension, making it difficult for decision makers to decide which issue is most salient.

Regarding congruence, do both the president and the media have to use anxiety cues about an issue before others in the system (such as the public) focus on that issue? The project shows that the media and the president fail to significantly heighten the level of issue attention the other provides to issues through anxiety cues. Still, it was not evaluated whether the usage of anxiety cues by the president heightens the usage of anxiety cues by the media, and vice-versa. Were there to be a high congruence of anxiety cues in the system, theory would predict attention to the issue from political actors like the public or Congress would increase. If the intensity of anxiety cues by the media and the president about an issue is simultaneously high, attention to that issue should heighten.

With both issue competition and tone congruence potentially relevant factors in explaining issue attention, the conception that anxiety cues will heighten issue attention could be more nuanced than represented by the theory originally offered in this project. In Figure 6.1, there are multiple characteristics of anxiety-based issue discussion that need consideration before being able to predict the strength of the response to anxiety cues. As a result of the multiple factors that would have to be measured at any given point in time, traditional measurement using time series statistical models could be difficult. For this reason, qualitative case studies that can explore multiple issues in-depth within finite time periods can help clarify the factors that help or hinder anxiety-based issue discussion's ability to increase issue attention.

Figure 6.1 Multiple Characteristics of Anxiety Cues Help Predict Issue Attention



While the focus of this project has been on anxiety-based issue language, another topic worth consideration is whether there are other legitimate forms of emotional language that can alter issue attention. The two types of emotion studied in the project, anxiety and enthusiasm, fit within the traditional dimensions of the dual systems

framework. As suggested by MacKuen et al. (2010, 441), there has not been much empirical analysis of how aversion fits within the framework of affective intelligence.

Aversion can encapsulate feelings of anger, hatred, contempt, and disgust. These are feelings that could be experienced when confronted with political objects a decision maker is familiar with, that they also happen to hold an aversive reaction to. Feelings of aversion compel decision makers to use previously applied solutions to address the familiar opponent. This is how the negative emotion of aversion is distinct from the negative emotion of anxiety. Aversion engages with familiar circumstances, while anxiety engages with unfamiliar circumstances. This also explains why feelings of aversion have been characterized as fitting within the disposition system, instead of the surveillance system (Marcus 2003).

Time series research should look into whether political elites do use emotional cues that heighten aversive feelings. Survey respondents can be provided a wordlist, asking them to determine whether the usage of specific words by political elites can make the public feel angry, anxious, or enthusiastic. Those words that the majority of respondents believe can produce reactions of anger could be used to represent aversion-based issue language. The process of electronically extracting sentences and validation of these sentences through human coding that was performed in this project can be replicated for aversion-based language.

The effect of an increase in aversion-based language can be compared to the two other forms of emotional language. If aversion does fit within the disposition system, a logical prediction is that we will not see an increase in attention to an issue with an

increase in this type of language cue. Aversion might produce avoidance of information about the political object the decision maker has an intense dislike of (MacKuen et al. 2010, 442). Experimental research has found feelings of anger leads to decision making based on the usage of limited information, with an emphasis on employing heuristic tools (Bodenhausen 1993; Lerner, Goldberg, and Tetlock 1998).

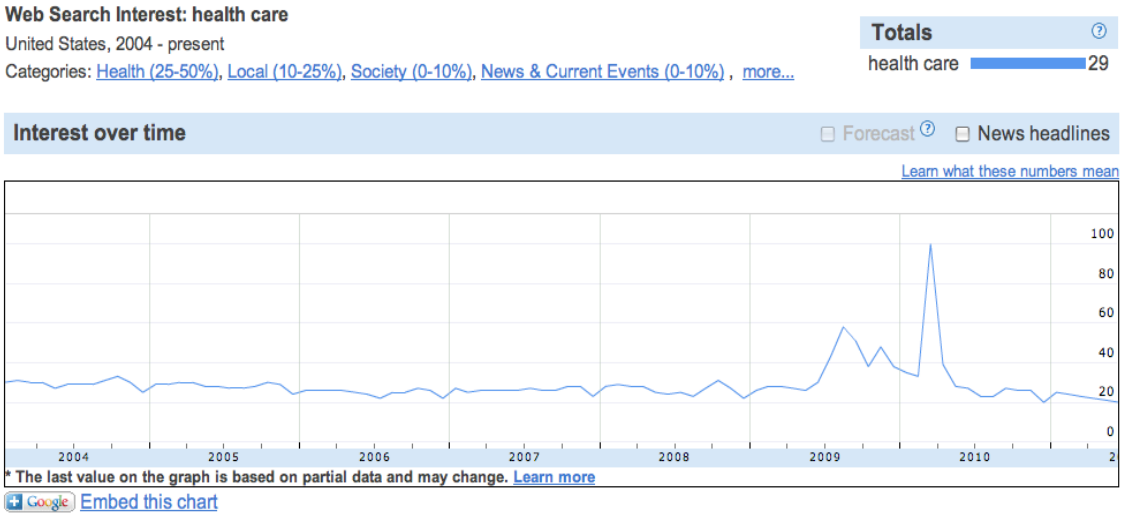
Determining whether aversion-based issue discussion limits efforts to assess information available in the system is worth studying with dynamic issue series. An additional consideration in this discussion is whether the results of this project suggesting political elites struggle in guiding actors of an opposing ideology is due to aversive political reactions to these figures. The issue messages of political figures could be avoided or ignored altogether if an ideological actor has a consistent negative reaction to that specific figure. Linking the concept of aversion in the dual systems framework to proposals of biased information processing and motivated reasoning could help determine whether dual systems models serve as a useful general model of human reasoning and behavior.

One limitation of the current project is that it does not explicitly measure whether an information search occurs in response to anxiety cues. Instead, it assumes an information search has occurred given a change in perceived issue salience. Some proponents of experimental research can criticize the approach of the project, given that there is no direct measurement of a major variable of interest. A benefit of experimental research is that the researcher directly manipulates the independent variable, and the researcher has the capacity to directly monitor the dependent variable in terms of how

individual subjects respond to the manipulation. Critics of time series applications of the dual systems framework will decry the inability to measure a search for information at the mass level. How can you possibly measure trends in the search for information by groups of individuals?

A means to evaluate information searches at the aggregate level is to examine information search trends on the Internet (Scharkow and Vogelgesang 2011). It is becoming increasingly possible to evaluate what is being searched for on the Internet over time and by geographic region. A useful tool Scharkow and Vogelgesang (2011) propose in which to perform this is *Google Insights for Search*. Through this tool, it is possible to enter in any possible search term, and track the intensity of the search for this particular term over time within a certain region. Figure 6.2 plots how many searches have been done for the specific term of "health care," in comparison to the total number of searches performed on the Google search engine over time. Data is available dating back to 2004 for every week of each year. The dynamics of weekly usage of emotional language of elites about an issue can be contrasted to the intensity of searches for information in that issue area on the Internet. An increase in anxiety-based emotional language could predict an increase in the intensity of searches for that issue area on the Internet.

Figure 6.2 Plot of Google Search Trends for the Issue Area of Health Care



Source: Google Insights for Search (http://www.google.com/insights/search/)

Search trends can be distinguished by region. This can arguably help to determine whether there is partisan resistance to cues. For instance, you can compare the intensity of search trends in cities or states that consistently vote Republican, to cities or states that consistently vote Democratic. This is an alternative means to see if political actors will refrain from conducting a search for information about an issue when a political figure from a rival party increasingly discusses the issue using anxiety-based language.

Figure 6.3 compares the intensity in searches on health care in Lubbock, Texas and San Francisco, California. There appears to be a sharp difference in the intensity of searches on the issue area between the two cities during the Obama administration's efforts to pass health care reform. Whether the observed dynamics relate to the presence of anxiety cues in the system can be evaluated through time series techniques.

Evaluating aggregate trends in Internet searches should provide another means to track issue attention over time.

Figure 6.3 Plot of Google Search Trends Distinguished by Two Cities

Source: Google Insights for Search (http://www.google.com/insights/search/)

Such a proposal does not mean though that there is not also merit to studying the impact of elite emotional language on issue attention using experimental methodology. For instance, a viable design can compare the response to presidential speeches filled with one of the types of emotional language cues. In the pre-test, participants are allowed for several minutes to look at a news aggregation site for any information they choose. The news aggregation site is designed on an application like DecTracer (see Sirin, Villalobos, and Geva 2011 for an example of this type computerized measurement tool). An application of this type allows the researcher to specify and provide multiple types of information for respondents, but allows respondents to personally select which

specific pieces of information they are exposed to. The news site can present links to stories in multiple issue areas, and also links to general interest items (sports stories, movie reviews, weather, etc.). The application will keep a log of the stories the participants click on to read, as well as measure the length of time spent reading the story.

During the experimental manipulation, participants will be presented with the transcript to a hypothetical presidential speech. One collection of subjects can be given the transcript of a hypothetical presidential speech on an issue that is filled with words on the anxiety language list. Another collection of subjects can be given the transcript of a hypothetical speech on the same issue, but this time the speech is comprised of a substantial number of words from the enthusiasm language wordlist. A control group can receive a speech on the same issue with no emotional cues. All participants will also be provided the transcripts to non-issue based speeches without an emphasis on emotional cues (such as a discussion on the value of teamwork and perseverance). This is done so that participants would not feel influenced to respond a certain way if they receive a speech on only one topic.

After the treatment stage, participants are allowed to look at the news aggregation site again for several minutes for any information they choose. The type of stories selected in this post-test stage is contrasted to the stories selected in the pre-test stage. The length of time evaluating stories during the post-test would also be assessed. The interest is in whether participants exposed to the issue message with anxiety cues are more likely to click on a story or stories related to the issue area. The story selection

of those exposed to anxiety cues will be contrasted to those exposed to enthusiasm cues or non-emotional issue discussion. Whether those exposed to anxiety cues about an issue spend a significantly longer time reviewing stories on that issue than those who were not presented with anxiety cues would offer support for proposals of the dual systems framework.

The purpose of the current project is to see whether exposure to anxiety-based cues in issue discussion leads to an information search on that issue that can help alter the outlook decision makers have about that issue. This is what the dual systems framework would predict. An experiment of the type proposed above can complement continued research at the aggregate level in attempts to learn more about the applicability of the dual systems framework on issue attention dynamics.

Summary

The proposal of the project is that the dual systems framework can explain dynamics in issue attention. Political actors who are anxious about an issue will become increasingly focused on that issue. Actors who are enthusiastic about an issue will not feel compelled to reassess that issue, as they do not perceive conditions related to that issue as a threat to their personal condition. As a result of this framework, it was predicted that political elites use anxiety-based emotional cues when discussing an issue to induce others in the system to focus on that issue.

Components of the project's empirical analyses offer support for this prediction, while other components contradict this prediction. Elites appear to be able to heighten public attention through anxiety cues, but not the issue attention of other elites or

ideological actors of a different political background. Future research should determine whether these results are unique to the issue areas studied, or to the particular methodological approach used. This will help determine the generalizability of the dual system framework as a model of human reasoning, especially in the realm of political behavior.

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APPENDIX A

SURVEY ITEMS USED IN PUBLIC SYSTEMIC ATTENTION

Survey Organization: Gallup
Question Wording: What do you think is the most important problem facing this country today?

Survey Organization: CBS News/New York Times
Question Wording: What do you think is the most important problem facing this country today?

Survey Organization: ABC News/Washington Post
Question Wording: What do you think is the most important problem facing this country today?

Survey Organization: Wirthlin Quorum Survey
Question Wording: What would you say is the single most important problem facing the United States today, that is, the one that you, yourself, are most concerned about?

Survey Organization: Pew Research Center
Question Wording: What do you think is the most important problem facing the country today?

Survey Organization: Associated Press
Question Wording: What do you think is the most important problem facing this country today?

or

In your opinion, what is the most important problem facing the U.S. (United States) today?

Survey Organization: Quinnipiac University Poll
Question Wording: What do you think is the most important problem facing the country today?

Survey Organization: Henry J. Kaiser Family Foundation
Question Wording: What do you think is the most important problem for the government to address?

Survey Organization: Stony Brook University Center for Survey Research
Question Wording: What do you think is the most important problem facing this country today?

Survey Organization: Los Angeles Times Poll
Question Wording: What's the most important problem facing this country today?

Survey Organization: Washington Post Poll
Question Wording: What do you think is the most important problem facing this country today?

Survey Organization: People and the Press Poll
Question Wording: What is the most important problem facing the country today?

or

What do you think is the most important problem facing this country (the United States) today?

Survey Organization: Times Mirror
Question Wording: What do you think is the most important problem for the government to deal with today?

Survey Organization: New York Times Poll
Question Wording: What do you think is the most important problem facing this country today?

Survey Organization: Fox News/Opinion Dynamics Poll
Question Wording: What do you think is the most important issue for the federal government to address today?

Survey Organization: Opinion Research Corporation
Question Wording: I would like you to think about the problems facing our country today. What do you think is the single most important issue facing our country today?

Survey Organization: National Public Radio/Greenberg Quinlan Rosner Research
Question Wording: What would you say is the single most important problem facing the United States today, that is, the one that you, yourself are most concerned about?

APPENDIX B

LOADINGS OF PUBLIC ATTENTION SURVEYS TO ISSUE INDEX DIMENSIONS

Crime

Survey Organization	Number of Cases	Dimension Loading	Mean
CBS/NY Times	74	0.956	7.922
Gallup	158	0.967	4.666
ABC News/Washington Post	33	0.985	7.697
Pew Research Center	23	0.961	4.783
Associated Press	12	0.109	2.333
Henry J. Kaiser Family Foundation	3	0.973	1.333
Los Angeles Times	13	0.799	5.538
Stony Brook U. Ctr. for Survey Research	7	0.785	2.286
New York Times	3	0.994	7.667
Washington Post Poll	5	1.000	6.400
People and the Pres Poll	9	0.974	16.778
Times Mirror	2	1.000	11.000
Opinion Research Corporation	2	1.000	14.000
Wirthlin Quorum Survey	4	0.957	3.250

% Variance Explained: 88.66%

Environment

Survey Organization	Number of Cases	Dimension Loading	Mean
CBS/NY Times	47	0.838	1.817
Gallup	131	0.935	1.728
ABC News/Washington Post	20	0.866	1.750
Pew Research Center	15	0.574	1.333
Associated Press	9	0.960	2.444
Fox News/Opinion Dynamics Poll	10	0.387	1.100
Los Angeles Times	12	0.633	2.167
Washington Post Poll	5	0.976	4.600
People and the Pres Poll	5	0.998	2.600
Opinion Research Corporation	2	1.000	4.500
Wirthlin Quorum Survey	4	0.924	2.500

% Variance Explained: 75.84%

Health Care

Survey Organization	Number of Cases	Dimension Loading	Mean
CBS/NY Times	103	0.942	6.161
Gallup	125	0.934	7.000
ABC News/Washington Post	21	0.924	4.000
Qunnipiac University Poll	7	0.680	3.429
Pew Research Center	25	0.695	4.720
Associated Press	2	1.000	4.500
Fox News/Opinion Dynamics Poll	13	0.458	11.000
Henry J. Kaiser Family Foundation	3	-0.517	6.000
Los Angeles Times	13	0.955	4.692
Stony Brook U. Ctr. for Survey Research	7	0.668	6.286
NPR/Greenberg Quinlan Rosen Research	2	1.000	4.000
New York Times	2	1.000	4.500
Washington Post Poll	5	0.870	2.400
People and the Pres Poll	8	0.954	8.125
Times Mirror	2	1.000	19.500
Opinion Research Corporation	2	1.000	9.000
Wirthlin Quorum Survey	4	0.928	3.750

% Variance Explained: 80.43%

Poverty

Survey Organization	Number of Cases	Dimension Loading	Mean
CBS/NY Times	88	0.813	2.951
Gallup	146	0.945	4.709
ABC News/Washington Post	22	0.818	5.727
Qunnipiac University Poll	5	0.181	1.400
Pew Research Center	25	0.425	2.680
Associated Press	4	0.659	2.250
Henry J. Kaiser Family Foundation	3	0.983	3.333
Los Angeles Times	7	0.949	4.143
Stony Brook U. Ctr. for Survey Research	7	0.456	3.429
New York Times	3	0.920	5.333
Washington Post Poll	5	0.582	6.400
People and the Pres Poll	8	0.553	3.250
Times Mirror	2	1.000	2.000
Opinion Research Corporation	2	1.000	3.000
Wirthlin Quorum Survey	4	0.057	3.500

% Variance Explained: 69.77

APPENDIX C

ORIGINAL WORDLIST USED FOR SURVEY OF EMOTIONAL WORDS

A	Acceptable	Adequate	Alarm	Anarchist
Abandon	Acceptance	Admirable	Alert	Anarchy
Abase	Accepted	Admiration	Alienate	Angry
Abash	Accident	Admire	Align	Anguish
Abdicate	Acclaim	Admonish	Alike	Animosity
Abduct	Acclimate	Adore	Alive	Animus
Aberrant	Accolade	Adulterate	Allegiance	Anniversary
Abet	Accommodate	Advancement	Alleviate	Annual
Abeyance	Accomplice	Advantage	Alliance	Antagonize
Abhor	Accomplish	Adversary	Allow	Antecedent
Abject	Accord	Adversative	Ally	Anticipate
Ablaze	Accordance	Adversity	Alone	Anticlimactic
Able	Accordingly	Affable	Aloof	Antipathy
Able-bodied	Accuracy	Affection	Altruism	Antiquity
Abnegate	Accurate	Affinity	Ambiguous	Anxious
Abnormal	Accursed	Affirm	Ambitious	Apathy
Abolish	Accusation	Afflict	Ambush	Appalling
Abominable	Accustom	Affluent	Ameliorate	Apparent
Abort	Ache	Afraid	Amenable	Appealing
Abound	Achievable	Aggravate	Amend	Appease
Abrupt	Achievement	Aggression	Amenity	Apportion
Abscond	Acrimonious	Aghast	Amicable	Apposite
Absent	Active	Agitate	Amiss	Appreciate
Absolute	Actualize	Agonize	Amity	Apprehend
Absolve	Addict	Agree	Amnesty	Apprehensive
Abundance	Addle	Agreeable	Amoral	Apprise
Abundant	Adept	Ailment	Ample	Appropriate

Approval	Awesome	Benign	Brotherly	Ceaseless
Archenemy	Avarice	Better	Brutal	Celebrate
Archfiend	Awful	Betterment	Buffer	Censorship
Archtype	**B**	Beware	Buoy	Censure
Ardent	Backfire	Bind	Buoyant	Ceremonial
Ardor	Backlash	Bipartisan	Burdensome	Ceremony
Arduous	Badly	Bloom	Burglary	Certain
Argument	Balance	Bluff	**C**	Certify
Arm-twisting	Banish	Blunder	Calamity	Certitude
Arrogate	Bankrupt	Body count	Callous	Champion
Askew	Barbaric	Bolster	Calm	Chaos
Asperse	Beat	Bomb	Cancellation	Charity
Aspiration	Beautiful	Bond	Cannibalize	Charm
Assail	Bedevil	Bonus	Capable	Chase
Assassinate	Bedrock	Boost	Capitulate	Chasm
Assault	Befit	Botch	Captivate	Chasten
Assent	Befoul	Bother	Capture	Chastise
Assist	Befriend	Bountiful	Care	Cheat
Assuage	Bellicose	Brave	Careful	Cheer
Atrocity	Belligerence	Brawl	Carry	Cheerful
Atrophy	Belong	Breach	Castigate	Cheerily
Attractive	Beloved	Breakdown	Casualty	Chronic
Attack	Benefactor	Breakthrough	Cataclysm	Churlish
Auspicious	Beneficial	Bright	Catastrophe	Clamor
Authentic	Benefit	Brilliance	Catharsis	Clarification
Authenticate	Benevolence	Brinkmanship	Cathartic	Clash
Avalanche	Benevolent	Brotherhood	Causeless	Classifiable

Clean	Comparable	Conquer	Converge	Crucial
Cleanly	Compassion	Conscript	Conversable	Cultivate
Clear-cut	Compel	Consensus	Conversant	Curse
Clear-headed	Competence	Consent	Convulse	Custom
Clearly	Competent	Considered	Cool-headed	Customarily
Closure	Complain	Consistent	Cooperate	Customary
Coerce	Compliance	Consolation	Cooperation	**D**
Cogent	Complicate	Consolidate	Coordinate	Dagger
Cohere	Complicit	Conspiracy	Correct	Damage
Cohesion	Compliment	Constancy	Corrective	Danger
Cohort	Confer	Constrain	Correlate	Dastardly
Collaborate	Confidence	Constrict	Correspond	Dead end
Collapse	Confident	Consult	Corrode	Deaden
Collective	Confine	Consummate	Corrupt	Deadlock
Combat	Confirmed	Contagious	Counsel	Deadly
Comfort	Confiscate	Contemplative	Counterattack	Deafen
Comfortable	Conflict	Contemporaneous	Counteroffensive	Dearth
Commend	Confound	Contempt	Courage	Death
Commendable	Confront	Contend	Courageous	Deathwatch
Commensurable	Confuse	Content	Courteous	Debase
Commensurate	Congest	Contraction	Covert	Deceive
Commodity	Congruence	Contribute	Crackdown	Decelerate
Common	Congruent	Contuse	Crash	Decent
Commonplace	Congruity	Convalesce	Credible	Decompress
Communal	Congruous	Convenience	Creeping	Decontaminate
Communion	Conjoin	Convenient	Criminal	Defeat
Compact	Connive	Conventional	Crossfire	Defect

Defend	Demise	Detest	Disfigure	Dissent
Defense	Demonstrable	Devalue	Disgrace	Dissipate
Defensible	Demonstrate	Devastate	Disgust	Dissolution
Defensive	Demoralize	Devious	Disingenuous	Dissolve
Deference	Denigrate	Diabolic	Disjoin	Distaste
Defiant	Denounce	Die	Dislike	Distinctive
Deficiency	Deplenish	Diminish	Disloyal	Distinguishable
Defile	Deplete	Diplomatic	Dismal	Distort
Deflate	Deposit	Dirty	Dismantle	Distract
Deform	Deprave	Disappoint	Disobey	Distraught
Defraud	Depreciate	Disapprove	Disorder	Distribute
Defuse	Depress	Disarm	Disorganize	Distrust
Degenerate	Deprive	Disarray	Disorient	Disturb
Degradation	Deride	Disavow	Disown	Dour
Degrade	Desecrate	Disband	Disparage	Downfall
Dehumanize	Desirable	Disbar	Dispensable	Downgrade
Deleterious	Desirous	Disbelief	Dispense	Drastic
Deliberate	Desolate	Discard	Displace	Dreary
Deliberation	Despair	Discontinue	Displayable	Durability
Deliberative	Desperation	Discount	Displease	Durable
Delicate	Despicable	Discourage	Dispose	Duteous
Delimit	Despoil	Discredit	Dispraise	Dutiful
Delineate	Despond	Discriminate	Disrepair	Duty
Deluge	Destitute	Disdain	Disrespect	**E**
Delusion	Destroy	Disenchant	Disrupt	Easily
Demean	Deteriorate	Disengage	Dissatisfy	Ecstasy
Demented	Determinable	Disfavor	Dissect	Ecstatic

Effective	Engulf	Evacuate	Faction	Feasible
Efficiency	Enrage	Evade	Fail	Feeble
Efficient	Enrich	Everlasting	Failure	Felonious
Elated	Enshroud	Everyday	Faint	Fester
Elation	Enslave	Everywhere	Fair	Feud
Elementary	Ensure	Evident	Fallacy	Fever
Eliminate	Entangle	Evil	Fallible	Fiasco
Elusive	Enthrall	Evildoer	Falsehood	Fiend
Emaciate	Entrap	Excel	Falsify	Fierce
Emancipate	Entrust	Excellence	Falter	Fiery
Emasculate	Envenom	Excite	Familial	Fight
Embarrass	Enviable	Exemplary	Familiar	Filth
Embezzle	Epidemic	Exemplify	Familiarity	Fire
Embitter	Equitable	Exempt	Familiarize	First-rate
Embrace	Equilibrium	Exile	Family	Fisticuffs
Eminent	Equivalent	Explode	Famine	Fit
Emphasis	Eradicate	Exploit	Fanatic	Fitting
Emphatic	Erase	Expropriate	Fancy	Fix
Enable	Erode	Expulsion	Fanfare	Fixture
Enchain	Errant	Extensive	Fantastic	Fizzle
Enclose	Erratic	Extravagance	Fatal	Flagrant
Encroach	Erroneous	Extravagant	Fault	Flashy
Encumber	Error	Exuberance	Favorable	Flaw
Endanger	Erupt	Exuberant	Favored	Flexible
Endurance	Eruptive	**F**	Favorite	Flip-flop
Endure	Essential	Fabricate	Fear	Flood
Energetic	Euphoria	Face-off	Feasibility	Flop

Flourish	Functional	Great	Hide	Ill-bred
Flunk	Fundamental	Grievous	Hinder	Ill-fated
Flurry	**G**	Grim	Historic	Ill-gotten
Fluster	Gain	Grotesque	Historical	Illegal
Fool	Generalize	Growth	Honest	Illegitimate
Forbid	Generally	Grudge	Honor	Illicit
Force	Generic	Guarantee	Honorable	Illness
Forgive	Generosity	**H**	Honorarium	Illuminate
Formulate	Generous	Habit	Hopeful	Illuminative
Found	Gentle	Habitual	Horrendous	Immense
Foundation	Gently	Happiness	Horrible	Immovable
Franchise	Gift	Happy	Horrid	Impair
Frantic	Glad	Hardship	Horrific	Impale
Fraternal	Glamorous	Harmful	Hostage	Impartial
Fraternity	Glee	Harmonious	Humane	Impasse
Fraternize	Glitch	Harmony	Humiliate	Impassioned
Fraud	Glorious	Hassle	Hurried	Impassive
Free	Glory	Hastily	Hurtful	Impatient
Freedom	Glut	Hate	Hysteria	Impede
Frenetic	Goal	Havoc	**I**	Impenetrable
Frenzy	Good	Hazard	Ideal	Impenitent
Friction	Goodness	Headway	Idealist	Imperfect
Friendly	Goodwill	Heartfelt	Idealize	Imperious
Friendship	Grace	Heritable	Identical	Impertinent
Fright	Graceful	Heritage	Ignominious	Impetuous
Fulfill	Grateful	Hero	Ignorant	Implode
Fumble	Grave	Heroic	Ill	Important

Impossible	Inconclusive	Interrupt	Legend	Maintenance
Impoverish	Inconsistent	Invigorate	Legitimacy	Malaise
Impractical	Indecent	Invulnerable	Legitimate	Malfunction
Improvable	Indefensible	**J**	Liar	Malign
Improve	Indifferent	Jackpot	Liberate	Manageable
Improvement	Indignant	Jubilant	Liberty	Manic
Improving	Indignity	Jubilation	Lifeline	Manipulate
Imprudence	Indiscriminate	Just	Lifesaver	Marvel
Impudent	Indispose	Justice	Likeminded	Marvelous
Impulsive	Inefficient	Justifiable	Likeable	Massacre
Inability	Inept	Justifiably	Logical	Masterful
Inaccessible	Inessential	Justification	Longevity	Masterly
Inaccuracy	Inferior	Justify	Lovely	Mean
Inadequate	Infest	Justly	Loyal	Meddle
Inadvertent	Infinite	**K**	Luckily	Meditate
Inalienable	Inherent	Keepsake	Lucky	Merit
Inalterable	Inheritable	Kill	Lucrative	Mess
Inappeasable	Injure	Kindly	Luscious	Misappropriate
Inappropriate	Innocuous	Kindness	Luxury	Misbecome
Incapability	Innovation	Kindred	**M**	Misbegotten
Incapacity	Insignificant	Kinship	Mad	Misdeed
Incense	Insist	**L**	Magic	Miserable
Inclement	Inspiration	Laborious	Magical	Misfeasance
Inclusive	Inspire	Lack	Magnanimous	Misfire
Incoherence	Insubordinate	Landmark	Magnificent	Misfortune
Incompetent	Insufferable	Laudatory	Mainstay	Mismanage
Incomprehensible	Intense	Leader	Maintain	Misspend

Mistake	Nosedive	Operable	Overwhelm	Permit
Moderate	Nuisance	Opponent	**P**	Perpetual
Moderation	**O**	Opportunist	Painful	Perplex
Modest	Obese	Opportunity	Painless	Persecute
Momentary	Obfuscate	Opposition	Painstaking	Persist
Momentous	Objective	Oppress	Paltry	Persistent
Monotonous	Objectivity	Optimism	Panic	Perspicuous
Monotony	Obligate	Optimum	Paralysis	Persuadable
Monumental	Obliterate	Ordeal	Parsimonious	Persuade
Mortify	Oblivion	Orderliness	Parting	Persuasion
Mourn	Obnoxious	Orderly	Passable	Persuasive
Muddle	Obscene	Ordinarily	Passive	Pertinent
Murder	Obsess	Ordinary	Paternal	Perverse
Mutate	Obsolete	Organize	Pathetic	Pest
Muzzle	Obstacle	Ornery	Patriot	Pester
N	Obstruct	Outbrave	Patriotic	Phony
Nationalism	Obtrusive	Outbreak	Patriotism	Picket
Neglect	Odd	Outburst	Penalty	Picky
Negligence	Offbeat	Outcast	Perceptive	Pinpoint
Noble	Offend	Outcry	Perfect	Plague
Nonaggression	Offensive	Outrage	Perfection	Plaudits
Nonchalant	Old-fashioned	Outstanding	Peril	Plausibility
Nonessential	Old-line	Overcome	Permanence	Plausible
Nonevent	Ominous	Overstate	Permanent	Plead
Nonpartisan	Onerous	Overstep	Permissible	Pleasant
Normal	Open-minded	Overthrow	Permission	Pleasurable
Normalcy	Openhearted	Overturn	Permissive	Pleasure

Plentiful	Predispose	Progression	Rationale	Reinforce
Plethora	Predisposition	Prominence	Rationalize	Reject
Plunder	Predominance	Prominent	Ravage	Rejoice
Plunge	Predominant	Proof	Ravenous	Rejuvenate
Plurality	Predominate	Protest	Reasonable	Remarkable
Poise	Preeminence	Proud	Reassurance	Remiss
Poison	Preeminent	Pulverize	Reassure	Repel
Polarize	Preempt	Pummel	Rebel	Replenish
Polemic	Prejudge	**Q**	Rebellion	Repudiate
Pollute	Prejudice	Quake	Rebuff	Repugnant
Popular	Premature	Qualification	Rebuke	Repulse
Popularity	Preposterous	Qualify	Recognition	Rescind
Popularize	Pressing	Quality	Recognizable	Resilience
Positive	Pressure	Qualm	Recognize	Resiliency
Positively	Prestigious	Quarrel	Reconcile	Resilient
Possibility	Pretty	Quaver	Reconciliation	Resist
Possible	Prevalence	Quit	Reconstruct	Respectable
Practical	Prevalent	**R**	Redeem	Respectful
Praise	Priority	Radical	Redemption	Respecting
Praiseworthily	Probable	Rage	Regain	Responsive
Praiseworthiness	Prodigious	Raid	Regards	Restrain
Praiseworthy	Prodigy	Rally	Regimentation	Restrict
Precarious	Proficiency	Rampage	Regress	Resurgent
Precaution	Proficient	Rampart	Regret	Resuscitate
Precise	Profit	Rant	Regular	Retaliate
Preclude	Profitable	Rape	Regularize	Revile
Predicament	Progress	Rational	Rehabilitate	Revoke

Revolt	Scold	Splendid	Strong	Sympathy
Reward	Scorn	Splendor	Strong-minded	Synchronic
Rightful	Scourge	Squabble	Stronghold	Synchronize
Rigor	Scrutinize	Stability	Struggle	Synchronous
Robust	Secretive	Stabilization	Stuck	Systematic
Routine	Seize	Stabilize	Sturdiness	**T**
S	Sensible	Stable	Sturdy	Takeover
Sabotage	Severe	Stalemate	Subjugate	Talent
Sacrilege	Share	Standard	Subvert	Tamper
Sadism	Shoot	Standard-bearer	Succeed	Tardy
Safe	Shout	Standardization	Success	Tarnish
Safeguard	Shove	Standardize	Suffer	Temporarily
Safekeeping	Showdown	Stationary	Suffocate	Temporariness
Safety	Significance	Steadiness	Suicidal	Temporary
Safety net	Significant	Steady	Suitable	Tense
Salutary	Simple	Stern	Superior	Tension
Salute	Simplicity	Stigmatize	Superlative	Tenuous
Sanctify	Simplification	Stimulate	Surefire	Terrify
Sanctuary	Simplify	Stimulation	Surety	Thank
Satisfactory	Sinister	Stinging	Surly	Thankful
Satisfy	Skirmish	Stormily	Suspenseful	Thorough
Scam	Slam	Stormy	Suspicious	Thoughtful
Scandal	Slap	Strange	Sustain	Thriftily
Scarce	Slump	Stranglehold	Swindle	Thriftiness
Scathing	Soften	Strangulate	Swipe	Thrifty
Scheme	Solidarity	Strength	Sympathetic	Tidily
Scoff	Spectacular	Stricken	Sympathize	Tidiness

Tidy	Unaffected	Unrest	Victorious	Wisdom
Timeless	Unalienable	Unruly	Victory	Wise
Timeliness	Unanimity	Unsettle	Vindicate	Wonderful
Timely	Unanimous	Unskilled	Vindication	Wondrous
Together	Unanswerable	Unstable	Violate	Worthwhile
Torture	Uncomfortable	Upheld	Vitality	
Tradition	Unconcern	Uproar	Vitalize	
Trailblazer	Unconcerned	Upset	Vitriolic	
Travesty	Unconscionable	Useful	Vivacious	
Treacherous	Uncorrectable	Usurp	Vivacity	
Treason	Uneasy	**V**	Vivification	
Trick	Uneven	Vague	Vivify	
Triumph	Unfair	Valiant	Volatile	
Triumphant	Unfavorable	Validate	Vulgar	
Trust	Unfit	Validation	**W**	
Trusting	Unflappable	Validity	Waste	
Trustworthily	Unidentified	Valor	Wasteful	
Trustworthiness	Unique	Valuable	Weird	
Trustworthy	Unity	Venerable	Welcome	
Truth	Unkempt	Venerate	Well-advised	
Tumble	Unleash	Venturous	Well-balanced	
Tumult	Unorganized	Verifiable	Well-being	
Turbulent	Unpracticed	Verify	Well-built	
Tyrant	Unprepared	Viability	Well-found	
U	Unprincipled	Viable	Well-intentioned	
Unaccomplished	Unqualified	Vibrancy	Well-timed	
Unadvised	Unreasonable	Vibrant	Winning	

APPENDIX D

SURVEY INSTRUMENT USED TO CREATE ANIXETY AND ENTHUSIASM

WORDLISTS

The following is a questionnaire designed to see the potential reaction to the usage of specific words by the president and the media when discussing political issues. You are asked to review these words used in political communication and assess whether they evoke a specific reaction.

Thank you for your participation in this survey.
Directions: Below is a list of 240 words. For each word, please answer the following question

The usage of this word by the president and the media when discussing an issue is likely to make the public feel _____ about that issue

a. **anxious**
b. **enthusiastic**
c. **neither anxious or enthusiastic**

Next to each word, write the letter corresponding to your choice from the three above options for that respective word. Please make a selection for all 240 words. You must select one of the three options for each word.
Please do not put any information on this survey paper that can be used to identify you (such as your name or University Identification Number).
You will submit the completed survey to the instructor of your course at the next class session.

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
1	Abandon	
2	Abase	
3	Abash	
4	Abdicate	
5	Abduct	
6	Aberrant	
7	Abet	
8	Abeyance	
9	Abhor	
10	Abject	
11	Ablaze	
12	Able	
13	Able-bodied	
14	Abnegate	
15	Abnormal	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
16	Abolish	
17	Abominable	
18	Abort	
19	Abound	
20	Abrupt	
21	Abscond	
22	Absent	
23	Absolute	
24	Absolve	
25	Abundance	
26	Abundant	
27	Acceptable	
28	Acceptance	
29	Accepted	
30	Accident	
31	Acclaim	
32	Acclimate	
33	Accolade	
34	Accommodate	
35	Accomplice	
36	Accomplish	
37	Accord	
38	Accordance	
39	Accordingly	
40	Accuracy	
41	Accurate	
42	Accursed	
43	Accusation	
44	Accustom	
45	Ache	
46	Achievable	
47	Achievement	
48	Acrimonious	
49	Active	
50	Actualize	
51	Addict	
52	Addle	
53	Adept	
54	Adequate	
55	Admirable	
56	Admiration	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
57	Admire	
58	Admonish	
59	Adore	
60	Adulterate	
61	Advancement	
62	Advantage	
63	Adversary	
64	Adversative	
65	Adversity	
66	Affable	
67	Affection	
68	Affinity	
69	Affirm	
70	Afflict	
71	Affluent	
72	Afraid	
73	Aggravate	
74	Aggression	
75	Aghast	
76	Agitate	
77	Agonize	
78	Agree	
79	Agreeable	
80	Ailment	
81	Alarm	
82	Alert	
83	Alienate	
84	Align	
85	Alike	
86	Alive	
87	Allegiance	
88	Alleviate	
89	Alliance	
90	Allow	
91	Ally	
92	Alone	
93	Aloof	
94	Altruism	
95	Ambiguous	
96	Ambitious	
97	Ambush	
98	Ameliorate	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
99	Amenable	
100	Amend	
101	Amenity	
102	Amicable	
103	Amiss	
104	Amity	
105	Amnesty	
106	Amoral	
107	Ample	
108	Anarchist	
109	Anarchy	
110	Angry	
111	Anguish	
112	Animosity	
113	Animus	
114	Anniversary	
115	Annual	
116	Antagonize	
117	Antecedent	
118	Anticipate	
119	Anticlimactic	
120	Antipathy	
121	Antiquity	
122	Anxious	
123	Apathy	
124	Appalling	
125	Apparent	
126	Appealing	
127	Appease	
128	Apportion	
129	Apposite	
130	Appreciate	
131	Apprehend	
132	Apprehensive	
133	Apprise	
134	Appropriate	
135	Approval	
136	Archenemy	
137	Archfiend	
138	Archtype	
139	Ardent	
140	Ardor	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
141	Arduous	
142	Argument	
143	Arm-twisting	
144	Arrogate	
145	Askew	
146	Asperse	
147	Aspiration	
148	Assail	
149	Assassinate	
150	Assault	
151	Assent	
152	Assist	
153	Assuage	
154	Atrocity	
155	Atrophy	
156	Attractive	
157	Attack	
158	Auspicious	
159	Authentic	
160	Authenticate	
161	Avalanche	
162	Awesome	
163	Avarice	
164	Awful	
165	Backfire	
166	Backlash	
167	Badly	
168	Balance	
169	Banish	
170	Bankrupt	
171	Barbaric	
172	Beat	
173	Beautiful	
174	Bedevil	
175	Bedrock	
176	Befit	
177	Befoul	
178	Befriend	
179	Bellicose	
180	Belligerence	
181	Belong	
182	Beloved	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
183	Benefactor	
184	Beneficial	
185	Benefit	
186	Benevolence	
187	Benevolent	
188	Benign	
189	Better	
190	Betterment	
191	Beware	
192	Bind	
193	Bipartisan	
194	Bloom	
195	Bluff	
196	Blunder	
197	Body count	
198	Bolster	
199	Bomb	
200	Bond	
201	Bonus	
202	Boost	
203	Botch	
204	Bother	
205	Bountiful	
206	Brave	
207	Brawl	
208	Breach	
209	Breakdown	
210	Breakthrough	
211	Bright	
212	Brilliance	
213	Brinkmanship	
214	Brotherhood	
215	Brotherly	
216	Brutal	
217	Buffer	
218	Buoy	
219	Buoyant	
220	Burdensome	
221	Burglary	
222	Calamity	
223	Callous	
224	Calm	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
225	Cancellation	
226	Cannibalize	
227	Capable	
228	Capitulate	
229	Captivate	
230	Capture	
231	Care	
232	Careful	
233	Carry	
234	Castigate	
235	Casualty	
236	Cataclysm	
237	Catastrophe	
238	Catharsis	
239	Cathartic	
240	Causeless	

You have completed the survey. Thank you for your participation.

The following is a questionnaire designed to see the potential reaction to the usage of specific words by the president and the media when discussing political issues. You are asked to review these words used in political communication and assess whether they evoke a specific reaction.

Thank you for your participation in this survey.

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Next to each word, write the letter corresponding to your choice from the three above options for that respective word. Please make a selection for all 240 words.
You must select one of the three options for each word.
Please do not put any information on this survey paper that can be used to identify you (such as your name or University Identification Number).
You will submit the completed survey to the instructor of your course at the next class session.
Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
1	Ceaseless	
2	Celebrate	
3	Censorship	
4	Censure	
5	Ceremonial	
6	Ceremony	
7	Certain	
8	Certify	
9	Certitude	
10	Champion	
11	Chaos	
12	Charity	
13	Charm	
14	Chase	
15	Chasm	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
16	Chasten	
17	Chastise	
18	Cheat	
19	Cheer	
20	Cheerful	
21	Cheerily	
22	Chronic	
23	Churlish	
24	Clamor	
25	Clarification	
26	Clash	
27	Classifiable	
28	Clean	
29	Cleanly	
30	Clear-cut	
31	Clear-headed	
32	Clearly	
33	Closure	
34	Coerce	
35	Cogent	
36	Cohere	
37	Cohesion	
38	Cohort	
39	Collaborate	
40	Collapse	
41	Collective	
42	Combat	
43	Comfort	
44	Comfortable	
45	Commend	
46	Commendable	
47	Commensurable	
48	Commensurate	
49	Commodity	
50	Common	
51	Commonplace	
52	Communal	
53	Communion	
54	Compact	
55	Comparable	
56	Compassion	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
57	Compel	
58	Competence	
59	Competent	
60	Complain	
61	Compliance	
62	Complicate	
63	Complicit	
64	Compliment	
65	Confer	
66	Confidence	
67	Confident	
68	Confine	
69	Confirmed	
70	Confiscate	
71	Conflict	
72	Confound	
73	Confront	
74	Confuse	
75	Congest	
76	Congruence	
77	Congruent	
78	Congruity	
79	Congruous	
80	Conjoin	
81	Connive	
82	Conquer	
83	Conscript	
84	Consensus	
85	Consent	
86	Considered	
87	Consistent	
88	Consolation	
89	Consolidate	
90	Conspiracy	
91	Constancy	
92	Constrain	
93	Constrict	
94	Consult	
95	Consummate	
96	Contagious	
97	Contemplative	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
98	Contemporaneous	
99	Contempt	
100	Contend	
101	Content	
102	Contraction	
103	Contribute	
104	Contuse	
105	Convalesce	
106	Convenience	
107	Convenient	
108	Conventional	
109	Converge	
110	Conversable	
111	Conversant	
112	Convulse	
113	Cool-headed	
114	Cooperate	
115	Cooperation	
116	Coordinate	
117	Correct	
118	Corrective	
119	Correlate	
120	Correspond	
121	Corrode	
122	Corrupt	
123	Counsel	
124	Counterattack	
125	Counteroffensive	
126	Courage	
127	Courageous	
128	Courteous	
129	Covert	
130	Crackdown	
131	Crash	
132	Credible	
133	Creeping	
134	Criminal	
135	Crossfire	
136	Crucial	
137	Cultivate	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
138	Curse	
139	Custom	
140	Customarily	
141	Customary	
142	Dagger	
143	Damage	
144	Danger	
145	Dastardly	
146	Dead end	
147	Deaden	
148	Deadlock	
149	Deadly	
150	Deafen	
151	Dearth	
152	Death	
153	Deathwatch	
154	Debase	
155	Deceive	
156	Decelerate	
157	Decent	
158	Decompress	
159	Decontaminate	
160	Defeat	
161	Defect	
162	Defend	
163	Defense	
164	Defensible	
165	Defensive	
166	Deference	
167	Defiant	
168	Deficiency	
169	Defile	
170	Deflate	
171	Deform	
172	Defraud	
173	Defuse	
174	Degenerate	
175	Degradation	
176	Degrade	
177	Dehumanize	
178	Deleterious	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
179	Deliberate	
180	Deliberation	
181	Deliberative	
182	Delicate	
183	Delimit	
184	Delineate	
185	Deluge	
186	Delusion	
187	Demean	
188	Demented	
189	Demise	
190	Demonstrable	
191	Demonstrate	
192	Demoralize	
193	Denigrate	
194	Denounce	
195	Deplenish	
196	Deplete	
197	Deposit	
198	Deprave	
199	Depreciate	
200	Depress	
201	Deprive	
202	Deride	
203	Desecrate	
204	Desirable	
205	Desirous	
206	Desolate	
207	Despair	
208	Desperation	
209	Despicable	
210	Despoil	
211	Despond	
212	Destitute	
213	Destroy	
214	Deteriorate	
215	Determinable	
216	Detest	
217	Devalue	
218	Devastate	
219	Devious	
220	Diabolic	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
221	Die	
222	Diminish	
223	Diplomatic	
224	Dirty	
225	Disappoint	
226	Disapprove	
227	Disarm	
228	Disarray	
229	Disavow	
230	Disband	
231	Disbar	
232	Disbelief	
233	Discard	
234	Discontinue	
235	Discount	
236	Discourage	
237	Discredit	
238	Discriminate	
239	Disdain	
240	Disenchant	

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b. **enthusiastic**
c. **neither anxious or enthusiastic**

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Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
1	Disengage	
2	Disfavor	
3	Disfigure	
4	Disgrace	
5	Disgust	
6	Disingenuous	
7	Disjoin	
8	Dislike	
9	Disloyal	
10	Dismal	
11	Dismantle	
12	Disobey	
13	Disorder	
14	Disorganize	
15	Disorient	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
16	Disown	
17	Disparage	
18	Dispensable	
19	Dispense	
20	Displace	
21	Displayable	
22	Displease	
23	Dispose	
24	Dispraise	
25	Disrepair	
26	Disrespect	
27	Disrupt	
28	Dissatisfy	
29	Dissect	
30	Dissent	
31	Dissipate	
32	Dissolution	
33	Dissolve	
34	Distaste	
35	Distinctive	
36	Distinguishable	
37	Distort	
38	Distract	
39	Distraught	
40	Distribute	
41	Distrust	
42	Disturb	
43	Dour	
44	Downfall	
45	Downgrade	
46	Drastic	
47	Dreary	
48	Durability	
49	Durable	
50	Duteous	
51	Dutiful	
52	Duty	
53	Easily	
54	Ecstasy	
55	Ecstatic	
56	Effective	
57	Efficiency	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
58	Efficient	
59	Elated	
60	Elation	
61	Elementary	
62	Eliminate	
63	Elusive	
64	Emaciate	
65	Emancipate	
66	Emasculate	
67	Embarrass	
68	Embezzle	
69	Embitter	
70	Embrace	
71	Eminent	
72	Emphasis	
73	Emphatic	
74	Enable	
75	Enchain	
76	Enclose	
77	Encroach	
78	Encumber	
79	Endanger	
80	Endurance	
81	Endure	
82	Energetic	
83	Engulf	
84	Enrage	
85	Enrich	
86	Enshroud	
87	Enslave	
88	Ensure	
89	Entangle	
90	Enthrall	
91	Entrap	
92	Entrust	
93	Envenom	
94	Enviable	
95	Epidemic	
96	Equitable	
97	Equilibrium	
98	Equivalent	
99	Eradicate	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
100	Erase	
101	Erode	
102	Errant	
103	Erratic	
104	Erroneous	
105	Error	
106	Erupt	
107	Eruptive	
108	Essential	
109	Euphoria	
110	Evacuate	
111	Evade	
112	Everlasting	
113	Everyday	
114	Everywhere	
115	Evident	
116	Evil	
117	Evildoer	
118	Excel	
119	Excellence	
120	Excite	
121	Exemplary	
122	Exemplify	
123	Exempt	
124	Exile	
125	Explode	
126	Exploit	
127	Expropriate	
128	Expulsion	
129	Extensive	
130	Extravagance	
131	Extravagant	
132	Exuberance	
133	Exuberant	
134	Fabricate	
135	Face-off	
136	Faction	
137	Fail	
138	Failure	
139	Faint	
140	Fair	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
141	Fallacy	
142	Fallible	
143	Falsehood	
144	Falsify	
145	Falter	
146	Familial	
147	Familiar	
148	Familiarity	
149	Familiarize	
150	Family	
151	Famine	
152	Fanatic	
153	Fancy	
154	Fanfare	
155	Fantastic	
156	Fatal	
157	Fault	
158	Favorable	
159	Favored	
160	Favorite	
161	Fear	
162	Feasibility	
163	Feasible	
164	Feeble	
165	Felonious	
166	Fester	
167	Feud	
168	Fever	
169	Fiasco	
170	Fiend	
171	Fierce	
172	Fiery	
173	Fight	
174	Filth	
175	Fire	
176	First-rate	
177	Fisticuffs	
178	Fit	
179	Fitting	
180	Fix	
181	Fixture	
182	Fizzle	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
183	Flagrant	
184	Flashy	
185	Flaw	
186	Flexible	
187	Flip-flop	
188	Flood	
189	Flop	
190	Flourish	
191	Flunk	
192	Flurry	
193	Fluster	
194	Fool	
195	Forbid	
196	Force	
197	Forgive	
198	Formulate	
199	Found	
200	Foundation	
201	Franchise	
202	Frantic	
203	Fraternal	
204	Fraternity	
205	Fraternize	
206	Fraud	
207	Free	
208	Freedom	
209	Frenetic	
210	Frenzy	
211	Friction	
212	Friendly	
213	Friendship	
214	Fright	
215	Fulfill	
216	Fumble	
217	Functional	
218	Fundamental	
219	Gain	
220	Generalize	
221	Generally	
222	Generic	
223	Generosity	
224	Generous	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
225	Gentle	
226	Gently	
227	Gift	
228	Glad	
229	Glamorous	
230	Glee	
231	Glitch	
232	Glorious	
233	Glory	
234	Glut	
235	Goal	
236	Good	
237	Goodness	
238	Goodwill	
239	Grace	
240	Graceful	

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Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
1	Grateful	
2	Grave	
3	Great	
4	Grievous	
5	Grim	
6	Grotesque	
7	Growth	
8	Grudge	
9	Guarantee	
10	Habit	
11	Habitual	
12	Happiness	
13	Happy	
14	Hardship	
15	Harmful	

Please continue the survey on the next page ⇒ **SD**

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
16	Harmonious	
17	Harmony	
18	Hassle	
19	Hastily	
20	Hate	
21	Havoc	
22	Hazard	
23	Headway	
24	Heartfelt	
25	Heritable	
26	Heritage	
27	Hero	
28	Heroic	
29	Hide	
30	Hinder	
31	Historic	
32	Historical	
33	Honest	
34	Honor	
35	Honorable	
36	Honorarium	
37	Hopeful	
38	Horrendous	
39	Horrible	
40	Horrid	
41	Horrific	
42	Hostage	
43	Humane	
44	Humiliate	
45	Hurried	
46	Hurtful	
47	Hysteria	
48	Ideal	
49	Idealist	
50	Idealize	
51	Identical	
52	Ignominious	
53	Ignorant	
54	Ill	
55	Ill-bred	
56	Ill-fated	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
57	Ill-gotten	
58	Illegal	
59	Illegitimate	
60	Illicit	
61	Illness	
62	Illuminate	
63	Illuminative	
64	Immense	
65	Immovable	
66	Impair	
67	Impale	
68	Impartial	
69	Impasse	
70	Impassioned	
71	Impassive	
72	Impatient	
73	Impede	
74	Impenetrable	
75	Impenitent	
76	Imperfect	
77	Imperious	
78	Impertinent	
79	Impetuous	
80	Implode	
81	Important	
82	Impossible	
83	Impoverish	
84	Impractical	
85	Improvable	
86	Improve	
87	Improvement	
88	Improving	
89	Imprudence	
90	Impudent	
91	Impulsive	
92	Inability	
93	Inaccessible	
94	Inaccuracy	
95	Inadequate	
96	Inadvertent	
97	Inalienable	

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
98	Inalterable	
99	Inappeasable	
100	Inappropriate	
101	Incapability	
102	Incapacity	
103	Incense	
104	Inclement	
105	Inclusive	
106	Incoherence	
107	Incompetent	
108	Incomprehensible	
109	Inconclusive	
110	Inconsistent	
111	Indecent	
112	Indefensible	
113	Indifferent	
114	Indignant	
115	Indignity	
116	Indiscriminate	
117	Indispose	
118	Inefficient	
119	Inept	
120	Inessential	
121	Inferior	
122	Infest	
123	Infinite	
124	Inherent	
125	Inheritable	
126	Injure	
127	Innocuous	
128	Innovation	
129	Insignificant	
130	Insist	
131	Inspiration	
132	Inspire	
133	Insubordinate	
134	Insufferable	
135	Intense	
136	Interrupt	
137	Invigorate	
138	Invulnerable	
139	Jackpot	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
140	Jubilant	
141	Jubilation	
142	Just	
143	Justice	
144	Justifiable	
145	Justifiably	
146	Justification	
147	Justify	
148	Justly	
149	Keepsake	
150	Kill	
151	Kindly	
152	Kindness	
153	Kindred	
154	Kinship	
155	Laborious	
156	Lack	
157	Landmark	
158	Laudatory	
159	Leader	
160	Legend	
161	Legitimacy	
162	Legitimate	
163	Liar	
164	Liberate	
165	Liberty	
166	Lifeline	
167	Lifesaver	
168	Likeminded	
169	Likeable	
170	Logical	
171	Longevity	
172	Lovely	
173	Loyal	
174	Luckily	
175	Lucky	
176	Lucrative	
177	Luscious	
178	Luxury	
179	Mad	
180	Magic	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
181	Magical	
182	Magnanimous	
183	Magnificent	
184	Mainstay	
185	Maintain	
186	Maintenance	
187	Malaise	
188	Malfunction	
189	Malign	
190	Manageable	
191	Manic	
192	Manipulate	
193	Marvel	
194	Marvelous	
195	Massacre	
196	Masterful	
197	Masterly	
198	Mean	
199	Meddle	
200	Meditate	
201	Merit	
202	Mess	
203	Misappropriate	
204	Misbecome	
205	Misbegotten	
206	Misdeed	
207	Miserable	
208	Misfeasance	
209	Misfire	
210	Misfortune	
211	Mismanage	
212	Misspend	
213	Mistake	
214	Moderate	
215	Moderation	
216	Modest	
217	Momentary	
218	Momentous	
219	Monotonous	
220	Monotony	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
221	Monumental	
222	Mortify	
223	Mourn	
224	Muddle	
225	Murder	
226	Mutate	
227	Muzzle	
228	Nationalism	
229	Neglect	
230	Negligence	
231	Noble	
232	Nonaggression	
233	Nonchalant	
234	Nonessential	
235	Nonevent	
236	Nonpartisan	
237	Normal	
238	Normalcy	
239	Nosedive	
240	Nuisance	

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Number	Word	Reaction Selection
1	Obese	
2	Obfuscate	
3	Objective	
4	Objectivity	
5	Obligate	
6	Obliterate	
7	Oblivion	
8	Obnoxious	
9	Obscene	
10	Obsess	
11	Obsolete	
12	Obstacle	
13	Obstruct	
14	Obtrusive	
15	Odd	

Please continue the survey on the next page ⇒ **SE**

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
16	Offbeat	
17	Offend	
18	Offensive	
19	Old-fashioned	
20	Old-line	
21	Ominous	
22	Onerous	
23	Open-minded	
24	Openhearted	
25	Operable	
26	Opponent	
27	Opportunist	
28	Opportunity	
29	Opposition	
30	Oppress	
31	Optimism	
32	Optimum	
33	Ordeal	
34	Orderliness	
35	Orderly	
36	Ordinarily	
37	Ordinary	
38	Organize	
39	Ornery	
40	Outbrave	
41	Outbreak	
42	Outburst	
43	Outcast	
44	Outcry	
45	Outrage	
46	Outstanding	
47	Overcome	
48	Overstate	
49	Overstep	
50	Overthrow	
51	Overturn	
52	Overwhelm	
53	Painful	
54	Painless	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
55	Painstaking	
56	Paltry	
57	Panic	
58	Paralysis	
59	Parsimonious	
60	Parting	
61	Passable	
62	Passive	
63	Paternal	
64	Pathetic	
65	Patriot	
66	Patriotic	
67	Patriotism	
68	Penalty	
69	Perceptive	
70	Perfect	
71	Perfection	
72	Peril	
73	Permanence	
74	Permanent	
75	Permissible	
76	Permission	
77	Permissive	
78	Permit	
79	Perpetual	
80	Perplex	
81	Persecute	
82	Persist	
83	Persistent	
84	Perspicuous	
85	Persuadable	
86	Persuade	
87	Persuasion	
88	Persuasive	
89	Pertinent	
90	Perverse	
91	Pest	
92	Pester	
93	Phony	
94	Picket	
95	Picky	

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
96	Pinpoint	
97	Plague	
98	Plaudits	
99	Plausibility	
100	Plausible	
101	Plead	
102	Pleasant	
103	Pleasurable	
104	Pleasure	
105	Plentiful	
106	Plethora	
107	Plunder	
108	Plunge	
109	Plurality	
110	Poise	
111	Poison	
112	Polarize	
113	Polemic	
114	Pollute	
115	Popular	
116	Popularity	
117	Popularize	
118	Positive	
119	Positively	
120	Possibility	
121	Possible	
122	Practical	
123	Praise	
124	Praiseworthily	
125	Praiseworthiness	
126	Praiseworthy	
127	Precarious	
128	Precaution	
129	Precise	
130	Preclude	
131	Predicament	
132	Predispose	
133	Predisposition	
134	Predominance	
135	Predominant	
136	Predominate	
137	Preeminence	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
138	Preeminent	
139	Preempt	
140	Prejudge	
141	Prejudice	
142	Premature	
143	Preposterous	
144	Pressing	
145	Pressure	
146	Prestigious	
147	Pretty	
148	Prevalence	
149	Prevalent	
150	Priority	
151	Probable	
152	Prodigious	
153	Prodigy	
154	Proficiency	
155	Proficient	
156	Profit	
157	Profitable	
158	Progress	
159	Progression	
160	Prominence	
161	Prominent	
162	Proof	
163	Protest	
164	Proud	
165	Pulverize	
166	Pummel	
167	Quake	
168	Qualification	
169	Qualify	
170	Quality	
171	Qualm	
172	Quarrel	
173	Quaver	
174	Quit	

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
175	Radical	
176	Rage	
177	Raid	
178	Rally	
179	Rampage	
180	Rampart	
181	Rant	
182	Rape	
183	Rational	
184	Rationale	
185	Rationalize	
186	Ravage	
187	Ravenous	
188	Reasonable	
189	Reassurance	
190	Reassure	
191	Rebel	
192	Rebellion	
193	Rebuff	
194	Rebuke	
195	Recognition	
196	Recognizable	
197	Recognize	
198	Reconcile	
199	Reconciliation	
200	Reconstruct	
201	Redeem	
202	Redemption	
203	Regain	
204	Regards	
205	Regimentation	
206	Regress	
207	Regret	
208	Regular	
209	Regularize	
210	Rehabilitate	
211	Reinforce	
212	Reject	
213	Rejoice	
214	Rejuvenate	
215	Remarkable	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
216	Remiss	
217	Repel	
218	Replenish	
219	Repudiate	
220	Repugnant	
221	Repulse	
222	Rescind	
223	Resilience	
224	Resiliency	
225	Resilient	
226	Resist	
227	Respectable	
228	Respectful	
229	Respecting	
230	Responsive	
231	Restrain	
232	Restrict	
233	Resurgent	
234	Resuscitate	
235	Retaliate	
236	Revile	
237	Revoke	
238	Revolt	
239	Reward	
240	Rightful	

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Number	Word	Reaction Selection
1	Rigor	
2	Robust	
3	Routine	
4	Sabotage	
5	Sacrilege	
6	Sadism	
7	Safe	
8	Safeguard	
9	Safekeeping	
10	Safety	
11	Safety net	
12	Salutary	
13	Salute	
14	Sanctify	
15	Sanctuary	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
16	Satisfactory	
17	Satisfy	
18	Scam	
19	Scandal	
20	Scarce	
21	Scathing	
22	Scheme	
23	Scoff	
24	Scold	
25	Scorn	
26	Scourge	
27	Scrutinize	
28	Secretive	
29	Seize	
30	Sensible	
31	Severe	
32	Share	
33	Shoot	
34	Shout	
35	Shove	
36	Showdown	
37	Significance	
38	Significant	
39	Simple	
40	Simplicity	
41	Simplification	
42	Simplify	
43	Sinister	
44	Skirmish	
45	Slam	
46	Slap	
47	Slump	
48	Soften	
49	Solidarity	
50	Spectacular	
51	Splendid	
52	Splendor	
53	Squabble	
54	Stability	
55	Stabilization	
56	Stabilize	
57	Stable	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
58	Stalemate	
59	Standard	
60	Standard-bearer	
61	Standardization	
62	Standardize	
63	Stationary	
64	Steadiness	
65	Steady	
66	Stern	
67	Stigmatize	
68	Stimulate	
69	Stimulation	
70	Stinging	
71	Stormily	
72	Stormy	
73	Strange	
74	Stranglehold	
75	Strangulate	
76	Strength	
77	Stricken	
78	Strong	
79	Strong-minded	
80	Stronghold	
81	Struggle	
82	Stuck	
83	Sturdiness	
84	Sturdy	
85	Subjugate	
86	Subvert	
87	Succeed	
88	Success	
89	Suffer	
90	Suffocate	
91	Suicidal	
92	Suitable	
93	Superior	
94	Superlative	
95	Surefire	
96	Surety	
97	Surly	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
98	Suspenseful	
99	Suspicious	
100	Sustain	
101	Swindle	
102	Swipe	
103	Sympathetic	
104	Sympathize	
105	Sympathy	
106	Synchronic	
107	Synchronize	
108	Synchronous	
109	Systematic	
110	Takeover	
111	Talent	
112	Tamper	
113	Tardy	
114	Tarnish	
115	Temporarily	
116	Temporariness	
117	Temporary	
118	Tense	
119	Tension	
120	Tenuous	
121	Terrify	
122	Thank	
123	Thankful	
124	Thorough	
125	Thoughtful	
126	Thriftily	
127	Thriftiness	
128	Thrifty	
129	Tidily	
130	Tidiness	
131	Tidy	
132	Timeless	
133	Timeliness	
134	Timely	
135	Together	
136	Torture	
137	Tradition	
138	Trailblazer	

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
139	Travesty	
140	Treacherous	
141	Treason	
142	Trick	
143	Triumph	
144	Triumphant	
145	Trust	
146	Trusting	
147	Trustworthily	
148	Trustworthiness	
149	Trustworthy	
150	Truth	
151	Tumble	
152	Tumult	
153	Turbulent	
154	Tyrant	
155	Unaccomplished	
156	Unadvised	
157	Unaffected	
158	Unalienable	
159	Unanimity	
160	Unanimous	
161	Unanswerable	
162	Uncomfortable	
163	Unconcern	
164	Unconcerned	
165	Unconscionable	
166	Uncorrectable	
167	Uneasy	
168	Uneven	
169	Unfair	
170	Unfavorable	
171	Unfit	
172	Unflappable	
173	Unidentified	
174	Unique	
175	Unity	
176	Unkempt	
177	Unleash	
178	Unorganized	
179	Unpracticed	
180	Unprepared	
181	Unprincipled	

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
182	Unqualified	
183	Unreasonable	
184	Unrest	
185	Unruly	
186	Unsettle	
187	Unskilled	
188	Unstable	
189	Upheld	
190	Uproar	
191	Upset	
192	Useful	
193	Usurp	
194	Vague	
195	Valiant	
196	Validate	
197	Validation	
198	Validity	
199	Valor	
200	Valuable	
201	Venerable	
202	Venerate	
203	Venturous	
204	Verifiable	
205	Verify	
206	Viability	
207	Viable	
208	Vibrancy	
209	Vibrant	
210	Victorious	
211	Victory	
212	Vindicate	
213	Vindication	
214	Violate	
215	Vitality	
216	Vitalize	
217	Vitriolic	
218	Vivacious	
219	Vivacity	
220	Vivification	

Please continue the survey on the next page ⇒

Answer options- a. anxious b. enthusiastic c. neither anxious or enthusiastic

Number	Word	Reaction Selection
221	Vivify	
222	Volatile	
223	Vulgar	
224	Waste	
225	Wasteful	
226	Weird	
227	Welcome	
228	Well-advised	
229	Well-balanced	
230	Well-being	
231	Well-built	
232	Well-found	
233	Well-intentioned	
234	Well-timed	
235	Winning	
236	Wisdom	
237	Wise	
238	Wonderful	
239	Wondrous	
240	Worthwhile	

You have completed the survey. Thank you for your participation.

APPENDIX E

LIST OF WORDS IDENTIFIED BY RESPONDENTS AS ANXIETY WORDS

A	alert	badly	chaos	creeping
abandon	alienate	banish	chase	criminal
abash	aloof	bankrupt	chasten	crossfire
abduct	alone	barbaric	chastise	curse
abhor	ambiguous	beat	cheat	D
abject	ambush	bedevil	chronic	dagger
abnormal	amiss	befoul	clamor	damage
abolish	anarchist	belligerence	clash	danger
abominable	anarchy	beware	collapse	dastardly
abort	angry	bluff	combat	dead-end
abrupt	anguish	blunder	complain	deaden
abscond	animosity	body-count	complicate	deadlock
absent	antagonize	bomb	confine	deadly
accident	anxious	botch	confiscate	deafen
accomplice	apathy	bother	conflict	dearth
accursed	appalling	brawl	confound	death
accusation	archenemy	breach	confuse	deathwatch
ache	archfiend	breakdown	congest	debase
acrimonious	arduous	brutal	connive	deceive
addict	argument	burdensome	conquer	defeat
admonish	arm-twisting	burglary	conspiracy	defect
adulterate	arrogate	C	constrain	defiant
adversary	askew	calamity	constrict	deficiency
adversative	asperse	callous	contagious	defile
adversity	assail	cancellation	contempt	deflate
afflict	assassinate	cannibalize	contraction	deform
afraid	assault	capture	convulse	defraud
aggravate	atrophy	casualty	corrode	degenerate
aggression	attack	cataclysm	corrupt	degradation
aghast	avalanche	catastrophe	counterattack	degrade
agitate	awful	causeless	counteroffensive	dehumanize
agonize	B	ceaseless	covert	deleterious
ailment	backfire	censorship	crackdown	delusion
alarm	backlash	censure	crash	demean

demented
demise
demoralize
denigrate
denounce
deplenish
deplete
deprave
depreciate
depress
deprive
deride
desecrate
desolate
despair
desperation
despicable
despoil
despond
destitute
destroy
deteriorate
detest
devalue
devastate
devious
diabolic
die
diminish
dirty
disappoint
disapprove
disarm
disarray
disavow
disband
disbar
disbelief
discard
discontinue
discourage
discredit
discriminate
disdain
disenchant
disfavor
disfigure
disgrace
disgust
dislike
disloyal
dismal
disobey
disorder
disorganize
disorient
disown
displease
dispose
dispraise
disrepair
disrespect
disrupt
dissatisfy
dissent
dissolve
distaste
distort
distraught
distrust
disturb
downfall
downgrade
drastic
dreary
E
elusive
emasculate
embarrass
embezzle
embitter
enchain
encroach
endanger
enrage
enslave
entangle
entrap
envenom
epidemic
eradicate
erase
erode
errant
erratic
erroneous
error
erupt
eruptive
evacuate
evade
evil
evildoer
exile
explode
exploit
expulsion
F
fabricate
face-off
fail
failure
fallacy
falsehood
falsify
falter
famine
fanatic
fatal
fault
fear
feeble
felonious
fester
feud
fever
fiasco
fiend
fight
filth
flaw
flip-flop
flood
flop
flunk
fool
forbid
force
frantic
fraud
frenzy
friction
fright
G
glitch
grave
grievous
grudge
H
hardship
harmful
hassle
hastily
hate
havoc
hazard
hinder
horrendous
horrible
horrid
horrific
hostage
humiliate
hurried
hurtful
hysteria
I
ignorant
ill
ill-bred

ill-fated	injure	N	painful	radical
ill-gotten	insubordinate	neglect	painstaking	rage
illegal	insufferable	negligence	panic	raid
illegitimate	intense	nosedive	paralysis	rampage
illicit	interrupt	nuisance	penalty	rant
illness	K	O	peril	rape
immense	kill	obese	perplex	ravage
immovable	L	obligate	persecute	ravenous
impair	lack	obliterate	perverse	rebel
impale	liar	oblivion	pest	rebellion
impatient	M	obnoxious	pester	rebuke
impede	mad	obscene	plague	regress
implode	malfunction	obsess	plead	regret
impossible	manic	obstacle	plunder	reject
impoverish	manipulate	obstruct	plunge	repugnant
impractical	massacre	obtrusive	poison	repulse
impulsive	mean	odd	pollute	resist
inability	meddle	offend	precarious	restrain
inaccessible	mess	offensive	precaution	restrict
inaccuracy	misappropriate	opponent	predicament	retaliate
inadequate	misbecome	opposition	preempt	revoke
inappeasable	misbegotten	oppress	prejudge	revolt
inappropriate	misdeed	ordeal	prejudice	S
incapability	miserable	outbreak	preposterous	sabotage
incapacity	misfire	outburst	pressing	sacrilege
incompetent	misfortune	outcast	pressure	sadism
incomprehensible	mismanage	outcry	protest	scam
inconclusive	misspend	outrage	pulverize	scandal
inconsistent	mistake	overstate	pummel	scarce
indecent	mortify	overstep	Q	scathing
inefficient	mourn	overthrow	quake	scheme
inept	murder	overturn	quarrel	scoff
inferior	mutate	overwhelm	quit	scold
infest	muzzle	P	R	scorn

scourge	swindle	unpracticed
scrutinize	T	unprepared
secretive	takeover	unprincipled
seize	tamper	unqualified
severe	tardy	unreasonable
shoot	tarnish	unrest
shout	tense	unruly
shove	tension	unsettle
showdown	tenuous	unskilled
sinister	terrify	unstable
skirmish	torture	uproar
slam	travesty	upset
slap	treacherous	V
slump	treason	vague
squabble	trick	violate
stalemate	tumble	volatile
stern	tumult	vulgar
stigmatize	turbulent	W
stinging	tyrant	waste
stormily	U	wasteful
stormy	unaccomplished	
strange	unadvised	
stranglehold	unanswerable	
strangulate	uncomfortable	
stricken	unconscionable	
struggle	uncorrectable	
stuck	uneasy	
subjugate	uneven	
subvert	unfair	
suffer	unfavorable	
suffocate	unfit	
suicidal	unidentified	
suspenseful	unleash	
suspicious	unorganized	

APPENDIX F

LIST OF WORDS IDENTIFIED BY RESPONDENTS AS ENTHUSIASM WORDS

A	alliance	bright	contribute	efficiency
able	ally	brilliance	convenience	efficient
able-bodied	ambitious	brotherhood	convenient	elated
abound	amenable	brotherly	conventional	elation
absolute	amend	C	cool-headed	emancipate
abundance	amnesty	calm	cooperate	embrace
abundant	ample	capable	cooperation	enable
acceptable	anniversary	care	coordinate	endurance
acceptance	annual	careful	cooperation	endure
accepted	appealing	celebrate	coordinate	energetic
acclaim	appreciate	ceremonial	correct	enrich
accommodate	appropriate	ceremony	corrective	ensure
accomplish	approval	champion	courage	entrust
accord	aspiration	charity	courageous	equivalent
accuracy	assist	charm	courteous	euphoria
accurate	attractive	cheer	credible	everlasting
achievable	authentic	cheerful	crucial	everyday
achievement	awesome	cheerily	D	everywhere
active	B	clean	defend	excel
actualize	balance	cleanly	defense	excellence
adept	beautiful	clear-cut	defensible	excite
adequate	befriend	clearly	defuse	exemplary
admirable	belong	collaborate	deposit	exemplify
admiration	beloved	collective	desirable	exuberant
admire	benefactor	comfort	diplomatic	F
adore	beneficial	comfortable	distinctive	fair
advancement	benefit	commend	distinguishable	familial
advantage	benevolence	commendable	durability	familiar
affection	better	compassion	durable	familiarity
affinity	betterment	competence	duteous	familiarize
affirm	bloom	competent	dutiful	family
affluent	bond	compliment	duty	fantastic
agree	bonus	confidence	E	favorable
agreeable	boost	confident	easily	feasible
alive	bountiful	confirmed	ecstasy	first-rate
allegiance	brave	considered	ecstatic	fit
alleviate	breakthrough	consistent	effective	fix

fixture	heartfelt	likeminded	outstanding	profit
flexible	hero	likeable	overcome	profitable
flourish	heroic	logical	P	progress
forgive	honest	longevity	painless	progression
found	honor	lovely	passable	prominence
free	honorable	loyal	passive	proof
freedom	hopeful	luckily	patriot	proud
friendly	I	lucky	patriotic	Q
friendship	ideal	luscious	patriotism	quality
fulfill	illuminate	luxury	perfect	R
G	improve	M	perfection	rally
gain	improvement	magnificent	persist	reassurance
generosity	improving	maintain	persistent	reassure
generous	infinite	maintenance	persuadable	recognition
gentle	innovation	manageable	persuade	recognizable
gently	inspiration	marvel	pinpoint	recognize
gift	inspire	marvelous	pleasant	reconcile
glad	invigorate	masterful	pleasurable	reconciliation
glamorous	invulnerable	masterly	pleasure	reconstruct
glee	J	meditate	plentiful	redeem
glorious	jackpot	merit	plethora	redemption
glory	jubilant	modest	poise	rejoice
goal	jubilation	momentous	popular	rejuvenate
good	K	monumental	popularity	remarkable
goodness	keepsake	N	popularize	replenish
goodwill	kindly	nationalism	positive	resilient
grace	kindness	noble	positively	respectable
graceful	kinship	nonaggression	possibility	respectful
grateful	L	O	possible	respecting
great	landmark	open-minded	praise	reward
growth	leader	openhearted	praiseworthily	robust
H	legend	operable	praiseworthiness	S
happiness	legitimacy	opportunity	praiseworthy	safe
happy	legitimate	optimism	precise	safeguard
harmonious	liberate	optimum	prestigious	safekeeping
harmony	liberty	orderliness	pretty	safety
headway	lifesaver	outbrave	proficient	salute

satisfactory	triumph
satisfy	triumphant
significant	trust
soften	trusting
spectacular	trustworthily
splendid	trustworthiness
splendor	trustworthy
stability	truth
stabilization	U
stabilize	unanimous
stable	unique
steadiness	unity
steady	upheld
stimulate	V
stimulation	valiant
strength	validate
strong	validation
strong-minded	validity
stronghold	valor
sturdiness	valuable
sturdy	venerable
succeed	venturous
success	verifiable
suitable	verify
superior	viability
surefire	viable
T	vibrancy
talent	vibrant
thank	victorious
thankful	victory
thorough	vitality
thoughtful	vitalize
thriftily	W
tidy	welcome
together	well-advised
tradition	well-balance
trailblazer	well-being

APPENDIX G

EXAMPLE EMOTIONAL LANGUAGE SENTENCES BY THE MEDIA AND THE PRESIDENT

Examples of Anxiety-Based Emotional Language Used by the Media on Health Care

19800611.016.06 1
Basic health care is now often provided through the outpatient department of a hospital, where costs are exorbitant and care often inappropriate.

19840412.019.03 1
It would be naive to expect that solutions to ever-escalating hospital costs, lack of access to health care for those unable to pay and threats to the fiscal integrity of medical institutions could be developed and implemented overnight.

19850125.017.03 1
The takeovers have left an uneven record concerning the overall quality of health care.

19870626.017.01 1
The financial costs alone worry health care specialists.

19890208.010.01 1
The changing AIDS epidemic is exposing gaps and weaknesses throughout the nation's health care system as growing multitudes of patients need a wider array of services.

19920420.012.02 1
At the heart of the growing crisis is the system's failure to contain the extraordinary escalating cost of health care, soon to exceed 13 percent of gross national product.

19930517.019.01 1
The slow progress is less reason for despair than evidence that health care reform is formidably difficult.

19931122.026.01 1
But what the nursing groups see as the natural evolution of health care the American Medical Association sees as a growing danger.

19940104.045.01 1
The President cast opponents of his health care plan as obstructionists who lack a commitment to universal health coverage and challenged them to defend their own plans.

20050919.022.01 1
Consider this: in the United States, unlike any other advanced country, many people fail to receive basic health care because they can't afford it.

20060111.170.02 1
But medical efforts to control it are consistently undermined, experts say, by the perverse financial incentives of American health care.

20070307.030.01 1
Adding up to 48 million new insured people to the health care system will overwhelm the delivery of health care by the medical profession, especially primary-care providers.

Examples of Enthusiasm-Based Emotional Language Used by the Media on Health Care

19811014.012.03 1
It is better health care and better health.

19820115.024.02 1
In part, this reflects advances in the quality of health care, improvements in the cure rate for certain diseases and the increased use of expensive medical technology.

19910529.010.03 1
Prescription drugs consistently show up among the lowest contributors to the overall cost of health care, and this country has by far the world's most efficient and cost effective system for the distribution of drug products.

19920626.035.01 1
The Democrats, like many Republicans, endorse the goal of "access to quality, affordable health care" for all Americans.

19930311.024.02 1
By better using nurses for primary care, the goals of national health care reform -- improved access to appropriate services at affordable cost -- can be achieved.

19930319.020.01 1
Supporters of the program contend that it also produces other benefits, like bringing improved health care to children and better social services to their families.

20020328.012.02 1
These programs are intended to increase access to health care in underserved areas by improving the quality, racial and ethnic diversity, and the geographic distribution of the health care work force.

20021213.012.01 1
That large insurers now see themselves as stakeholders in establishing health care for all Americans is commendable.

20030305.038.03 1
In good times, the plan worked, and it was widely praised as a resourceful use of limited public funds for health care.

20051025.013.04 1
Even better, all Americans, working or not, could be assured of receiving comprehensive, affordable health care.

20060904.012.05 1
But thanks to reforms begun under Bill Clinton, it's now providing remarkably high-quality health care at remarkably low cost.

20080830.017.02 1
In the long run, full coverage should serve as a springboard toward reforming the health care system to deliver higher quality, more cost-effective care.

Examples of Anxiety-Based Emotional Language Used by the Media on Poverty

19820415.019.01 1
The report, however, is not likely to settle the argument about the extent of poverty, even if the Government decides to adopt one of the methods recommended.

19841009.039.03 1
For instance, the Congressional Research Service, a bipartisan arm of Congress, reported in July that the budget reductions alone had pushed 560,000 people below the poverty line, 325,000 of them children.

19860205.030.04 1
After hundreds of billions of dollars in poverty programs, the plight of the poor grows more painful.

19880126.046.06 1
With the best of intentions, government created a poverty trap that wreaks havoc on the very support system the poor need most to lift themselves out of poverty - the family.

19890815.1490.03 1
The problem, he added, was that the War on Poverty was underfinanced and was fought with inadequate weapons.

19910701.13422.01 1
In the Bush Administration, the fight against poverty has been a slow go.

19920708.24561.01 1
The study said the rise in poverty rates was caused by the failure of wages to keep up with inflation and by government cuts in income-support programs.

19940310.39012.04 1
Depriving part-time workers of supplementary welfare payments, they say, would force some mothers to increase their work hours, thus spending less time with their children, or fall deeper into poverty.

19940715.41649.07 1
It was just absolute, total abject poverty.

19960816.57390.02 1
When we look into the face of poverty, we see the pain, the despair and the need of human beings.

20030927.111317.03 1
The percentage of people in severe poverty, those with incomes below half of the poverty threshold, increased to 14.1 million from 13.4 million.

Examples of Enthusiasm-Based Emotional Language Used by the Media on Poverty

19820405.175.03 1
That would mean that enormous progress had been made in recent years in the nation's ''War on Poverty,'' to use the 1965 definition.

19890815.1787.02 1
Harrington insisted that where the Federal Government was willing to spend money, as on programs for the elderly, it made progress against poverty.

19930730.35084.02 1
But White House officials said today that they were confident the Congressional conferees would approve a compromise that would allow the President to fulfill his pledge: that Americans who work 40 hours a week and have a child at home would no longer live in poverty.

19940126.38585.02 1
It will lift 15 million working families out of poverty, rewarding work over welfare, making it possible for people to be successful workers and successful parents.

19950915.49262.01 1
The $26 billion-a-year program is widely praised as one of the most effective anti-poverty measures in Government.

19961118.60313.01 1
Still, in public hospital waiting rooms, in medical clinics and in the offices of social welfare programs around the country, workers point to glimmers of improvement even with poverty and hopelessness.

19980210.68004.01 1
The Administration's report also said the nation has made some progress in reducing poverty among children in recent years.

20020219.102280.01 1
Some poverty experts point to progress in recent years.

20020430.103495.01 1
Under that law, states have had resounding success in reducing welfare caseloads and poverty.

20030307.108262.01 1
One of the more remarkable findings is that when mothers went to work, their household income nearly doubled, and most of the families were lifted out of poverty.

Examples of Anxiety-Based Emotional Language Used by President on Crime

19810928.021.01 1
Crime is an American epidemic.

19810406.005.04 1
Violent crime is the uncivilized shout that threatens to drown out and ultimately silence the language of liberty.

19830726.012.01 1
The challenge of crime today in America is a grave one.

19861015.014.05 1
This permissive attitude is one of the root causes for the crime epidemic that plagues this country.

19900724.038.02 1
But our crime bill faces another obstacle.

19910305.020.01 1
Today the fear of crime strikes too many American families.

19921006.004.04 1
Obviously, this will hamper the Justice Department's efforts to combat violent crime.

19940215.012.06 1
Crime is so bad I'm afraid to go outside.

19940409.004.02 1
None of our efforts to tackle other problems will work if we fail to address the overwhelming force of crime.

19940413.028.01 1
The fear of violent crime has made neighbors seem like strangers.

19940729.032.05 1
We have people who are growing up in mean streets and tough neighborhoods where there's too much crime and violence.

19981113.050.01 1
We know from painful experience that the most serious threat to the safety of police officers is a criminal armed with a weapon.

20020416.007.01 1
Many of the victims of crime have gotten a crash course in the complications and frustrations of our criminal justice system.

20040803.028.05 1
They’re vulnerable to gangs and crime and despair.

Examples of Enthusiasm-Based Emotional Language Used by President on Crime

19850813.011.01 1
We recognize the effectiveness and the growth of local crime watch organizations throughout the country and the major role they have played in turning the tide against crime.

19870828.012.01 1
Together, we've made great strides in the war on crime.

19911002.033.04 1
But our crime bill, and your work, your dedicated, selfless work will strengthen the hand of good.

19920424.006.02 1
They've set out to improve, protect, and strengthen the rights of crime victims.

19920424.018.01 1
I am proud of what this administration has accomplished on behalf of crime victims and their survivors.

19941219.014.04 1
If we listen to people at the grassroots level and enlist ourselves as your supporters, then we can continue to make progress on crime.

19950211.008.03 1
Last year, Democrats and Republicans joined together to pass the crime bill to keep that promise.

19950523.050.01 1
I'm very proud of the fact that the crime rate has come down in this country now in both years I've been President.

19950524.002.02 1
I am pleased that so many Americans are joining together to improve safety and reduce crime in communities across the country.

19970627.010.01 1
These criminal background checks make good sense; they save lives.

19990416.032.03 1
And the crime rate is at a 30-year low, and I'm grateful for it.

20020222.085.03 1
Well, first of all, I'm proud to report that violent crime actually is going down.

20020222.085.03 1
Well, first of all, I'm proud to report that violent crime actually is going down.

20080820.030.01 1
There's hopeful progress when it comes to reducing crime.

Examples of Anxiety-Based Emotional Language Used by President on Environment

19810116.763.01 1
One of the most pressing problems to come to light in the past four years has been improper hazardous waste disposal.

19861017.004.03 1
The danger of toxic wastes is perhaps the most pressing environmental problem confronting our country.

19890612.076.02 1
Moreover, ozone is suspected of playing a role in the long-term development of chronic lung diseases and permanent lung structure damage.

19900403.032.01 1
I again reject the extremists in the environmental movement who would burden our economy by mindless regulation, and I reject those who do not recognize their obligations to clean up our environment.

19920227.216.02 1
The slash-and-burn method employed by coca and opium poppy growers causes severe erosion of the soil, and indiscriminate disposal of the toxic chemicals used to produce coca derivatives is poisoning the rivers and the water table.

19950316.066.01 1
Second, too many businesses are afraid to come to the EPA for help in cleaning up their act because they're afraid they'll be punished.

19951104.010.01 1
This budget will mean dirtier water, more smog, more illness, and a diminished quality of life.

19971006.024.01 1
The great majority of the world's climate scientists have concluded, if we don't cut our emission of greenhouse gases, temperatures will rise and will disrupt the global climate.

19971118.062.06 1
And I think that we permit the degradation of our environment at our peril.

20011109.006.02 1
Exposure to toxic substances in the environment such as industrial pollutants, aerosol sprays, nontobacco smoke, and internal combustion engine exhaust may also aggravate or contribute to COPD.

20070331.065.01 1
So the fact of the matter is the following: That the climate change issue today is a severe disease.

Examples of Enthusiasm-Based Emotional Language Used by President on Environment

19820501.045.01 1
We're pursuing our goal of energy security while still respecting and protecting our environment.

19830422.002.06 1
We can be proud of the actions we have taken as a nation to protect the quality of the environment for ourselves and our children.

19891227.031.01 1
We're making some progress on the environment.

19901115.035.07 1
Today marks a great victory for the environment, a day when we have strengthened our clean air statutes, already the world's toughest.

19950902.014.04 1
It will maintain the purity and clarity of our environment.

19960917.032.02 1
Compared to 4 years ago, we have safer drinking water, cleaner air, food protected by better standards, more toxic waste dumps have been cleaned up.

19970630.012.04 1
I'm proud of the fact that we have taken dramatic strides to protect our environment with safe drinking water and new clean air standards and new food standards and record numbers of toxic waste dumps cleaned up and record land set aside in preservation forever.

20010530.013.01 1
This marks tremendous progress in protecting our Nation's environment.

20010628.004.02 1
These actions will increase the quality of life of Americans by providing reliable energy and protecting the environment.

20021202.009.03 1
This legislation shows that when Government and landowners and conservationists and others work together, we can make dramatic progress in preserving the beauty and the quality of our environment.

20030227.003.02 1
This demonstration project and the Carbon Sequestration Leadership Forum will build on these initiatives to provide the American people and the world with advanced technologies to meet the world’s energy needs, while improving our global environment for future generations.

20070222.012.04 1
The idea is to have zero-emission coal-fired plants here in America, and it’s possible, and we’re making progress toward that goal.

Examples of Anxiety-Based Emotional Language Used by President on Health Care

19830228.066.02 1
By doing so, they contribute both to the persistence of inefficient forms of health care financing and delivery and to overuse of health services.

19860206.124.02 1
A primary reason for the escalating cost of health care is that adequate incentives for keeping costs down were not built into the system, and there has been a lack of competition in the field of health services.

19920206.016.03 1
But cold statistics don't show us the worry that people feel, the all-too-familiar fear about what happens to their health care if they change jobs or, worse still, if they lose their jobs.

19920803.020.02 1
They think they can fix health care by slapping you with at least a 7-percent payroll tax to finance a Government takeover scheme.

19930501.008.05 1
And of course, we're facing the big crisis of health care, trying to guarantee security to all Americans and control costs so that we can move forward with the kind of basic health care that other people in other countries take for granted but that threatens to bankrupt America.

19930916.044.04 1
Look at the Americans in peril of losing their health care.

19940321.076.01 1
Make no mistake about it, the guardians of gridlock, the people who liked our national politics when it was about distraction, division, and destruction, are doing everything they can to stop health care reform.

19940624.066.03 1
Not only that, the burden of paying for health care is wildly uneven and unfair.

19951215.002.04 1
The cuts they propose would deprive millions of people of health care: poor children, pregnant women, the disabled, seniors in nursing homes.

20060503.052.02 1
That is harmful for our health care system.

20071217.069.01 1
And to me that would mean that the greatest health care system in the world would head toward mediocrity quite rapidly.

Examples of Enthusiasm-Based Emotional Language Used by President on Health Care

19841003.005.01 1
Progress in medical science and the generally rising level of health care available from birth onwards have been among our Nation's greatest achievements in this century.

19860206.122.02 1
More people receive better health care services here than anywhere else in the world.

19920206.014.02 1
American health care is first-rate.

19920221.039.02 1
It improves our health care system, which provides the highest quality care on Earth.

19930125.042.06 1
So whatever course we take, we will preserve what is best about American health care, some consumer choice and the quality of care.

19940405.010.01 1
There's so much that's good about our health care system, and that which is good is the best in the world.

19960321.006.01 1
It is a true bipartisan, almost a nonpartisan effort to make an honest endeavor to bring health care to millions of Americans who've been shut out of the market.

19960821.012.03 1
In passing this Act, a modest but important step has been taken to improve Americans' access to health care coverage.

20010322.023.05 1
These are good programs, and it's an effective part of the delivery of health care.

20010713.004.01 1
I am so proud of the health care system of America.

20031125.012.01 1
This Nation’s health care is great.

20071220.001.03 1
First, I’m inspired by the quality of health care.

20080128.014.02 1
We share a common goal: making health care more affordable and accessible for all Americans.

20080820.029.01 1
The health care system is improving.

Examples of Anxiety-Based Emotional Language Used by President on Poverty

19801021.205.06 1
The country is poverty stricken.

19811021.005.04 1
The problems of hunger and poverty are severe and deeply rooted.

19860204.037.04 1
After hundreds of billions of dollars in poverty programs, the plight of the poor grows more painful.

19860215.009.01 1
We're in danger of creating a permanent culture of poverty as inescapable as any chain or bond; a second and separate America, an America of lost dreams and stunted lives.

19870209.029.01 1
We have to fight the impulse of many to believe that one policy change or reform, written and implemented here in Washington, can solve the problem of poverty and welfare dependency.

19880125.050.06 1
With the best of intentions, government created a poverty trap that wreaks havoc on the very support system the poor need most to lift themselves out of poverty: the family.

19890715.020.02 1
Extreme poverty and exclusion from society violate the dignity of everyone enduring them.

19910818.124.02 1
It's isolation and it's degradation and it's excessive poverty that keeps the wage rates disproportionately low.

19920430.016.01 1
Now, I know this, and we all know it, and we all feel it in our hearts: There are places in America where people are caught up in a tragic cycle of despair and poverty.

19930707.022.02 1
There are still millions in abject poverty.

19940520.018.03 1
In many places devastated by poverty and despair, we have seen the absolute collapse of families and work itself and the sense of community.

20020314.014.04 1
Yet persistent poverty and oppression can lead to hopelessness and despair.

Examples of Enthusiasm-Based Language Used by President on Poverty

19850528.055.01 1
We're offering a ladder of opportunity for every family that feels trapped, a ladder of opportunity to grab hold of and to climb out of poverty forever.

19860206.040.05 1
The significant decline in the percentage of the population in poverty in 1984 reflects both the success of our programs and the strength of the economy.

19860513.008.04 1
The poor are now increasingly able to dig themselves out of poverty, and that's been good economic news.

19940309.006.01 1
This earned-income tax credit can help to improve the lives of working people all across the country by lifting them above the poverty line.

19960516.026.03 1
The poverty rate has dropped, and this country is coming together.

19981102.010.03 1
I'm grateful that poverty rates are dropping among all Americans and minority Americans.

19990620.050.03 1
It will help to reduce poverty and expand opportunity.

20000927.012.03 1
Just in the last 2 days-we were able to announce yesterday that poverty was at a 20-year low, and that minority-African-American and Hispanic poverty dropped more than ever before from one year to the next, last year, and more than in 34 years for children, that median income was above $40,000 for the first time in the history of America.

20001004.019.05 1
Last year we had the biggest drop in child poverty since 1966, because we have a stable and growing economy.

20010116.009.01 1
The other thing I'm quite proud of is that the poverty rate has gone down to a 20-year low.

20020320.010.04 1
When you add up all the new money, it equals about $10 billion or so, and that will be money to help alleviate poverty.

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