THE AGENDA-SETTING EFFECTS OF NEW MEDIA ON THE POLICY AGENDA: A QUANTITATIVE CONTENT ANALYSIS OF THE BLOGOSPHERE AGENDA, ONLINE ELITE MEDIA AGENDA, SPECIALIZED PUBLIC OPINION AGENDA, INTEREST GROUP AGENDA, AND THE POLICY AGENDA

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To my dad, Paul R. Vaughn

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In recent years, the general public has developed an increased concern for where

their food comes from, how animals were treated prior to processing, and how

agriculture is affecting the environment. During this same time, public understanding of

agriculture has decreased, thus there is an increased need for research in this area.

Agricultural policy is complex. Decisions made in United States' agricultural policies

encompass multiple levels, from production agriculture to marketing and sales, which in

turn affect markets in countries around the world. The Internet has changed the way

people communicate and transfer information, but the effects on agenda setting and the

transfer of salience of objects and attributes has continued to take place in this new

environment. However, this issue has not been explored in an empirical way and the

effects of the blogosphere agenda and its affect on the policy agenda has not been

explored in research. This study worked to fill this gap through the objectives to

determine what tones are used when discussing the object of the 2009 Cap & Trade

legislation, determine if attributes that appear in the blogosphere agenda, interest group

agenda, elite media agenda, and the public agenda) with regard to 2009 Cap & Trade

legislation (H.R. 2454), recur in the same policies once they are passed through the House of Representatives; determine if there is a difference in tone depending on the source (mass media, interest groups, public agenda, and 2009 Cap & Trade legislation (H.R. 2454)); and determine the predictive relationship among the blogosphere, mass media, interest groups, public agenda, and 2009 Cap & Trade legislation (H.R. 2454).

This study utilized a quantitative content analysis to address these research objectives and found that attributes discussed in the blogosphere, elite media, public, and interest groups agendas were transferred to the policy agenda. Moreover, there was a statistically significant predictive relationship of the blogosphere, elite media, interest group, and public agendas on the policy agenda. This study confirms that a statistically significant two-way relationship exists between the blogosphere agenda and the elite media, public, and interest group agendas. However, this study failed to conclude that a two-way relationship exists between the interest group agenda and the public and elite media agendas. It is recommended that future research look into the potential two-way relationship between the interest group agenda and the public and elite media agendas and that practitioners seek to engage in conversations in new media forums in an effort to influence the policy agenda.

CHAPTER 1
WHAT INFLUENCES AGRICULTURAL POLICY AND THE POLITICAL AGENDA?

Introduction

In recent years, the general public has developed an increased concern for where their food comes from, how animals were treated prior to processing, and how agriculture is affecting the environment. As a result, public concern over policy that affects agriculture has increased (Blandford & Fulponi, 1999). During this same time, public understanding of agriculture has decreased, and the average American has moved farther away, literally and figuratively, from production agriculture (Kellogg Commission, 1999). Less than 1% of the American population claims production agriculture as their primary occupation, and only 2% are directly involved in it full time (U.S. Environmental Protection Agency, Ag 101, 2009). Thus, a population of people does not have a first-hand knowledge about food production, but are voting and making policy decisions that affect all agricultural producers and, by extension, American consumers.

Agricultural policy is complex. Decisions made in United States' agricultural policies encompass multiple levels, from production agriculture to marketing and sales, which in turn affect markets in countries around the world. For example, when a change is made to the Farm Bill price sets for a commodity like corn, this change will affect how much income is made on the farm, the cattle producers who purchase corn for feed, the food companies that use corn in their products, the consumers who purchase products made with corn, and the countries outside the United States that purchase corn on the world market. These economic effects are exacerbated when combined with the effects of agricultural policies on society, and "governments are being pressured to ensure that

public concerns are addressed" (Blandford & Fulponi, 1999, p. 1). All of these difficulties come together to make agricultural issues arguably the most contentious of policy issues (Blandford & Fulponi, 1999). Consequently, it is no surprise why a concern over the lack of understanding of an industry that feeds and clothes so many is growing. These intensifying concerns make research related to agricultural policy both pertinent and imperative.

Public Policy and Policy Development

The origins of the study of public policy date back to 1922, when political scientist Charles Merriam recognized a link between traditional political theory and its application to behavioral theory and reality (Birkland, 2005). Public policies arise to solve social problems which can be focused on a myriad of issues, such as crime, education, foreign policy, health, social and animal welfare, the economy, and agriculture (Weimer & Vining, 2005).

The U.S. political system is an open democratic system and, as such, there are multiple contributors to policy development who often have a stake in the outcome of policy decisions (Jones, 1970). Additionally, contributors typically have an individual agenda associated with them or their organizations. Some of these contributors to policy development — other than legislators themselves — are interest groups and scientists concerned with a specific issue; the public, which is comprised of constituents in multiple districts; the media; and the internal support staff of the policy makers.

These contributors and development processes take place on both a state and federal level, with the majority of research studies on policy development focusing on the federal level. Multiple reasons exist for this, some of which are state policy development is so varied in each state, the issues at the state level are usually based

on one issue which makes a small scale case study more important, and the majority of the issues that are long term occur at the federal level (Hathaway, 1963). As such, the present study will also look at these contributors and policy development processes at a federal level.

Federal policy makers look to contributors to help them develop the final policy and make decisions about what elements should be included (Jones, 1970). These contributors vary, depending on the problem associated with the policy, such as interest groups concerned with a specific issue. An example of an agriculturally focused interest group would be the American Farm Bureau, which is "the largest U.S. farm group and often described as the most influential" (Abbott, 2010, para. 3). This group would be involved in advocating for a policy like the Farm Bill, but may not be involved in policy development related to women's rights.

An often discussed group that is credited with influencing policy is that of lobbyists. Coalitions of lobbyists and grassroots lobbyists exist, but, in general, lobbyists represent some form of special interest group. The direct effect of lobbying activities, which are often paired with campaign or Political Action Campaign (PAC) contributions, is debated in the literature (Brown 1983; Sabato, 1984). However, it is clear that lobbying activities work to shape the political agenda and corresponding legislative debate (Wright, 1990). As such, it can be concluded that messages conveyed by lobbyists likely appear in other outlets, like the mainstream media and interest group testimony and literature. Wright (1990) concluded that lobbying efforts and campaign contributions are one small part of what influences policy makers. These decision makers are looking at the entire landscape of opinion on these issues, which includes all interest groups and the public

agenda (Wright), which is comprised of the issues of major importance to the general public at one particular time (McCombs M. E., 2004). Often lobbying efforts simply reinforce what has already been seen in other realms of communication (Wright). The direct efforts of lobbyists are beyond the scope of this study, but because of the overlapping nature of interest groups and the public agenda, messages from the lobbyists may likely be analyzed in this study as a part of the public or media agenda.

One of the most influential groups in the process of federal policy development is the Congressional support staff, specifically the legislative aides (LAs) (DeGregorio, 1988). LAs complete a multitude of tasks including reading bill text, responding to requests from constituents, researching bills, and even speaking with media. In some cases, LAs have been in their current post longer than the Representative they work for, so they hold a wealth of knowledge and experience. Like any job, some LAs are short-term, but there are many that are long-term career LAs that "love the congressional environment and thrive on being so close to power and having opportunities to influence public policies" (Romzek & Utter, 1996, p. 23). DeGregorio (1988) determined that LAs do have a significant influence on policy makers. Due to policy makers' extremely busy schedules and increasingly demanding workload, they must rely on LAs to communicate to them the issues of importance with regard to the development of policy and synthesize this information for them (Davidson & Oleszek, 2000). Thus, the other contributing groups to policy development, like interest groups, the public, scientists, lobbyists, and media, continually work to influence legislative policy decision makers through their LAs, using multiple channels, with each group vying to see their group's interests represented in the final legislation (Lowi, Ginsberg, & Shepsle, 2007).

Role of The Internet in Political Discourse

The Internet has changed the way people communicate and transfer information. The Internet has been lauded as the fastest diffusing technology in recent history (Goodman, Burkhart, Press, Tan, & Woodard, 1998), and its use continues to grow, in part, because of the speed at which information can be transferred (Garrison, 2000). During a time when public understanding of agriculture has diminished, the American public's access to information has increased. Internet access in the U.S. was reported at 5 million users in 1995, with a staggering growth of 50 million Americans having internet access by 1999 (Stempel, Hargrove, & Bernt, 2000). As of July 2009, there were 231 million internet users in the United States out of the over 307 million people in the United States during the same time frame (CIA World Factbook, 2010).

Not only has access grown, but one recent study determined that internet users are specifically seeking scientific- and policy-related information while online. Schroeder, Caldas, Mesch, and Dutton (n.d.) examined how the Internet may reconfigure access to scientific information. Results indicated that scientific information is now more accessible to the masses through new information technology like the Internet. McNutt (2008) found an active policy network on the Web that includes multiple actors involved in making policy decisions.

The growth of the Internet has resulted in an increased use of online newspapers in recent years and, at the same time, a decline in readership of the traditional paper newspaper. The Newspaper Association of America reports that monthly traffic to online newspapers was 73.3 million unique visitors in 2009 (Langeveld, 2009). This results in 43.6% of internet users visiting online newspapers at least monthly, which was a 10.5% increase from the same point in 2008 (Langeveld, 2009). In 2009, only 25% of

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Americans reported reading a print-only version of a newspaper, 5% reported reading print and online, while 39% said they read an online newspaper only (Pew Research Center, Newspapers Face a Challenging Calculus, 2009). This shift has been lauded as offering the potential for two-way communication in interactive online components of newspapers. This is of note because two-way communication is recommended as preferred communication for many organizations and offers more interaction and is regarded highly within the public relations profession (Grunig L. A., 1997). Two-way communication enables audience engagement and promotes continued attenuation which is considered valuable in multiple theoretical bases including active audience theory, uses and gratifications, Grunig's models of public relations, and opinion leadership.

Multiple studies have been conducted about the relationship among the mass media, public opinion, and political elections (McCombs M. E., 2004). However, little has been done to evaluate the effect of the Internet on policy development, especially agricultural policy. While clear evidence exists that information about policy and an active exchange of ideas about policies occurs through the Internet, it is unclear how directly influential these information sources are on final policy development.

The Blogosphere and Policy Development

One element of the online policy network that has been determined to be extremely active is the blogosphere, which is comprised of individual blogs. Blogs, or web logs, are websites that operate almost as a diary of an individual or organization. They are simple Web publishing systems that are easy to use and allow for the sharing of ideas, the advancement of political and personal issues, and can offer an alternative news source (Rigby, 2008). Blogs allow for two-way communication through comments

and are an avenue for online conversation (Rigby, 2008). Wallsten (2007) determined specifically that the blogosphere is affected by the mass media and vice versa, so an indirect connection between policy development and the Internet may be implied, but more research needs to be conducted to determine the exact relationship.

However, political discourse is active in the blogosphere, with bloggers and blog readers engaging in the exchange of ideas and actively seeking to shape the political agenda, encouraging unified action, and initiating mobilization (Pole, 2010). The blogosphere is continuing to grow, as represented by a study from the Pew Research Center (Smith, 2008) which determined how many internet users have read an online journal or blog and determined that 42% of internet users (representing 32% of all adults) had read an online journal or blog. This number decreased to 33% of internet users when asked if they read a blog on a regular basis and to 11% when asked if they read a blog on a typical day (Smith, 2008).

Because it has been determined that LAs are so influential on policy makers, multiple studies have examined the preferred channels of communication of LAs and have determined that LAs prefer electronic channels of communication (Boone, Tucker, & McClaskey, 2002; Webb & Tidwell, 2009). While electronic communication can include everything from e-mail to online newspapers, a growing body of evidence suggests blogs influence political discourse (Wallsten, 2007). A study conducted by Song, Chi, Hino, and Tseng (2007) suggested that blogs are having an influence on political discourse because bloggers are opinion leaders and gather information of importance and consequence and communicate it to the masses through their respective blogs. Additionally, the researchers developed an InfluenceRank algorithm

that has proven effective in identifying influential opinion leaders in the blogosphere

(2007). Song et al. demonstrated this algorithm as a blog summarization system which

uses leverages of influential blogs to capture the opinions in the rest of the blogosphere.

This resulted in the summarization derived from the influential blogs providing a diverse

and comprehensive summary of current opinions in the blogosphere.

Moreover, studies have determined blogs have a noteworthy influence on

mainstream media and on political and campaign discussion (Wallsten, 2007; McQuail,

2008). However, the impact of political blogs on politics and civic engagement has not

been studied in a systematic way (Pole, 2010), and a gap in knowledge exists about

how directly influential the blogosphere is on final policy development.

Political Agenda Setting

The theoretical base that serves as the foundation for this study deals with the

setting of the political agenda. The theory of agenda-setting involves the influence of the

media – in most cases the mainstream media – and its ability to tell the public what

issues are important (McQuail, 2008). At the core of agenda-setting is the public's

awareness of issues and the salience of these issues, which collectively represent the

public agenda. The more often people hear about an issue, the more likely it is to be

salient with them (McCombs M. E., 2004). For example, in the case of animal welfare,

the more often people hear a news story related to the treatment of animals, the more

likely they are to identify with this issue and pay attention to policy related to animal

welfare, which may transfer to this issue being a part of the public agenda.

Another important component of political communication is the tone associated

with content related to a certain candidate or an issue (McCombs M. E., 2004). Often,

studies evaluate the tone of a message using multiple categories, which on a basic level

may include considerations such as whether a positive or negative tone is present in a message. For example, a group in favor of climate change policy would likely communicate using messages with positive tones about the legislation like "this legislation has the ability to positively impact the environment, improve air quality, and decrease emissions." Upon identification of the descriptions, the tone of these descriptions may be compared with substantive categories to determine if a correlation exists between attributes (McCombs M. E., 2004).

The measurement of salience can be divided into two levels: object salience and attribute salience. Object salience is simply a connection between a specific issue or object in the media agenda and in the public agenda. This is called the first level of agenda setting (McCombs M. E., 2004). Attribute salience is the second level of agenda setting, where "specific aspects of media content about public affairs are explicitly linked to the shape of public opinion" (p. 85). Thus, these attributes are salient in the public agenda. This concept can be measured through comparing the themes and language appearing in media content, sometimes called a frame, and in determining how often and for how long they appear in the mass media agenda. Often, the timeframe of the increases and decreases of public concern, or the public agenda, on a specific issue mirrors that of the mass media agenda (McCombs M. E., 2004).

Beyond these second-level effects, there is a component related to the process of agenda setting, which is the compelling argument (McCombs M. E., 2004). The compelling argument connects the attribute salience on the media agenda with the object salience on the public agenda. In essence, because coverage of an issue contains a compelling argument, the issue may be more salient with the public

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(McCombs M. E., 2004). For example, the emotional appeal of "saving" the family farm is picturesque which provides a compelling argument that may be more salient with the public than an argument to save large production agriculture. McCombs, Lopez-Escobar, and Llamas (2000) divided attributes into affective and substantive elements. Substantive attributes help people cognitively structure news and distinguish among various topics and personalities while affective attributes elicit emotional reactions from consumers of information (Kiousis, Bantimaroudis, & Ban, 1999).

Some research exists comparing agenda-setting in the mass media and the blogosphere. Results of these studies indicate the mainstream media affects the blogosphere agenda and vice versa (Wallsten, 2007; Delwiche, 2005), and in some situations these agendas overlap (Delwiche, 2005); however, no clear pattern has been determined as to why or when this occurs. This may represent a decentralization of communication and a change in the flow of information (Delwiche, 2005). However, it is still unknown how the blogosphere contributes to setting the political agenda.

Policy that Affects Agriculture

Some policies can be explicitly defined as agricultural policies at the federal level, like the Farm Bill and Crop Insurance Legislation. However, a myriad of other policies affect agriculture, but are not specifically developed and defined as agricultural policy. These policies include items such as animal welfare, which may affect groups like the Organization of People for the Ethical Treatment of Animals (PETA) and the Humane Society of the United States (HSUS), but also has implications for how production agriculture handles livestock. Another example of this type of policy is climate change policy. On the surface, it may seem to only affect those with a passion for environmental

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issues; however, the implications for these policies affect the daily operations and long-term success of production agriculture.

This study will examine a piece of climate change policy, H.R. 2454, also called Cap and Trade, Waxman-Markey, or The American Clean Energy and Security Act of 2009 (H.R. 2454, 2009), that clearly represents a policy that affects agriculture but also affects multiple industries and eventually will affect the average consumer. Moreover, industries that are energy-intensive will be affected more by this type of legislation including manufacturing, transportation, retail and wholesale trade, fabricated metal, and agriculture (Kreutzer, Campbell, Beach, Lieberman, & Loris, 2009).

It has been estimated that agriculture would be excessively disadvantaged by H.R. 2454. Many reasons for this exist, including "higher gasoline and diesel fuel prices, higher electricity costs, and higher natural-gas–derived fertilizer costs [which] all erode farm profits, which are expected to decline by 28 percent in 2012 and average 57 percent lower through 2035" (Kreutzer, et al., 2009, p. 3). Because the effects of such legislation will hamper agricultural producers' day-to-day operations, consequences of such legislation may include higher food prices for the American consumer and lower international competitiveness for the U.S. agricultural producer. It is estimated that food costs could rise to an average of $33 billion annually in 2020 and up to $51 billion annually by 2030 (Florida Farm Bureau, 2009).

Background on H.R. 2454: Why This Bill? Why Now?

As with most policies, H.R. 2454 was initiated with the intention of solving problems, specifically, that 85% of U.S. energy currently is derived from carbon dioxide (CO_2). As the American population increases, energy becomes increasingly scarce and the current reliance on foreign oil becomes more undesirable (Energy Information

Administration [EIA], 2009). While climate change is a global externality of living on the planet (Frankel, 2009), some scientific debate occurs about the extent of climate change. The most conservative estimates average 4% increase in global temperature, which may seem low, but changes could be much more severe in certain areas (IPCC, 2007). Although carbon dioxide is the largest and most talked about greenhouse gas, it is not the only greenhouse gas emitted or of concern for regulation. Other greenhouses gases include methane (CH_4), nitrous oxide (N_2O), and industrial gases such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) (EIA, 2009). Some of these greenhouse gases occur naturally and are needed to sustain life on the planet. However, some of these gases, like the industrial gases, are produced exclusively by humans. An excess of greenhouse gasses is a concern of scientists for future temperature increases on the planet (EIA, 2009).

In response to these problems, H.R. 2454 was introduced on May 15, 2009 (H.R. 2454, 2009). The cap and trade policy concept included in H.R. 2454 was envisioned by a University of Wisconsin graduate student on economics in the 1960s and has been adopted by countries in Europe in recent years (Hilsenrath, 2009). The bill was introduced in the U.S. Congress by Congressmen Henry A. Waxman and Edward J. Markey, and was referred to multiple committees (H.R. 2454, 2009). The primary committee was the House Committee on Energy and Commerce where hearings were held May 18-21, 2009; the bill text was revised and reported out May 21, 2009. Two amendments were proposed; one was rejected and no action has been taken as of yet on the other. The bill passed the House narrowly by a vote of 219 to 212 on June 26,

2009. A companion bill is being considered in the Senate which was scheduled to be considered in spring of 2010, but the issue was delayed (Talley, 2009).

The goals of H.R. 2454 include reducing the total U.S. greenhouse gas emissions by 83%, which is below the levels in 2005, by the year 2050 through limiting the use of fossil fuels (EIA, 2009). It is estimated that this is the level of emissions in the U.S. in the year 1910 when there were 92 million Americans, whereas, today's U.S. population totals over 300 million people (CIA World Factbook, 2009). This bill is also referred to as the Cap and Trade Bill because the legislation would set limits for the six greenhouse gasses of most concern, while allowing companies to buy and sell permits for emitting these gasses (Woster, 2009). According to an analysis by the Environmental Protection Agency (EPA) this bill would:

> (1) advance energy efficiency and reduce reliance on oil; (2) stimulate innovation in clean coal technology to ensure that coal remains an important part of the U.S. energy portfolio by capturing harmful greenhouse gas emissions before they enter the atmosphere; (3) accelerate the use of renewable sources of energy, including biomass, wind, solar, and geothermal; (4) create strong demand for a domestic manufacturing market for these next generation technologies that will enable American workers to serve in a central role in our clean energy transformation; and (5) play a critical role in the American economic recovery and job growth – from retooling shuttered manufacturing plants to make wind turbines, to using equipment and expertise in drilling for oil to develop clean energy from underground geothermal sources, to tapping into American ingenuity to engineer coal-fired power plants that do not contribute to climate change. (EPA, 2009, p. 1)

However, there are still some uncertainties about the feasibility of a bill that promises to do so much. Multiple analyses with varying degrees of differences in what this bill will cost to implement and the effectiveness of the over 1,400 pages of H.R. 2454 have emerged. However, consensus is nonexistent. Because H.R. 2454, is an example of a bill that affects agricultural producers, which has passed in the U.S.

House, is currently being considered by the Senate, and is being discussed in a public forum, it is a logical and timely choice to deconstruct in an effort to determine the influences on policy development.

Purpose and Objectives

The purpose of this study is to gain a greater understanding of the influences in the development of public policy, particularly with regard to policies that affect agricultural producers. An example piece of legislation that affects agriculture will be used in this study, H.R. 2454, which has potentially sizeable effects on agricultural producers. The following objectives have been developed to guide this study:

- Determine what tones are used when discussing the object (2009 Cap and Trade legislation);

- Determine if attributes that appear in the blogosphere agenda, as compared to other agendas (mass media agenda, interest group agenda, and the public agenda) with regard to the policy agenda (2009 Cap and Trade legislation), recur in the same policies once they are passed through the House of Representatives;

- Determine if there is a difference in tone depending on the agenda (mass media agenda, interest group agenda, public agenda, and policy agenda); and

- Determine the predictive relationship of the blogosphere agenda, mass media agenda, interest group agenda, and public agenda on the policy agenda.

Operational Definitions

Blogosphere agenda: A collection of topics and concepts that are of high importance and relevance within the blogosphere at a certain point and time.

Mass media agenda: At the core of the theory of agenda-is the concept of the media and its ability to tell the public what issues are important (McQuail, 2008). The mass media agenda is a collection of topics and concepts that are of high importance and relevance to the mass media at a certain point and time.

Interest group agenda: A collection of topics and concepts that are of high importance and relevance within the major interest groups (via hearing testimony) at a certain point and time.

Public agenda: At the core of agenda-setting is the public's awareness of issues and the salience of these issues, which collectively represent the public agenda. The more often people hear about an issue, the more likely it is to be salient with them (McCombs M. E., 2004).

Tone: Important component of political communication. Tone may be associated with content related to a certain candidate or an issue (McCombs M. E., 2004). Often, studies evaluate the tone of a message using multiple categories, which on a basic level may include considerations such as whether a positive or negative tone is present in a message. Diction (2010) measures tone on a basis of 32 tenets that collectively have been determined to make up the tone of a message or text.

Attributes: Attribute salience is the second level of agenda setting, where "specific aspects of media content about public affairs are explicitly linked to the shape of public opinion" (McCombs, M. E., 2004, p. 85). McCombs, Lopez-Escobar, and Llamas (2000) divided attributes into affective and substantive elements. Substantive attributes help people cognitively structure news and distinguish among various topics and personalities while affective attributes elicit emotional reactions from consumers of information (Kiousis, Bantimaroudis, & Ban, 1999).

Summary

Public concern over policy that affects agriculture has grown (Blandford & Fulponi, 1999). However, public understanding of agriculture has decreased, and the average American is distanced from production agriculture (Kellogg Commission, 1999). Due to the emotional and economic implications of agricultural policy, agricultural issues are arguably the most contentious policy issues (Blandford & Fulponi, 1999). Policy makers use input from multiple groups to help them develop policy (Jones, 1970) with a major group of influencers being their legislative aides (LAs) (DeGregorio, 1988), who prefer electronic forms of communication (Boone, Tucker, & McClaskey, 2002; Webb & Tidwell, 2009). The role of the Internet in policy development has grown, and a growing body of evidence suggests specifically that blogs influence political discourse (Wallsten, 2007) through the exchange of ideas with the goal of actively seeking to shape the political agenda, encouraging unified action, and mobilization (Pole, 2010). However, it

is unclear how directly influential these sources are on final policy development, as this issue has not been studied in a systematic way (Pole, 2010).

One aspect of the study of public policy involves the setting of the political agenda which considers the influence of the media-in most cases the elite, mainstream media-and its ability to tell the public what issues are important (McQuail, 2008). At the core of agenda-setting is the public's awareness of issues and the salience of these issues. The more often people hear about an issue, the more likely it is to be salient with them (McCombs M. E., 2004). While agenda setting has been explored in the mass media, it is still unclear how new media contributes to setting the political agenda.

Policies may affect agriculture in a direct or indirect way. This study is concerned with a piece of climate change policy, H.R. 2454 also called Cap and Trade, Waxman-Markey, or The American Clean Energy and Security Act of 2009 (H.R. 2454, 2009), which has steep implications and disadvantages for the daily operations and long term success of production agriculture (Kreutzer et al., 2009; Florida Farm Bureau, 2009). Because H.R. 2454 affects agricultural producers, has passed in the U.S. House of Representatives, is currently being considered by the Senate, and is actively being discussed, it can be utilized to effectively determine the relationship of influences, specifically the influence of the blogosphere compared to other influences, on policy development.

CHAPTER 2
REVIEW OF RELEVANT LITERATURE

In an effort to gain a greater understanding of the influences in the development of public policy, literature from multiple disciplines was gathered. As this study was designed to answer questions about attributes that appear in the blogosphere and their transfer to other agendas, the tones used when discussing a specific piece of legislative policy (H.R. 2454), and the determination of the exact relationship among the blogosphere agenda and other agendas, it is necessary to explore literature related to the disciplines of communication, behavioral psychology, economics, leadership, and public policy. As such, this chapter begins by defining the blogosphere and interactions within the blogosphere, as well as how the blogosphere influences policy and political discourse. In addition, literature is utilized to develop a theoretical description of bloggers and blog readers specifically as opinion leaders. Next, this chapter will explore literature on the theory of the digital divide and underrepresented groups in the blogosphere. This literature will be followed by studies on policy development and the influences on the formation of policy and decision-making of policy makers. This is followed by literature related to the theoretical basis for this study, agenda-setting and agenda-building. Finally, this chapter will conclude with the theoretically anticipated relationship of the variables in this study.

Defining the Blogosphere

The first blog, or web log, started in December 1997 (Mathison, 2009). In early 1999, there were 23 known blogs published on Camworld. During this same period of time, a searchable directory of blogs was published at eatonweb.com. Later this same year, a company named Pyra Labs offered blog-creation software free of charge which

was an immense push for the future of blogs. Pyra™ later became Blogger™ which was ultimately acquired by Google ™ (Mathison, 2009). In response to the terrorist attacks on September 11, 2001, there was an extraordinary growth in the number of political and personal blogs. These events spurred a new type of blog category called war blogs (Gill, 2004). The growth of war blogs was intensified in March 2003, when U.S. and British forces entered Iraq (Gill, 2004). In the first three months of 2005, more than 30% of the U.S. population had visited a blog (Mathison, 2009). The Pew Research Center determined in 2008 that 42% of internet users (representing 32% of all adults) had read an online journal or blog (Smith, 2008). By March 2007, 150 new blogs were being created each day and in 2009 there were 65 million blogs with an estimated 50,000 new blogs continuing to be created every day (Mathison, 2009).

At the basic level, three core components are common to every blog: 1) text and image publishing, 2) continued post display in reverse chronological order, and 3) ability for readers to submit public comments (Rigby, 2008). Other blog features, that most blogs include, have developed out of necessity and/or ease of use for both the blog reader and the blogger. One such feature is a permalink. Because multiple posts began to clutter a blog and made finding a specific post difficult, today blog-posting software has evolved to give each blog post a permalink. A permalink is a copy of a blog post which is available at a Universal Resource Locator, more commonly known by the acronym URL, of its own, which allows for tracking of issues or linking to a specific post easier (Rigby, 2008). Another important feature of a blog is a trackback, which allows the connection of blogs, and actually "weave[s] the blogosphere together" (Rigby, 2008, p.32). A trackback, in essence, allows bloggers to cite other bloggers the way the author

of a book would cite other authors. Another component that connects blogs to each other is the blogroll. A blogroll is a list of links to other blogs which the blogger thinks are relevant to his/her blog or who the blogger shares a respect for or similar political views with. This persuades readers to go to more than one blog in an effort to create "a symbiotic blog universe" (Rigby, 2008, p. 33).

Other features which connect blogs to each other and to their readers exist. While these features are not necessarily limited to blogs, they do enable blogs to engage readers. The first of these features is a feed, which will include new posts from a blogger. A reader of a blog can subscribe to the feed from a specific blogger and receive a message when new posts are available or read the headlines of posts directly through a feed reader, which allows the blog reader to save time by skimming the headlines and clicking for the full post if it attracts his/her attention. Additionally, many readers have smart phone applications making reading blog feeds even easier (Rigby, 2008). Another feature that helps blog readers find the content they are seeking is tagging. A tag is similar to keywords in a story. It is a short phrase that communicates what a post is about that helps search engines find the post, organizes information within a blog, and contributes to the overall World Wide Web system (Rigby, 2008).

Additionally, the comment feature creates a forum for discussion as it allows readers to respond to a particular post. This is intended to be a way for readers not only to read the discussion, but also participate in it. This creates asynchronous two-way communication which has been recognized as one of Gruinig's models of public relations (Grunig, J. E., & Grunig, L. A., 1992). Moreover, in the Cybernetic Theory (Wiener, 1948), comments can be seen as interactive forums where the reader is able

to step beyond reading the blog post and contribute to the conversation. Kiousis (2002) compiled attributes from previous literature to create a definition of interactivity. To be interactive, the medium must include 1) two-way communication, where 2) the roles of the message sender and receiver are equal and interchangeable, and 3) the speed of communicating should be close to real-time, and include 4) third-order dependency, meaning people can participate in reciprocal message exchanges (Kiousis). In the majority of blog comments, all of these attributes are present. Some blogs operate differently, however, and the comments are only viewable if one clicks on a hyperlink to show comments. In the blogs reviewed for this study, the comments were visible at the bottom of each blog post, if not in entirety, then the first few.

The Blogosphere as a Theoretical Community

Blogs all working together interconnect with each other to form what is known as the blogosphere. The connections discussed thus far are basic technical connections, but the blogosphere offers a deeper, theoretical connection in nature and is often described as a community. Those who were spectators of media in traditional media delivery formats now have the opportunity to interact with the media purveyors, bloggers. Now blog readers, or bloggers themselves, can be considered more than a passive audience to media – they are now described in the literature as an interactive audience (Jenkins, 2006). Jenkins posits these interactive audiences are building a collective intelligence online through a new participatory culture that is occurring when three trends convene. These trends are

> 1) new tools and technologies enable consumers to archive, annotate, appropriate, and recirculate media content, 2) a range of subcultures promote Do-It-Yourself (DIY) media production, a discourse that shapes how consumers have deployed those technologies, and 3) economic trends favoring the horizontally integrated media conglomerates encourage the

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flow of images, ideas, and narratives across multiple media channels and
demand more active modes of spectatorship. (Jenkins, 2006, p. 135-136)

Jenkins argued these trends have changed the way media interact with their active
audiences and have changed the way groups organize. Jenkins built on Pierre Lévy's
(Lévy, 2001) work with decision-making and self-organized groups, putting it in the
context of virtual communities. These new knowledge communities that are self-
organized may have stronger attachments and emotional loyalties from their members
than the institutionally organized groups, which have seen diminished loyalties in the
past couple of decades (Jenkins, 2008). This diminished loyalty to traditional groups
and traditional civic engagement has been blamed on new technology by some
researchers, the foremost of which is Robert Putnam. Putnam specifically cited the
advent of television with the breakdown of civic participation and community life,
proposing that instead of engaging with each other, Americans are sitting at home
engaging with electronic forms of communication, like the television (Putnam, 2000).
However, this premise was prior to the two-way communication that is now possible
with current technologies. People, especially young adults, are now actively
participating and engaging online through fan sites and popular culture sites (Jenkins,
2006; Lewis, Inthorn, & Wahl-Jorgensen, 2005), as well as in political campaigns and
social movements (Rigby, 2008). The generations born after 1982 are a part of a new
group that has never known a time without the Internet nor a world where a sense of
duty was more important than self (Twenge, 2006). These groups are more likely to be
found in one of the many online social realms like the blogosphere, where they can
create their own institutions and groups and are comfortable interacting, seeking
information, exchanging ideas, joining campaigns and organizations, and exploring and

sharing new ideas in this interactive online environment (Rigby, 2008). This may explain the paradigm shift from in-person participation to virtual participation. Social institutions form around new technologies, like blogs, and the practices involved in their use (Lievrouw & Livingstone, 2006). The literature in this area recognizes that communication is not only about the transfer of information, but also includes the forming of connections (Yell, 2005), and, as a result, the building of communities online. As such, the blogosphere has given rise to what is now commonly called participatory journalism. Readers can have two-way conversations with bloggers acting as citizen journalists, which can provide multiple viewpoints as well as shared experiences (Gill, 2004).The same is true for online newspapers, which now often offer comment sections and a participatory nature, making the lines between professional journalists and their audiences blurred (Bruns, 2005).

Relationship Development Online

The Internet has changed the way people become social (Weinberger, 2002). Weinberger observed that early Web communication research alleged online relationships were negative and fruitless. However, Weinberger ascertains the opposite is true on the Web; in face-to-face interactions people become less intimate as the group gets larger, but on the Web "individuals retain the faces no matter what size of the group" (p. 24). As the result of the personal and anonymous nature of the Internet, personal relations formed online are common (Berge, 1994). In an exploratory study of online friendships, researchers found that nearly two-thirds of internet newsgroup users surveyed met and began a personal relationship/friendship with someone they met on the Internet (Parks & Floyd, 1996). These friendships were more than passing

acquaintances. Over 50% of those surveyed communicate with their online friends at least once a week and nearly a third communicate several times a week.

Current literature works to dispel the myths that emotional interaction is impossible over the Internet or that it is a constant roller coaster of emotion. Chenault (1998) noted a crossover from real life to cyber discussions as people bring their real-life problems and personalities into their online interaction. Other researchers find that the Internet is another vehicle for people to "find one another" and forge meaningful and lasting relationships (Rheingold, 1993). Users of online communication are free from typical social barriers or constraints and often more able to engage in online social activities where they can make friends (Spears & Lea, 1994).

The Influence of the Blogosphere on Policy and Politics

The blogosphere has been credited as having major political influence, with numerous bodies of literature citing the blogosphere with the now infamous political ousting of Senate Majority Leader Trent Lott in 2002 (Pole, 2010; Rigby, 2008; Drezner & Farrell, 2004; Mathison, 2009). Some scholars in this field have gone as far as to say the blogosphere is responsible for fundamentally changing the entire political landscape in the United States (Pole, 2010). Some research focuses on how influential the blogosphere is at affecting policy and politics. Bloggers primarily influence political discourse, which in some cases has initiated political action (Drezner & Farrell, 2004; Pole, 2010; Wallsten, 2007). The majority of the research in this area credits the blogosphere's political influence to the blogosphere's ability to influence traditional media. Because bloggers usually blog as a part-time activity and many of them have the goals of sharing celebrity news or teenage hype, skepticism is apparent of the political influence of bloggers (Kerbel, 2009). However, there do not have to be a large

number of political blogs for them to make an impact. The top five political blogs have been reported as having half a million visitors a day (Drezner & Farrell, 2004). As the blogosphere continues to grow, an emergent hierarchical structure has developed in the political blogosphere with a few political bloggers being well known and sought after by the public and the mainstream media. If a lesser-known blogger has a potentially big story, the blogger often contacts one of the elite political bloggers. This mechanism allows the mainstream media to visit the few elite blogs easily and get a pulse on what is being discussed in the blogosphere (Drezner & Farrell, 2004). This is the process for many political stories that have had an immense impact on the political landscape in the U.S. A study on the influence of blogs determined that 83% of journalists used blogs in story development, with 43% of them using blogs at least once a week (Farrell & Drezner, 2007). As such, the blogosphere has the potential to influence the content in mainstream media.

While the blogosphere has had a significant impact through feeding the mass media with stories of importance, this is not the only way the blogosphere has influenced U.S. politics. The blogosphere has taken on the role of keeping the mainstream media in check (Drezner & Farrell, 2004; Pole, 2010). Political bloggers have become known for fact-checking the mainstream media and working to make sure the entire story is told, if it is one the blogosphere deems worthy of telling (Drezner & Farrell, 2004; Pole, 2010). Bloggers were famously responsible for forcing CBS News to admit they could not substantiate documents about George W. Bush's National Guard service when bloggers were able to identify these documents were forgeries (Drezner & Farrell, 2004). In this same vein, the blogosphere often sheds light on issues that may

have been passed by in the mainstream media, often pushing these stories through to the elite bloggers and eventually to the mainstream media (Drezner & Farrell, 2004; Pole, 2010). Because bloggers do not have an editorial board to answer to, they are often able to break stories or shed light on issues the mainstream media shies away from (Gill, 2004).

Limits to the influence the blogosphere can have exist, because the majority of bloggers are individuals without staff, support, or fact-checkers of their own. Bloggers must rely on the mainstream media's resources to find out information about what is happening in the world, which limits their ability to have mass reach on their own accord (Drezner & Farrell, 2004; Kerbel, 2009). However, even with its limitations, the mainstream media and policymakers may find the blogosphere difficult to ignore as a pulse of what Americans think about politics and policy (Drezner & Farrell, 2004).

While some disagreements in how directly influential the blogosphere is on politics and the policy development process has transpired, it has changed the face of American political discourse. Blogging has redefined access to the media, allowing for more people to be heard on political issues (Pole, 2010). A continued need for more research in this area exists in order to determine the exact influence of the blogosphere on policy development.

Theoretically Defining Bloggers and Blog Readers

While the importance of the blogosphere to politics and the political process continues to grow, it raises the question "who are political bloggers"? To get to the core of this question, it is important to first understand why political bloggers blog. A recent study, with active political bloggers conducted by Antoinette Pole, determined the majority of political bloggers blogged for two reasons: 1) to inform readers and 2) to

report errors or omissions in the mainstream media. Seventy-five percent of the content evaluated in her study addressed politics, public policy, and current events (Pole, 2010). While these aspects are important to determine the goals and objectives of political bloggers, determining exactly who they are is sometimes a challenge. Pole's study (2010) found many of the minority bloggers desired to remain anonymous and wanted to conceal this activity from their employers. However, currently, the political blogosphere is primarily white males in the middle to upper class (Pole, 2010). While this is the current landscape, Pole argues that the blogosphere impacts other groups significantly because of its lack of barriers in race, gender, occupation, political persuasion, or sexual orientation. A study conducted by McKenna and Pole (2004) about political bloggers determined political bloggers are well-educated, with 59 out of the 141 political bloggers studied having an advanced degree (Pole, 2010). The majority of bloggers are part-time bloggers, meaning this is not their full time profession (Drezner & Ferrell, 2004). They are reported as struggling between time spent blogging and other family responsibilities or other obligations (Pole, 2010). While some researchers call bloggers amateurs (Gill, 2004), the majority agree they are all passionate for their subject (Pole, 2010; Gill, 2004; Drezner & Ferrell, 2004). Many are actually subject matter experts, and some are professional writers blogging about other pursuits. Bloggers that blog officially for mainstream radio, television, or other news outlets are present in the blogosphere and contribute to the blogosphere hierarchy (Gill, 2004). With the ease of blogging today, the blogosphere is open to everyone, with a growing number of bloggers focusing on politics and policy.

Politicians have entered the blogosphere and are using their blogs to connect with constitutes in a new way. Howard Dean was the first of the now many political candidate bloggers. Dean was considered a success in the political blogosphere with up to 30,000 daily visitors in September 2003, (Gill, 2004) and brought in millions of dollars through online fundraising (Blossom, 2009). He went on to lose the election due to a series of other events; however, blogging by politicians became commonplace after this in the 2004 presidential election. In the 2008 presidential campaign, Barrack Obama utilized many online social media successfully, including a campaign blog. Through the vehicle of the blog, Obama and staffers were able to respond and interact with supporters in a new and influential way (Blossom, 2009). Above direct campaign messages, the blogosphere offers a platform for politicians at all levels to get their message across and to counteract what is being said about them in the mainstream media (Rigby, 2008; Sappenfield, 2005). While the blogosphere may offer an alternative news outlet for politicians who feel they are struggling with bias in the mainstream media (Rigby, 2008), it is unlikely a candidate blog will directly motivate an individual to vote. Instead these blogs offer people who are already politically active additional information about candidates and a way to engage with politicians in a meaningful way (Gill, 2004). Moreover, politician and candidate blogs are just one more example of the growth of politics and policy discussion in the blogosphere and the types of people blogging.

Defining Bloggers through the Theory of Opinion Leadership

One reason bloggers have had such an impact and continue to be talked about in communication research and the mainstream media is they are often seen as opinion leaders who gather information of importance and consequence and communicate it to the masses through their respective blogs (Song, Chi, Hino, & Tseng, 2007). The

concept of opinion leadership spans multiple bodies of literature, but the literature on

the diffusion of innovations defines opinion leaders as correlating the closest with what

bloggers do and how they interact with their readers. According to the diffusion of

innovations, opinion leadership is "the degree to which an individual is able to influence

other individuals' attitudes or overt behavior informally in a desired way with relative

frequency" (Rogers, 2003, p. 27). Other scholars have worked to define opinion leaders

in their respective fields in a variety of ways. Corey (1971) observed that opinion

leaders are trusted and informed people who exist in virtually all groups of people. In

another theoretical view of opinion leaders, Rogers and Cartano (1962) observed that

opinion leaders are individuals who "exemplify the values of their followers" (p. 437).

This is especially relevant for bloggers, who often have readers who are extremely

similar to them in multiple aspects (Pole, 2010). Additionally, opinion leaders have been

described as people who use personal interaction to make ideas or innovations

contagious to others they connect with (Burt, 1999). A study in Australia based on the

diffusion of innovations found that opinion leaders sped up the process of

communicating information on topics related to health, development aide, agriculture,

and complex climate change issues (Keys, Thompson, & Smith, 2009). Researchers in

California looked specifically at bloggers as opinion leaders and developed an algorithm

that has proven effective in identifying influential opinion leaders in the blogosphere

(Song, Chi, Hino, & Tseng, 2007). Past research sought to determine how effective

specific bloggers were at contributing novel information, tracking topics, and filtering

information (Allen, Lavrenko, & Jin, 2000). However, Song et al. (2007) went one step

further by including not just the novelty of the information provided but the actual

influence bloggers had on the opinions of other blogs in an algorithm they call InfluenceRank. Through their research with InfluenceRank, they have been able to determine that bloggers are indeed opinion leaders in their own right and have the ability to spread new information and affect the opinions of others in a meaningful way (Song, Chi, Hino, & Tseng, 2007).

Bloggers are generally white upper- to middle-class males who are well educated. They share the primary goals of informing readers and reporting errors or omissions in the mainstream media (Pole, 2010). A growing number of politicians are using the blogosphere to connect with constituents and negate biased press (Blossom, 2009; Gill, 2004), although these blogs are unlikely to connect with people who are not already politically active (Gill, 2004). Possibly the real influence of the blogosphere comes from bloggers as opinion leaders in that bloggers gather information of importance and consequence and communicate it to the masses through their respective blogs and in many instances have a meaningful influence on followers (Song, Chi, Hino, & Tseng, 2007).

Defining Bloggers through Uses and Gratifications Theory

Uses and gratifications theory affects research in the blogosphere because only those who are truly interested in the blogger or the subject of a blog would access that blog. Those who intentionally access this content are more likely to be impacted by it (Morrison, 1974). Uses and gratifications serves an important role in understanding communication and the blogosphere as it outlines motivations for media exposure. The theory covers "a broad variance of media effects including knowledge, dependency, attitudes, perceptions of social reality, agenda setting, discussion, and politics" (Ruggerio, 2000, p. 25). The theoretical perspective of uses and gratifications is that it

works to identify the needs of users for a particular type of media (Blumler & Katz, 1974). Rubin (1993) asserted that the cornerstone of the theory is that audiences are active and to understand effects, scholars must explain motivations and behaviors. The theoretical perspective assumes an active and goal-directed audience seeking out particular media to gratify informational, social, and psychological needs (Rubin, 1994). However, some argue that uses and gratifications allows for too much interpretation which leads to bias (White, 1994) while others argue that there is no "active audience" (Massey, 1993). Some scholars credited the theory as a development from the two-step flow and media effects research; therefore, this perspective of the message moving from the sender to opinion leaders and then to the public shows choice of the public for specific information through a specific medium. This concept correlates with bloggers serving as opinion leaders. The two-step flow credits mass media with a degree of importance in creating opinion (Lazarsfeld, Berelson, & Gaudet, 1944), and stresses the interpersonal influence as a powerful element. Other scholars claim that uses and gratifications arose in the 1940s when scholars began investigating why audiences used particular media (Ruggiero, 2000). Early research during this time sought to explain the gratifications obtained through listening to radio quiz programs (Herzog, 1940), reading the newspaper (Berleson, 1949), and watching television (Greenberg, 1972). The emergence of new communication technology changes the prevalent one-way flow of information from media to audience. The two-way trait of the Internet makes the instant interaction between the media and audience possible.

Uses and gratifications has been used to examine the blogosphere in an empirical way. Trammell (2006) surveyed 1,837 readers of celebrity blogs who indicated

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entertainment, passing time, and information as their motivations for reading the blogs. Readers did not report using celebrity blogs for political content or information; however, they were not likely to avoid blog content if it contained political messages.

There are motivations related to the usage of specific blogs. These motivations can then be categorized as in self-documentation is a predictor of feedback management, self-presentation, and readership expectation. Improving writing motivation works as a predictor for self-presentation and readership expectation. Self-expression predicts self-presentation, readership expectation, and design elements use (Li, 2007). Medium appeal motivation predicts self-presentation. Information motivation predicts feedback management, use of hyperlinks, self-presentation, readership expectation, and design elements. Passing time motivation predicts self-presentation, design elements, and readership expectation. Socialization motivation predicts use of hyperlinks, self-presentation, and readership expectation. Gender differences were located in many aspects of blogging. Men claim higher approval of information motivation while women endorse self-documentation, self-expression, and passing time more. Other than gender, age also plays a role in motivating people to blog. Motivations as self-documentation, self-expression, and passing time have a negative relationship with age. Education level was found to have no connection with specific blogging motivations (Li, 2007).

Digital Divide Theory and Underrepresented Groups in the Blogosphere

The blogosphere has been influential on the political process and is able to be accessed by a myriad of people across the United States; however, certain groups are still underrepresented in the blogosphere. Much of this underrepresentation can be attributed to the digital divide that still exists in the United States. The digital divide is

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"the term now widely used to apply to the various inadequacies opened up by the development of computer-based digital means of communication" (McQuail, 2008, p. 554). This section will explore how the digital divide contributes to discrepancies in knowledge and access levels in the United States, which are mirrored in the blogosphere, and translates to underrepresented groups in the blogosphere.

An empirical investigation into the Internet and knowledge gaps in the United States found four barriers to people benefiting from the availability of information online. The first is a continued fear and negative attitude about the computer and information online. This is more prevalent in older people in the United States. Secondly, barriers, especially financially, to access are a problem. Third, there is a lack of user-friendliness to blog development and connecting to other bloggers. Finally, the principal gaps are education based (Bonfadelli, 2002). Since the Bonfadelli study was conducted, the user friendliness of most Web applications, especially blog applications has improved (Rigby, 2008), but some Americans still struggle with new media literacy challenges (Livingstone, 2004). As communication technology has increased, concern has extended beyond basic literacy to now include media literacy (Livingstone, 2004). Media literacy is defined as "the ability to access, analyze, evaluate, and create messages across a variety of contexts" (Livingstone, 2004, p. 3). In order for people to be media literate, they must have the technological knowledge paired with the necessary interpretive skills to evaluate the content. Because the Internet allows for anyone to create and publish information, it is additionally important that consumers of media use critical thinking to evaluate the validity of information presented (Livingstone, 2004). While people may have access to the blogosphere and policy information online, in

order for it to be truly valuable, people must be media literate and able to decide if the information they read is credible.

The literal barriers to access, while decreasing in the United States, are still of concern. In the United States a concern remains about a general knowledge gap between different groups in society (McQuail, 2008), but this apprehension is augmented with the development of the Internet and the plethora of information available online, which creates the digital divide discussed previously (McQuail, 2008). There are over 300 million people in the United States as of July 2009, with 223 million of those being described as internet users, which leaves over 80 million people in the United States that do not have access to the Internet (CIA World Factbook, 2010).

Discrepancies in internet use have been determined to exist between different socio-economic groups. Lower socio-economic groups, which tend to be less educated, are also less likely to use the Internet (OECD, 2001). Certain ethnic groups, specifically Hispanics and African Americans, are also less likely to use the Internet or own a computer (OECD, 2001). Additionally, people ages 60 and over have been determined to be less likely to use the Internet while people between 18-39 are the most likely to use the Internet (Bucy, 2000). People in rural areas have traditionally been less likely to use the Internet; however, research has determined the majority of this discrepancy can be explained by lower income and education levels in rural areas (Agarwal, Animesh, & Prasad, 2009). Internet access levels with dial-up connections have been similar in rural (37%) and urban (36%) areas in recent years, but high speed connections are still considerably lower in rural (11%) areas, compared to urban (36%) areas (Whitacre & Mills, 2007). This is of increasing concern, since high-speed access is required for the

growing number of interactive and video components online. Gaps in high-speed access have been equated to the infrastructure or lack thereof in rural areas. However, with federal money being allocated to infrastructure improvement, these gaps are anticipated to decrease in the future (Whitacre & Mills, 2007).

The composition of the political blogosphere tracks similarly with the makeup of internet users. The majority of political bloggers have been identified as white males in their thirties, with certain ethnic groups being underrepresented (Pole, 2010). Latinos appear to be newer to the blogosphere, while black and women bloggers have been blogging for longer but are still underrepresented (Pole, 2010). However, small but powerful subsets of bloggers in specific groups exist. Though underrepresented, Latino and black political bloggers have progressively increased in numbers (Pole, 2010). Latino bloggers have been influential in political discourse about immigration, while both black and Latino bloggers have played critical roles in exposing racism (Pole, 2010). Minority bloggers complain they are often pigeonholed into their specific ethnic group and feel segregated. However, many of them report contacting and linking to other bloggers who share their ethnic background, which may reinforce segregation (Pole, 2010). The future of black political bloggers is predicted to be strong because of their successes with social movements in the blogosphere. The Latino political blogging community's future appears to be less promising because of their lack of unity within the community, in that multiple countries and cultures are represented by Latino bloggers all with different political issues and backgrounds (Pole, 2010). Latino bloggers have also had fewer successes with social movements, but only time will tell for sure.

Other underrepresented groups in the blogosphere are women and lesbian, gay, bisexual, and transgendered (LGBT) Americans. However, these specific groups have also had successes in the blogosphere (Pole, 2010). The "mommy bloggers" are a group that has been coveted by advertisers of new products, while both women and LGBT bloggers fill the gap the mainstream media is criticized for leaving by not covering women and LGBT issues (Pole, 2010). A few high profile bloggers have emerged that are a part of the women and/or LGBT community. This, combined with past political social movements and successes, indicates this group may see growth in the future.

The digital divide in the United States is still a problem when considering the access of all groups to the Internet and political and educational information available in the blogosphere. Lower socio-economic groups, less educated individuals, older Americans, and certain ethic groups all have less access to the Internet in the United States. Possibly as a result of access or lack of new media literacy, groups still exist that are underrepresented in the blogosphere. Specifically, the blogosphere has fewer Latino, black, women, and LGBT bloggers. However, there are multiple instances where these groups have had influence in social movements and political influence.

Policy Development Process Theory

The American system of policy development is unique and is an open, democratic system. Due to its openness, governmental and quasi-governmental units are fairly easy to create. The structure of the U.S. government includes over 90,000 tax-levying municipalities across the country, which all have different functions but share in the formation and administration of policy (Jones, 1970). Governance in any society involves making rules which translate into policies. In the simplest form, policy development can be described as "the process of translating individual preferences into

policies" (Hobbes, Locke, Rousseau, & Rawls, 2002, p. 30). The basic elements of the policy process in the United States can be broken into five steps. The first of these is problem identification which is defined as a "demand for action to resolve a problem" (Jones, 1970, p. 13). The problem may be identified by a group or organization or may be a problem identified by policy makers that others do not even consider a problem yet. The second step is formulation, which is when a plan for how to remedy the problem is developed. The next step is legitimation, when the course of action becomes an actual piece of policy that is voted on and passed. The fourth step is application, which is when the policy is actually applied and sent to the agency responsible for enforcement. The fifth and final step is evaluation, when a policy is readjusted based on new needs or a new demand for action and the process begins again (Jones, 1970).

Policy development happens at both the local and federal level. Debate continues over which level is optimum, but some scholars argue policies should be developed at the level they will be enforced or where consequences will occur (Lowi, Ginsberg, & Shepsle, 2007). Correspondingly, policy development usually happens at the level where the problem reaches someone who has the power to solve the problem through policy formation (Jones, 1970). Thus, this may happen at the level where a group of people who are affected by a problem have the most contacts or where it politically makes sense for a policy maker to take action on a problem. Once a policy is implemented at a specific level, it is difficult to make a change to that level because of the bureaucracy and institutions set up to manage the policy (Weimer & Vining, 2005). However, sometimes policy development does not happen in this way, due to the nature of an issue. Certain issues are specified specifically by the U.S. constitution as being

decided on by the federal government, like immigration and naturalization, while others are specified as rights of the state, like education (Jones, 1970).

Some policies in the United States are developed through grassroots public policy development which involves local engagement that is contrary to top-down approaches. In grassroots policy development, the problem and solution is defined by the "active local people" instead of imposed from outside (Corburn, 2005). Top-down approaches to policy development happen when a person in power, like a Congressman, notices a problem and develops legislation to fix the problem. Often this type of policy is ineffective because it may only be a problem when viewed by an outsider. However, this type of policy development has proven effective in situations where the people affected by the policy and/or the problem cannot speak for themselves (Jones, 1970). An example of this would be policies related to children or animals.

Agricultural policy today is typically developed through grassroots policy development (even if the final policy is implemented through a top-down approach). These policies typically follow the grassroots public policy development process defined by Schuler (2009). This process is as follows:

- Research base - this is grounded in what local communities need
- Policy proposal - responds to findings from research, taking what is useable and saleable
- Ways to communicate – develop ways to communicate the policy idea effectively
- Demonstration – showing the policy can work in the real world
- Organizing and advocacy - using strategic partnerships
- Follow through to implementation

This process, though called grassroots, still needs an organization to facilitate the process and work through to the final stages. It is considered grassroots because it takes into account the needs of the local communities directly. If managed effectively,

this process can be efficient and useful. However, it is often easier to develop target messages and make it to the implementation phase through a "top-down" approach. An example of this type of approach would be the Human Society of the United States. These type of groups chose the legislative agenda for their members and simply use members' dues and donations directly for communicating and lobbying for their goals (Corburn, 2005). It takes a lot less time to work this way; thus, these groups often reach an end goal sooner. However, when a grassroots development process is used, the result is better for those involved and those who have to implement it (Schuler, 2009).

History of Agricultural Policy Development

Agricultural policy in the United States has been developed in a multitude of ways. Some of these have been more effective than others, but the majority of them have taken place at the federal level, though some scholars argue this should be changed to state-controlled agricultural policy due to the uniqueness of agriculture and societal needs within each state (Gilbert & Howe, 1991). The following section highlights some of the most influential policies on American agriculture.

One of the biggest landmarks in agricultural policy development was in 1928, with the development of farm boards. Herbert Hoover developed these cooperatives to regulate farmer production. This was the first time it was noted on a national level that agriculture did not follow traditional supply and demand. When the price of a commodity would drop, farmers would increase production to get more money, which caused the price to drop even further (Badger, 1989). The farm boards offered cheap credit to farmers join. Their slogan was "Grow Less Get More," which was a way of encouraging farmers to follow a traditional supply and demand concept, but the program was flawed.

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Many economists blamed the "top-down control." Farmers did not like being told to produce less, especially when their families were struggling.

In the early 1930s, the farm boards had no real success, and the United States switched to the adoption of large-scale government programs. These programs were also designed to regulate production (Breimyer, 1983-1984). These policies were the result of economic misery felt across the United States during this period. Thirty percent of the nation was farmers during this time (Badger, 1989). Additionally, a number of other professions, like bankers, relied on farmers to make their living. Again, these programs were primarily a "top down" approach with farmers being told how much to produce, including slaughtering animals to control populations instead of sending them to market. These programs were criticized throughout the years of paying people not to farm. Farm programs remained similar in nature until 1996.

In 1996, the Freedom to Farm Bill was passed. Senator Grassley said this was the most fundamental change in farm policy in the past 60 years. This bill relied on future demand for products of the United States and, as a result, embraced international trade agreements (Breimyer, 1983-1984). However, it has been argued that it did not consider the economic dependence of producers on future legislation (Lauck, 2000). This was considered a deregulation compared to previous farm regulation legislation and was considered to be a change from the "top down" approach. However, it still set national price supports and policies. In an effort to get the bill passed, it included the food stamp program. This bill is similar in nature to the current farm bills and is managed at a national level. Some economists argue that it would make more sense to have a farm bill at a state level instead of national, due to the diversity between states,

but as for now, farm legislation is a federal issue (Gunderson, Kuhn, Offutt, & Morehart, 2004).

Outside of farm policy, policies that established American agriculture today have been put in place. One major influence was the passage of the Morrill Act of 1862, which granted public land for the establishment of land grant colleges in each state to advance agricultural and other similar technical professions. Prior to this time, higher education had only been for the elite and learning had been focused on culture and refinement, not on industrial and trade improvement. In 1890, a second Morrill Act was passed that gave $25,000 to each land-grant institution to support research (Schapsmeier & Schapsmeier, 1975). These acts helped advance research and technology to improve the agricultural industry, which is a service land grant colleges still provide today. These acts were unique in that they were passed at the federal level, but they granted the land and money to the states to use in a way that was most efficient in their state. This legislation was much different than the "top-down" approach of the first farm programs (Lauck, 2000).

Other policies, not directly related to on-farm production, have been developed. These polices arose from problems farmers were suffering that were economically debilitating. One such problem was a concern of American farmers that the railroads had economic domination and the farmers did not have bargaining power against them. In what is still seen regularly with agricultural policy, this problem came from the people who gathered a coalition to talk to the federal government about their issue. As a result, in 1887 the Interstate Commerce Commission was established. This Commission

remains today and offers a place for farmers (and others) to come air grievances over the prices being charged by railroads.

This unequal bargaining power was not just between farmers and the railroads. Farmers were having trouble with other people in the supply chain, and as a result in 1890, the Sherman Act was passed which limited economic titans. One of the continued reasons for groups who could overpower farmers' bargaining power was that farmers were individuals and families and corporations could overpower them. Again, this problem was brought to the federal government, and in 1914 the Clayton Act was passed to limit corporate mergers. While this act helped alleviate problems in the 1900s, more recently problems with corporate mergers have caused price fixing of grain exporters. Specifically, Archer-Daniels-Midland was implicated in three price fixing conspiracies (Lauck, 2000). This, along with concern over growth in all marketing and processing sectors, gave way to the passage of a bill in 2000 to allow the USDA to review agribusiness mergers.

Actors in the Policy Development Process

The openness of the U.S. political system allows for multiple actors to participate in the policy development process. All of these actors have the ability to influence the American political system in a meaningful way with efforts that often overlap (Jones, 1970; Weimer & Vining, 2005). The major actors discussed here are representatives and their staff, interest groups, the media, and the general public.

Legislators are certainly major actors in policy development. While their decision-making will be discussed thoroughly in the next section, this section will deal with the factors that have the power to influence them. Three factors have been determined to significantly influence the voting decisions of policy makers. The first is personal interest

which may be different for each policy maker. In this category could be considerations like their families' well-being, reelection, campaign contributions, and representing their constituents (Weimer & Vining, 2005). The second is interest groups, and the third is party discipline, which may be strong or weak depending on the policy maker (Weimer & Vining, 2005). These factors may be interrelated and may affect other actors in the policy development process. For example, campaign contributions and constituent concerns may be a factor of personal interest and interest groups. Ainsworth (1993) evaluated the effect of lobbyists on political outcomes and found that the direct effects were minimal. The real effects came from these groups inspiring constituents to contact their representatives directly or from passing information on to the media or interest groups.

Additionally, party discipline may affect what news and information sources policy makers pay attention to. Furthermore, a study of 43 congressional staff members determined that party discipline may affect the staff a policy maker may choose to hire, and that legislative staff, specifically legislative aides (LAs), can be extremely influential on voting decisions of policy makers (DeGregorio, 1988).

Decision-Making of Policy Makers

An important element that informs this study is the way that people make decisions, because what ends up in a piece of legislation depends on multiple decision-makers along the way. Some of these decisions being made are by legislative aides and what information they decide to pass on to legislators. Additionally, policy makers are decisions makers and must decide what information to accept or reject. These questions are at the very heart of an area of behavior psychology and economic theory that deals with how people make decisions.

It once was thought that all decisions that were made were rational. Thus, decisions followed the theory of rationality which views the act of making of a decision through processes of restructuring and insight in an effort to optimize some function in terms of minimizing or maximizing. This type of decision-making is predictable and involves models of sound judgment and inference (Gigerenzer & Selten, 2001). However, in 1957, in the "Models of Man", Herbert Simon indicated that people are not completely rational individuals as assumed in previous definitions of rationality. Instead, people habitually make decisions based on emotions, which limit their processing of information (Simon, 1957). In later works, Simon further explored the concept he called "bounded rationality" as what he called a behavioral approach to economics. In this approach to rationality, the decision-maker's cognitive limitations of knowledge and computational capacity are taken into account. In complex situations, decision makers employ the use of heuristics to solve problems or make decisions because the formation of the expected utility of all alternatives is too complicated for them to process (Simon, 1997).

Other theorists have furthered the literature available on bounded rationality and continued to define bounded rationality. Two of the major names in this field of research are Gerd Gigerenzer and Reinhard Selten who outlined some of the major concepts in bounded rationality including the idea of limited search (Gigerenzer & Selten, 2001). In past theories of rationality, it was assumed that all pertinent information was available to all decision makers when they needed it. However, in bounded rationality it is acknowledged that decision makers may lack the cognitive ability and resources to make an optimal decision. Thus, they have to make a decision after narrowing the

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choices and information available to them (Gigerenzer & Selten, 2001). Additionally, Gigerenzer and Selten posit that bounded rationality moves beyond traditional theories of rationality by eliminating the idea of optimization and as an alternative consider how real people make decisions without calculating probabilities or utilities. Thus, bounded rationality moves toward a greater understanding of how individuals make decisions based not only on cognitive limitations, but also on the structure of their environments. This includes analyzing current norms, deviations from these norms, and the overall behavior of individual and institutional decision makers (Gigerenzer & Selten, 2001).

In an effort to further understand bounded rationality, researchers offer views from modern psychology which suggests that humans "are only moderately good at deductive logic" (Arthur, 1994, p. 406), which makes it unlikely that people would make decisions under the theory of rationally. Instead, people are more likely to make decisions based on what they are good at, which is solving problems through inductive reasoning based on patterns or models they construct to understand the world around them. While bounded rationality as a system of decision-making is complex and adaptive, it offers a richer understanding of how people solve problems and make decisions in a world that continues to evolve. At the same time, people continue to evolve and work through and sort information by credibility or use for their decision-making processes (Arthur, 1994).

Other research suggests decision makers are not only bound by what type of information they can find in a search for information, but also by their memory of the information obtained. This is important in a society that is often overloaded with information, which is referred to in the literature as "cognitive overload", through the use

of new technology (Mayer & Moreno, 2003). What information "sticks" or "slides" off the decision maker is equally as important as what information he/she has available (Mullainathan, 2002). This concept parallels some facets of agenda setting theory with regard to the concept of message salience. When people are presented with information that is consistent with their beliefs or from a source they deem as credible, they are more likely to retain this information (McQuail, 2008).

In order for decision makers to make a decision or form an opinion, they do so with the information they have accessible to them. Thus, these decisions may look irrational to the observer, but in actuality are simply rational decisions made in the bounded state based on information available to the decision maker at the time a decision was required (Gigerenzer, 2001).

Other bodies of literature have explored the role of human judgments and factors associated with decision making in a myriad of different environments from military to human health and supports the use of models to plan and explore policy. Numerous studies have found that individuals differ in the strategies they use to make a decision. These differences are seen in a person's awareness of the strategies they use and the degree to which interrelated cues and cognitive influences affect their decision making (Brehmer & Brehmer, 1988). Newman and Conrad's (1999) general knowledge model posits a cycle focused on knowledge flows extending from knowledge to creation, to retention, transfer, and utilization. Nonaka and Takeuchi (1995) argued that creation of knowledge is a five-step process whereby the tacit knowledge of individuals is shared with others to develop a common understanding. As representatives are deciding on a piece of legislation, communication is needed from their legislative aide, interest groups,

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constituents, traditional media, and the Internet. "Conceptual integration (blending) of prior knowledge into new mental models that are applicable to new situations represents a unique human aptitude – not a preprogrammed function that operationalizes prior knowledge as has mistakenly been suggested…" (Wiig, 2004, p. xix). Wiig's and others' emphasis on mental models connect human cognition with mental modeling and interpretation of information. How a legislator or legislative aide will use prior knowledge during the decision-making process is unknown, but this process of melding prior knowledge with new knowledge can be better understood by studying mental the influences on policy development. Dawson argues that "knowledge communication" may be a better term for "what most people think of as knowledge or information transfer – it suggests that a person or group has knowledge and communicates that knowledge so that another person or group has similar knowledge" (1999, p. 16). This is similar to the transfer of knowledge seen in the blogosphere where people often read specific blogs that back up their previous opinions about a topic or information.

Based on what is known about human decision making and the concept of people making rational decisions based on being bound by the information they have available to them, and putting a higher value on information sources that agree with previous knowledge, this study will attempt to determine what information sources contribute the most in final policy formation. This study will make an effort to analyze the product of political decision makers, H.R. 2454, and the channels (elite media, blogosphere, hearing testimony) through which information may have been accessible to the decision makers just prior to the decision.

Agenda Setting

The theory of agenda setting deals with the development of what the public views as important. It involves the influence of the media, in most cases the elite, mainstream media, and its ability to tell the public what issues are important (McQuail, 2008). At the core of agenda-setting is the public's awareness of issues and the salience of these issues. The more often people hear about an issue, the more likely it is to be salient with them. The measurement of salience can be divided into two levels: object and attribute salience. Object salience is simply a connection between a specific issue or object in the media agenda and in the public agenda, this is called the first level of agenda setting (McCombs M. E., 2004). Attribute salience is the second level of agenda setting, where "specific aspects of media content about public affairs are explicitly linked to the shape of public opinion" (p. 85). Thus, these attributes are salient in the public agenda. Beyond these second-level effects, within the process of agenda setting the concept of a compelling argument arises. These compelling arguments connect the attribute salience on the media agenda with the object salience on the public agenda. In essence, because coverage of an issue contains compelling arguments the issue may be more salient with the public (McCombs M. E. , 2004).

The majority of research on agenda-setting deals with questions related to whether the media reflects reality and how they frame and process reality. Additionally, studies tend to evaluate the media's concentration on a small number of issues and the tendency for the public to perceive those issues as more important than others (McCombs M. , 2005). Agenda setting studies traditionally examine the connection between the issues portrayed in the news media and the issues that are considered a priority by the general public (McCombs, 2004).

The concept of the power of the media to influence the public is not new. As early as the 1920s, newspaper columnist Walter Lippman was concerned about this issue (McCombs & Shaw, 1972). Many others weighed in on the issue of the influence of the media including Bernard Cohen who, in 1963, made the observation that the media does not tell people what to think, but instead leads people to think about issues that are important (Cohen, 1963). In later years, researchers would work to determine the effects of these very issues.

Moreover, the first to investigate the theory were researchers McCombs and Shaw, who studied this influence in presidential campaigns in 1968, 1972, and 1976. In the first study in 1968, they focused on two major components: awareness and information. Through this first study, they worked to understand the relationship between what voters in one community reported as important issues and the real content of the campaign media messages. Through the investigation of the agenda-setting function of the mass media, McCombs and Shaw concluded the mass media exerted a significant influence on what voters considered to be the major issues of the campaign (McCombs M., 2005). Other researchers have built on McCombs and Shaw's work and extended investigations of agenda setting to additional issues. Kiousis built on McCombs and Shaw's political work during the 2000 presidential election, resulting in the introduction of a conceptual model of media salience, with a multidimensional construct including attention, prominence, and valence. The study found that two dimensions of media salience were important: visibility and valiance (Kiousis, 2004). Wallsten continued in this vein of research in a study that compared the agenda of the mass media with the agenda of blogs on 35 issues during the 2004 presidential

campaign. This study made a clear connection between the blogosphere and political

agenda setting (Wallsten, 2007). Current models of agenda setting include five stages

for active research. These stages are not linear, nor did they evolve in chronological

order rather they are areas of emphasis for current and future research as defined by

McCombs (McCombs M. , 2005). These stages include 1) Basic Agenda-setting Effects,

2) Attribute Agenda Setting, 3) Psychology of Agenda-setting Effects, 4) Sources of the

Media Agenda, and 5) Consequences of Agenda-setting Effects (McCombs M., 2005).

McCombs, Lopez-Escobar, and Llamas (2000) divided attributes into affective and

substantive elements. Substantive attributes help people cognitively structure news and

distinguish among various topics and personalities while affective attributes elicit

emotional reactions from consumers of information (Kiousis, Bantimaroudis, & Ban,

1999). Ghanem (1997) proposed four dimensions of attributes: subtopics, framing

mechanisms, affective elements, and cognitive elements. Subtopics can simply be

explained as subtopics of the object or attribute. Framing mechanisms are the delivery

method of the frame, or the method by which a frame becomes more salient with the

public, as example of this would be radio or television (Gandy, Grant, & Reese, 2001).

Affective elements are those that arise from emotions while cognitive elements are

those derived from logical cognitive thought process (Ghanem, 1997). Researchers

have attempted to investigate both the substantive and the affective attributes

simultaneously. McCombs et al. (2000) determined that, "it is important to include the

affective context of the substantive attributes because descriptions of political

candidates both in the media and by voters frequently are conveyed in a positive or

negative tone" (p. 82). However, positive media coverage does not always lead to positive public perceptions (McCombs et al., 2000).

Agenda Building

Agenda building is similar to agenda setting and is studied by many of the same scholars. However, the major difference is that agenda building is the process through media chose which events, issues, or sources to feature over others (McCombs M. E., 2004). Agenda building is also related to work in political science on policy agenda setting, which focuses on how news coverage both reflects and shapes the priorities of government officials, decision-makers, and elites (Baumgartner & Jones, 2001). The news agenda is simply a number of events depicted in news coverage at one particular time. These events may be a government report on greenhouse gas emissions or a presidential speech on health care reform. Events can be grouped together to form issues like climate change or animal rights. There are multiple options of sources for this information like interest groups, political and government officials, or people directly involved in events or issues (Reese, 1991). Through the process of agenda-building, a myriad of divergent interests which work through multiple channels to advance the salience of issues that are of value to their group, organization, or party (McQuail, 2008).

The Connection of Agenda Setting with Framing and Priming

A relationship arguably exists between agenda-setting, framing, and priming. In 1975, Weaver, McCombs, and Spellman speculated that priming might be a consequence of agenda setting. In later years, Iyengar and Kinder (1987) looked at the issue of priming in a laboratory setting and confirmed that priming did have an effect. Iyengar and Simon went on to conclude in their 1993 publication that priming was really

an extension of agenda-setting in that it affected the criteria by which political leaders were judged. Little argument exists about the connection between priming and agenda-setting, and some have argued that priming actually strengthens the agenda-setting base (Kempton, 1997). However, arguments over the connection between framing and agenda setting are prevalent. McCombs (1997) argued a direct connection between framing and second level agenda setting exists. He even described framing in the words of agenda setting as "framing is the selection of a restricted number of thematically related attributes for inclusion on the media agenda when a particular object is discussed" (p. 6). Multiple researchers have gone on to use framing in the context of agenda-setting (Callaghan & Schnell, 2001; McCombs, 2004) and have added it to the broad category of cognitive media effects (Scheufele, 2000). Other researchers disagree and say that framing can only be used in agenda setting with the lower level attribute frames, but not with the macro-level frames (Kaid, 2004). Others still argue that theoretically framing and agenda-setting are different (Scheufele, 2000).

The concept of framing was first used in an empirical way in the sociology literature in the 1980s. However, it was in the 1990s before the framing concept was used in mass communication by Entman (1993). Mass communication scholars define framing differently from one another. Some say it is a subtle process of the media highlighting some elements of a story while leaving others out (Epp, 1998). Other scholars say it is more deliberate and has the goal of influencing the public and telling them not just what to think about but what to think (Weaver, McCombs, & Spellman (1975). Salwen and Matera (1992) concluded in a study published in the 1990s that framing affected how the general public evaluated issues. Callagan and Shenell (2001)

defined framing more loosely as stated or defined arguments and looked at gun control policy discourse. The way they looked at framing was more than just an attribute of an issue, but more the presentation of an issue, looking at the presentation of attributes.

Priming has been defined in mass communication research as the media activating ideas in the minds of audiences (Stone, Richmond, & Singletary, 1999). For example, if the media have been focused on national defense, then when people are asked about how the president is doing they are likely to compare how he is doing on national defense issues because they were primed to think about these issues. Again this concept did not begin in mass communication but rather was used by psychologists. Higgins and King (1981) in the 1980s developed a cognitive processing model to describe priming in which an idea was advanced within a person's thought processes when they were given more information related to that area. Wrill and Shruell (2001) described this more as a storage bin where people access the information that is on top of the bin first. Thus, if a person just read a story about food safety he or she is primed to think about it when asked about the most important issues right now. As Scheufele (2000) noted, however, "What remains unanswered is the question of whether the framing of an issue—regardless of its perceived salience—might have a significant effect on evaluations of political actors that goes above and beyond priming" (p. 313).

The Internet's Role in Agenda Setting

With the advent of the Internet, new agenda-setting research has emerged to answer new questions associated with how the Internet affects agenda setting. The Internet combines the mass communication and interpersonal communication in a single channel — internet users can obtain information and send feedback without

having to leave the same communication context. Interactivity, assumed as the inherent attribute of the Internet from the very beginning, contributes tremendously to the promotion of audience activity to a higher level (Morris, & Ogan, 1996). Moreover, the way audiences use media transforms from selecting over available resources to intentionally and actively searching for information useful to them. Audiences do not have to change their schedule to follow the agenda set by the media; instead, they have access to the information they need whenever and wherever internet access is present.

One such study investigated this issue specifically by looking at the personal agenda of viewers based on the Internet. Brubaker (2008) found that because of the Internet and people's ability to choose their own personal agenda, the effects of agenda setting were limited.

However, other studies have looked at the agenda setting effects of the Internet and determined an agenda-setting effect exists online. A study by Lee (2009) looked at the second-level agenda-setting process and the priming effects in online newspapers. Specifically, it explored the online media's agenda-setting effects on five different attributes of the global warming issue. Lee exposed three groups of subjects to three kinds of online newspaper stimuli, and concluded that attribute agenda-setting effects exist in online newspapers. Additionally, Lee's experiment showed an association between the attribute salience transfer and the priming effects. Roberts, Wanta, and Dawo (2002) looked at the agenda-setting effect of electronic bulletin boards using five issues in the 1996 fall political campaigns and found agenda-setting effects for all major issues excluding abortion.

Wallsten (2007) looked specifically at political blogs and their agenda in an effort to determine the effect they had on the mainstream media agenda. A computer-assisted quantitative content analysis was used to analyze 35 issues in the mainstream media during the 2004 presidential election, and the content from 10 randomly selected top tier political bloggers and 50 randomly selected less popular political bloggers. Wallsten found a bidirectional relationship in the political blogosphere as opposed to the previously mass-accepted thought that the relationship was unidirectional, as in traditional agenda-setting relationships (2007).

The Public and Policy Agenda

Rogers and Dearing (1988) advanced agenda-setting research by identifying three agendas, as opposed to the two previously discussed in the literature. They identified the media agenda, the public agenda, and the policy agenda in their 1986 publication, and two years later, they concluded in another publication that agenda-setting was best understood as a process among all three agendas. As the theory developed, the ways of conducting research in agenda-setting also progressed and Rogers and Dearing encouraged alternative approaches to agenda-setting research when they looked at one specific issue over a long period of time (1991). The focus of research today still remains focused on the media and public agenda, although some scholars look at the policy agenda.

At the heart of the discussion about policy development is often the public agenda and public opinion. In an effort to understand the public agenda and public opinion, it is first important to define public, which may vary depending on the issue. The public can be defined as "the set of individuals who are likely to be affected by the consequences, directly or indirectly" (Hobbes, Locke, Rousseau, & Rawls, 2000, p. 22) by a piece of

policy. Public is rarely a single group; instead it often consists of multiple groups in society that overlap (Hobbes et al., 2000) as seen in previous agenda-setting research (Rogers and Dearing, 1986).

While the focus of the majority of agenda-setting research is focused on the media and public agenda, some scholars look at the policy agenda. It has been noted that the policy agenda has not been of as much interest to communication scholars, perhaps because of the difficulty in assessing it and its complex nature (Rogers & Dearing, 1986). The communication scholars who have looked at the policy agenda have concluded that intensive periods of media attention on a problem influences policy (Yanovitsky, 2001). Cook et al (1983) used an experimental design built around a single media event to explore the impact of the media on the general public, policy makers, interest group leaders, and public policy. Results indicated the media influenced views about issue importance among the general public and government policy makers. However, it did not change public opinion or policy. Instead, policy change resulted from collaboration between journalists and legislative staff members. However in more recent research, Yanovitsky (2001) looked at the policy agenda and media coverage related to drunk driving and determined that the increased media coverage resulted in policy changes. Additionally, it was seen that when the media shifted away from the drunk driving issue that policy attention also shifted and long-term solutions to the problem were halted.

Specialized Form of Public Opinion

While agenda-setting theory classifies the public broadly (McCombs & Shaw, 1972), some scholars narrow the public to a specific specialized public opinion that is defined by an interest in a specific issue on the public, media, or policy agenda (Hobbes

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et al., 2000; Rogers and Dearing, 1986). The situational theory of publics defines a type

of specialized public opinion even more narrowly. Situational theory of publics says

publics can be defined according to the context in which they are aware of a problem

and their follow through on doing something about the problem like voting or writing a

Member of Congress, etc. (Grunig & Repper, 1992). The key concepts of this theory are

problem recognition which is the degree to which a person identifies a problem facing

him or her. Additionally, the theory concludes that people only involve themselves in an

issue if they recognize something should be done to convalesce the issue (Grunig &

Hunt, 1984). Another key concept of the theory of situational publics is constraint

recognition which is the amount a person views his or her behavior as limited by

elements outside their control (Grunig & Repper, 1992). Additionally, Level of

Involvement is another key component in the theory. It is a measure of how relevant,

personally or emotionally, the issue is for a person (Grunig & Hunt, 1984). A person's

involvement increases the probability of a person understanding the message (Pavlik,

1988) and how often a person analyzes issues and has a preference for messages that

contain more information and better arguments (Petty & Cacioppo, 1981, 1986).

Moreover, information seeking is another important component. This is the active

communication behavior where a public is more informed or involved because they

seek to be so (Grunig & Repper, 1992). The final major component of the theory of

situational stakeholders is information processing or passive communication behavior.

This occurs by information being processed without active participation in the

discussion, like picking up on one key message and accepting it as truth without

seeking more information or being inspired to make a difference in the issue (Grunig & Repper, 1992).

Theoretically Anticipated Relationship of Variables

Based on the previously discussed literature, which spans disciplines from communication to behavioral psychology, the following conceptual model has been developed. This model is the theoretically anticipated model (Figure 2-1) of the variables in this study and will be tested in an effort to answer the fifth objective in this study: determine the predictive relationship among the blogosphere, mass media, interest groups, public agenda, and legislative policy (H.R. 2454). This conceptual model indicates a two way relationship exists between the blogosphere and the elite media, the blogosphere and specialized public agenda, the elite media and specialized public agenda, elite media and the interest group agenda, and the specialized public agenda and the interest group agenda. Furthermore, the model indicates the blogosphere, elite media, specialized public agenda, and the interest group agenda all have an influence on the policy agenda.

Summary

The review of the literature outlined in this chapter provided an overview of the history of the blogosphere, as well as how the blogosphere influences policy and political discourse. The literature also described bloggers and blog readers through the theoretical frameworks of opinion leadership, uses and gratifications, and the digital divide. Literature was also explored on the policy development process and the influences on the formation of policy and decision-making of policy makers. Literature about the theoretical basis for this study, agenda-setting and agenda-building, was also explored. While, there was enough literature to build a theoretically anticipated

relationship of the variables in this study, there has not yet been a study that looked at all of these agendas at the same time. These gaps in the literature illustrate the need to further explore the effects of the blogosphere, media, public opinion, and interest group agendas on the policy agenda.
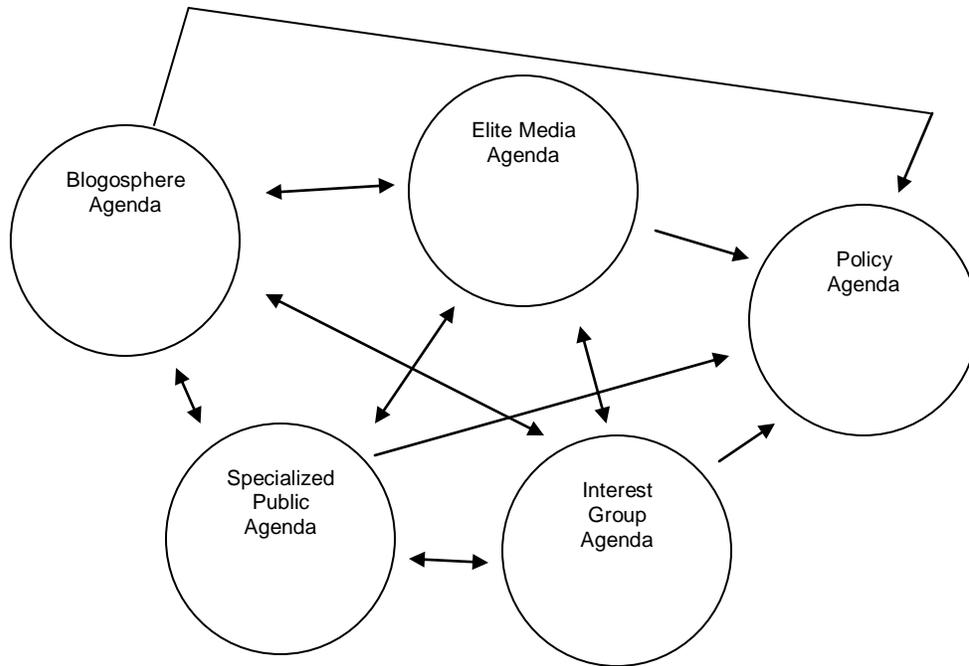
Figure 2-1. Conceptual model of variables

CHAPTER 3
METHODOLOGY

Study Design Overview

The purpose of this study is to gain a greater understanding of the influences in

the development of public policy, particularly with regard to policies that affect

agricultural producers. An example piece of legislation that affects agriculture will be

used in this study, H.R. 2454, which has potentially sizeable effects for agricultural

producers. This study was designed to answer the following research objectives1)

determine what tones are used when discussing the object (2009 Cap and Trade

legislation); 2) to determine if attributes that appear in the blogosphere agenda, as

compared to other agendas (mass media, interest groups, and the public agenda) with

regard to the policy agenda (2009 Cap and Trade legislation), recur in the same policies

once they are passed through the House of Representatives; 3) determine if there is a

difference in tone depending on the agenda (mass media, interest groups, public

agenda, and policy agenda); and 4) determine the predictive relationship of the

blogosphere agenda, mass media agenda, interest group agenda, and public agenda

on the policy agenda. In order to assess these objectives, this study utilized a

quantitative content analysis methodology to determine the influence of multiple factors

on the outcome of a piece of policy. For the purpose of this study, the influencing factors

of analysis were the elite media agenda, the blogosphere agenda, interest group

agenda, and a specialized public agenda. The outcome variable is the House Bill 2454.

Additionally, because the literature indicates a conceptual model (Figure 2-1) with a

two-way relationship between the blogosphere and the elite media, the blogosphere and

specialized public agenda, the blogosphere and the interest group agenda, the elite

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media and specialized public agenda, elite media and the interest group agenda, and the specialized public agenda and the interest group agenda. Subsequently, the following hypothesis is offered:

H1: The blogosphere, elite media, specialized public, and interest group agenda will have a statistically significant predictive relationship on the policy agenda.

H2: A statistically significant two-way relationship will exist between all predictive agendas
        a: blogosphere and elite media
        b: blogosphere and specialized public
        c: blogosphere and interest group
        d. elite media and interest group
        e. elite media and specialized public
        f. specialized public and interest group

H1 and H2 were tested using a confirmatory structural equation model.

Sampling

The purposive samples selected for this study consisted of content derived from political blogs, elite media, the text of the H.R. 2454 as passed in the U.S. House of Representatives (1,400 pages of bill text), and the transcripts from the four days of committee hearings on H.R. 2454 (approximately 400 pages of text). A purposive sampling technique was appropriate for testing the research questions for this study, which required the content from each variable be large enough to generate analyzable media content for sufficient statistical analysis, and ranked as being a highly used information source. Thus, this sampling and research design enables the testing of research questions that focus on potential effects of agenda-setting. Based on these purposive sampling needs, the political blogs and elite media were chosen according to the top ranked political blogs and online newspapers in 2009. The top five political blogs selected for this study were based on Wikio ranking in the political blog category for

2009. It is difficult to determine exactly how many political blogs there are as many directories have different listings. Technorati, one of the largest blog directories has 11,638 political blogs listed, however, a study by the Pew Internet and American Life Project reported 1.4 million blogs that contain purely political information (Lenhart & Fox, 2006). However, due to the Hierarchical structure of blogs, the top bloggers often have the same or similar stories to other political bloggers. The position of a blog in the Wikio ranking is determined through an algorithm which uses the number and weight of the incoming links from other blogs (Klein, 2009). Next, the top five online newspapers for 2009 were chosen to represent elite media content because of the dramatic increase in online newspaper use (Pew Research Center, 2009). This is out of an estimated 1,500 online newspapers (World Association of Newspapers). The blogs and newspapers were then searched for content related to H.R. 2454. Search terms included "H.R. 2454", "climate change", "climate change policy", "energy policy", "Cap and Trade", "Waxman-Markey" "global warming", and "The American Clean Energy and Security Act of 2009". Human judgment was then used to determine if the content related to H.R. 2454 and fell in the specified time frame. The total amount of content derived from the blogs and newspapers is approximately 200 stories and/or posts with a range in length from 400-1200 words with an average of five comments per post ranging in length from 3-400 words, resulting in a total amount of words at approximately 201,000 words.

The specific time frame for the content analyzed from political blogs and elite media was 60 days prior to the passage of H.R. 2454 (March 16, 2009 to May 14, 2009). This time frame is well over the four weeks or more that previous empirical

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research (Winter & Eyal, 1981) has established as the optimum time span for examining agenda-setting effects. The content generated during the first 30 days of this time frame was labeled Time 1 (March 16, 2009 to April 15, 2009), and the content generated during the last *30* days was labeled as Time 2 (April 16, 2009 to May 14, 2009).

Content Analysis

In order to evaluate the objectives in this study, a quantitative content analysis was conducted. Content analysis is "a research technique for the systematic, objective, and quantitative description of the manifest content in communication" (Berelson, 1952, as cited in Kaid & Wadsworth, 1989). Content analysis is one of the most commonly used methodologies in communication research (Kaid & Wadsworth, 1989). Content analysis has proven especially useful with samples that have large amounts of data because a percentage can be sampled for analysis and still provide generalizable and reliable results. Moreover, content analysis has been determined as the primary means for understanding blogs (Trammell & Gasser, 2004) and as such has been used to study the blogosphere in communication research (Trammell 2004; Trammell, Tarkowski, Hofmokl, & Sapp, 2006). Additionally, content analysis has proven to be an effective method in agenda-setting research and for examining multiple agendas (political, media, and public) at the same time (Roger & Dearing, 1996). Therefore, this study will content analyze the agendas of the media, interest groups, blogosphere, specialized public, and policy through content analyzing blog posts and online newspapers within the selected time and sampling frame, comments on the blogs and newspapers, hearing committee testimony, and H.R. 2454. As a result, this study will advance the knowledge on how the political agenda is built and what role new media, like the blogosphere and online newspapers, plays in developing this agenda.

This study is designed to follow Kaid and Wadsworth's (1989) suggested seven steps for implementing a content analysis. These steps are:

1. Formulate the hypotheses or research question to be answered;

2. Select the sample to be analyzed;

3. Define the categories to be applied;

4. Outline the coding process and train the coders;

5. Implement the coding process

6. Determine reliability and validity; and

7. Analyze the results from the coding process.

As previously discussed, the objectives and sampling have been established. The categories to be applied have been established according to categories from the theoretical basis for this study, agenda-setting. As such, each variable in the study will be coded for attributes, time-frame, and tone in an effort to determine which recur in the output variable. Due to the large volume of text in this study and to aid in objectivity, a quantitative content analysis software, Diction, was utilized for analysis. Diction is a computer assisted textual analysis (CATA) program which measures five standardized variables related to tone which have been proven to be independent of each other. These are "certainty", "activity", "optimism", "realism", and "commonality". Diction uses 10,000 search words in 33 lists, called dictionaries, to determine the levels of each of these standardized variables (Hart, 2000). Additionally, Diction allows for the creation of custom dictionaries for the ability to analyze more than tone. In this study, custom dictionaries were created based on the attributes that appeared in a random sample of content within the study. A panel of experts reviewed the sample content to determine the attributes that appeared and to develop dictionaries from this sample. These

dictionaries can be seen in Appendix A. CATA has been used in agenda-setting and agenda-building studies that require sorting and coding of large bodies of text with detailed coding protocols (Carroll, 2004; Dunn, 2006, 2009; Kiousis, 2005; Roberts & McCombs, 1994; Ragas, 2010).

As suggested by Kaid and Wadsworth's (1989) sixth step for implementing a content analysis, concerns for validity in a content analysis were addressed in this study. First, face and content validity was measured by using good sampling techniques and determining that results are plausible (Kaid & Wadsworth, 1989). Additionally, in studies that use inferential statistics, other data-related, construct, and predictive validity should also be considered (Kaid & Wadsworth, 1989). These threats were addressed in this study in the following ways. Data related validity was addressed through ensuring there is enough data in each cell and through a large sample. Within data related validity there is also a concern for violation assumptions, thus, during the data analysis process tests were conducted to ensure there were no violations. Construct validity is threatened by inadequate explanation of constructs (Kaid & Wadsworth, 1989), which was checked by the panel of experts review of the custom dictionaries and the standardization of tone through the use of Diction. Predictive validity requires a correlation between measures and criterion construct of interest (Kaid & Wadsworth, 1989). It is threatened by untheoretically linked measures to criterion. Thus, it is imperative that this study uses the theoretical basis that is related to the measures and has been used successfully in the past. This study is an extension of research within this theoretical base and as such is related to agenda-setting. The seventh and final step of analyzing the data will be covered in the next section.

Data Analysis

Upon completion of the quantitative content analysis, all data were standardized using PASW Statistics 18. Additionally, in order to address the objectives in this study, PASW Statistics 18 was used to run descriptive statistics, correlations, and t-tests. After the data were standardized, structural equation modeling (SEM) was used to test the relationship between the multiple variables and test the hypotheses in the study. AMOS, a plug in for PASW Statistics 18, was used to build the SEM.

The advantages of SEM are the flexibility of assumptions, use of confirmatory factor analysis to reduce measurement error by having multiple indicators per latent variable, the attraction of SEM's graphical modeling interface, the desirability of testing models overall rather than coefficients individually, the ability to test models with multiple dependents, and the ability to model mediating variables rather than be restricted to an additive model (Byrne, 2009). Additionally, SEM is appropriate for this study because observed outcome variables can be continuous, censored, binary, ordered categorical (ordinal), counts, or combinations of these variable types and this study utilizes a variety of different types of data. Researchers in SEM frequently use maximum likelihood procedure to estimate model parameters because it is the standard, unbiased, and consistent method (Bollen, 1989). The latent variables or factors in this study are the policy agenda, media agenda, blogosphere agenda, interest group agenda, and a specialized public agenda. The measured variables within this study are the number of attributes within each agenda, the time frame in which the attributes or objects appear, the length of articles, blog posts or comments, and tone ("certainty", "activity", "optimism", "realism", and "commonality"). In an effort to assess the agenda of each latent variable, a set of attributes that communicate the importance

at a point in time (Dearing & Rogers, 1996) were used. The hierarchy of the attributes on the agenda will be determined by the salience of each. Salience was measured, as with previous agenda-setting research, by the frequency of attribute mentions in the analyzed content (Kiousis, 2005; Tedesco, 2001).

The coding scheme for this study was based on frequency counts of each attribute, and attribute mentioned within the unit of analysis rather than a simple binary (present/absent) coding scheme. This will allowed for more advanced data analysis. However, there are some variables that have a limited number of options and may only have a minimal of choices within each category. Fortuitously, SEM is designed to work with variables of multiple types within the same model. Therefore, data can be continuous, censored, binary, ordered categorical (ordinal), counts, or combinations of these variable types.

Limitations

As with any study, there are some limitations to this research. The first limitation is the limited time frame in which it will be conducted. It is possible that the effects on the policy agenda happened much earlier than the 60 days prior to the passage of H.R. 2454. However, due to time constraints and study feasibility it would be impossible to do a longitudinal study like Rogers and Dearing (1996) recommend. Additionally, sampling is a methodological limitation to this study. The sampling will not be random, but rather purposive. However, because political blog content is generated in a hierarchical nature, there are top blogs that the other smaller political blogs feed major stories to (Drezner & Farrell, 2004); there is a strong argument for purposive sampling. The same idea applies to online newspapers, when a story appears in one of the top rated newspapers, it is often repeated in a lower tier newspaper. Additionally, it should be noted that blog

and newspaper comments will be used as a form of specialized opinion, which is a form of public opinion from an already politically engaged group and cannot be considered representative of the general public opinion. However, the theory of situational stakeholders argues that this specialized form of public opinion is the opinion that really matters, because this is the segment of the public that actually acts on issues of importance (Grunig & Repper, 1992). Another limitation of this study is the exclusion of the lobbying agenda as a variable. It is possible that the lobbying agenda will be conveyed in the other agendas, but due to the inability of the researcher to get transcripts of the personal communication of lobbyists with policy makers, it was not feasible to include them in the study.

Summary

This study utilized a quantitative content analysis approach to address the objectives and hypotheses submitted for this study. Content analysis has been recognized as the primary means for studying the blogosphere (Trammel & Gasser, 2004). The sampling for this study was purposive in nature and includes content derived from the top five political blogs in 2009, the top five online newspapers in 2009, the comments from the blogs and newspapers, the text of the H.R. 2454 as passed in the U.S. House of Representatives, and the transcripts from the four days of committee hearings on H.R. 2454. As such, the latent variables in this study were the policy agenda, media agenda, blogosphere agenda, interest group agenda, and a specialized public agenda. The measured variables within this study were the type and number of objects and attributes within each agenda, the time frame in which the frames or objects appear, the length of articles, blog posts or comments, and tone ("certainty", "activity", "optimism", "realism", and "commonality"). Diction, a content analysis software, was

utilized to analyze the text initially due to the large amount of test utilized in this study.

Upon completion of the quantitative content analysis, all data were standardized using

PASW Statistics 18. This software was then used to run descriptive statistics and

correlations and t-tests. After the data was standardized, structural equation modeling

(SEM) was used to test the relationship between the latent variables using a plug in for

PASW Statistics 18, AMOS. Limitations for this study included the limited time frame in

which it was conducted, purposive sampling, use of a form of specialized opinion

instead of general public opinion, and the exclusion of the lobbying agenda as a

variable.

CHAPTER 4
RESULTS

Within the theoretical framework of agenda-setting, the objectives for this

quantitative content analysis were 1) determine what tones are used when discussing

the object (2009 Cap and Trade legislation); 2) to determine if attributes that appear in

the blogosphere agenda, as compared to other agendas (mass media, interest groups,

and the public agenda) with regard to the policy agenda (2009 Cap and Trade

legislation), recur in the same policies once they are passed through the House of

Representatives; 3) determine if there is a difference in tone depending on the agenda

(mass media, interest groups, public agenda, and policy agenda); and 4) determine the

predictive relationship of the blogosphere agenda, mass media agenda, interest group

agenda, and public agenda on the policy agenda. In order to evaluate these objectives,

a sample of content derived from these agendas was taken 60 days prior to the

passage of H.R. 2454. This time frame was selected because it was a time when the

object of H.R. 2454 was being discussed regularly across agendas. The blogosphere

agenda, mass media agenda, and public agenda in this study were all derived from

online sources, while the interest group agenda and policy agenda were derived from

traditional print texts. However, all data in this study are referred to hereafter as texts.

This chapter begins with the descriptive analysis of the all data available within the

sampling frame. This is followed by the comparison of the descriptive analysis in this

study based on the agenda, in an effort to answer the research objectives. Finally, this

chapter will conclude with the testing of the hypotheses in this study:

> H1: The blogosphere, elite media, specialized public, and interest group agenda
> will have a statistically significant predictive relationship on the policy agenda.

H2: A statistically significant two-way relationship will exist between all predictive agendas
        a: blogosphere and elite media
        b: blogosphere and specialized public
        c: blogosphere and interest group
        d. elite media and interest group
        e. elite media and specialized public
        f. specialized public and interest group

Descriptive Results

One hundred and seventy nine text documents were included in the analysis for this study. This included one text for the bill text of H.R. 2454, four texts in the four days of hearing testimony, 65 blog texts, 67 newspaper texts, 21 text comments from blogs, and 21 text comments from newspaper articles. The total number of words analyzed was 884,956. The mean word size of all data in this study was 4.92 (SD = .29) letters per word. The mean length of each piece of content was 4,964.56 (SD = 23,773.82) words. The mean number of graphics was .59 (SD = 1.60) and the mean number of videos was .05 (SD = .18). The mean number of comments per text was 13.75 (SD = 51.93). Seventy-four texts occurred during the Time 1 period (March 14, 2009 – April 15, 2009) and 104 items occurred in Time 2 (April 16, 2009 to May 14, 2009). The text of H.R. 2454 was the only text that occurred out of this time frame, as it was the output variable that passed the House of Representatives on May 15, 2009.

For the purpose of this study, texts were further broken into group by agenda in an effort to address the objectives of this study more effectively. The elite media had the largest number of texts at 67 with 55,131 words, followed by the blogosphere with 65 texts and 49,950 words. As illustrated in Table 4-1, the specialized public agenda had fewer texts with 42 texts; however, there were more words, despite the fewer number of texts, with 156,219 words in the specialized public agenda. Similarly, the interest group

agenda had only four texts, but had 370,029 words, and the policy agenda had one text with 253,627 words. The average word size was similar across agendas with approximately a five-letter-per-word mean for all agendas. Comments, videos, and graphics were tracked for the blogosphere, elite media, and specialized public agendas, as these were the ones where these features were an option. The elite media agenda had the highest mean number of graphics (M = 1.03, *SD* = 2.44) while the specialized public agenda had the largest mean for comments (M = 24.76, *SD* = 71.09); however, the standard deviations were high, indicating there were outliers in the data. It makes sense the specialized public agenda had the highest number of comments, as it was made up entirely of comments. Full results can be viewed in Table 4-1.

Tone of Combined Data

In an effort to address the first research objective in this study and determine what tones were used when discussing the object of H.R. 2454, all data were analyzed using Diction 5.0 on the 32 attributes Diction has determined that make up tone, and then were compared on the basis of these tenents or attributes prior to comparing data on the calculated and master variables of tone. These 32 attributes are numerical terms, ambivalence, self reference, tenacity, leveling terms, collectives, praise, satisfaction, inspiration, blame, hardship, aggression, accomplishment, communication, cognition, passivity, spatial terms, familiarity, temporal terms, present concern, human interest, concreteness, past concern, centrality, rapport, cooperation, diversity, exclusion, liberation, denial, and motion. Definitions and ranges of standard scores in normal text are in Table 4-2. The standard scores are calculated based on the actual scores of normative data in Diction's internal dictionaries based on a 20,000-item sample of contemporary discourse (Diction, 2010). The standard scores are similar to a statistical z

score to allow for comparison beyond simple count data scores. The ranges of standard scores in Table 4-2 are on based on the normal range of contemporary text, which allows for comparison of the text in this study to normal contemporary text.

Text from all data were analyzed together initially to determine the average frequency counts for the attributes of tone and their standardized scores. These data were compared using Diction's internal dictionaries to determine if they were in the normal range for standard text. Because of the large number of words in each item used for analysis, the frequency counts within each item are an average of how many times words representing the attributes of tone occurred.

Based on the descriptive analysis, there were five attributes of tone that had a mean frequency occurrence of at least 15 indicating these were higher levels for this data set. These attributes were "numerical terms" (M = 20.34, *SD* = 18.01), "tenacity" (M = 22.92, *SD* = 9.52), "accomplishment" (M = 15.88, *SD* = 6.70), "familiarity" (M =116.11, *SD* = 20.86), and "concreteness" (M = 24.84, *SD* = 10.13), meaning that these attributes of tone had the highest number of occurrences in the overall texts. Four attributes had a mean frequency occurrence of less than two: "blame" (M = 1.72, *SD* = 2.50), "rapport" (M = 1.74, *SD* = 1.54), "diversity" (M = 1.77, *SD* = 2.09), and "liberation" (M = 1.70, *SD* = 1.96). This indicated these attributes had the lowest occurrence in the texts analyzed in this study. Only one attribute was in range for normal text in the majority of the texts, "numerical terms" (M = 72.10, *SD* = 129), while ten of the attributes of tone had zero percent of the texts falling within the range for normal text: "ambivalence", "tenacity", "leveling terms", "collectives", "cognition", "familiarity", "temporal terms", "present concern", "human interest", and "concreteness". This indicated the texts used in this

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study may not be similar to other standard texts with regard to the initial 32 attributes of tone. Full results are in Table 4-3. Table 4-3 is organized by the percent of texts that were in the normal range for standard text as this serves as a comparison variable for all tone attributes. Only "numerical terms" (72.10%, $n = 129$) had the majority of the texts in the normal range.

Diction 5.0 also utilizes four calculated variables of tone, which are all calculated on different functions based on their purpose. These calculated variables are "insistence", "embellishment", "variety", and "complexity". Definitions for these variables and the normal range for standard text for these variables standard scores are in Table 4-4.

The calculated variables are reported using average frequency counts, standardized scores, and where the text was out of range. The "insistence" mean frequency was the largest at 85.34 ($SD = 61.07$), but only one occurrence (.80%) fell in the normal range for normal text. The next highest was "complexity" with 8.80 ($SD = 43.20$) with only three (2.50%) items falling in the normal range. "Embellishment" and "variety" both had means under one with .78 ($SD = 2.50$) and .62 ($SD = .44$) respectively. There were 16 (13.10%) texts that fell into a normal range for "embellishment" and only one (.80%) that fell in the normal range for "variety". Results are in Table 4-5. Table 4-5 is ordered using the percentage of texts that were in range. None of the calculated variables were in range for the majority of the cases. The highest percent in range was "embellishment" at 13.10 ($n = 16$).

Diction utilizes five master variables, which are built by concatenating dictionary scores. The master variables of tone are "activity", "optimism", "certainty", and "realism". The formulas for the master variables and standard score ranges for normal text can be viewed in Table 4-6. After the data was compared on the 32 tenents of tone and the calculated variables, the data were analyzed on the basis of the master variables of tone, which are measured on a standard score and compared as to whether they fall into the range for normal text. All but one of the master variables for tone were in range for the majority of the texts analyzed. "Optimism" (87.70%, $n = 107$) and "activity" (82.00%, $n = 100$) had over 80% of the texts in range. "Realism" had over 60% in range (65.90%, $n = 81$) and "commonality" had over 50% in range (57.70%, $n = 71$). This indicated that for the master variables of tone, the texts in this study were more similar to standard contemporary texts. "Certainty" (28.50%, $n = 35$) was the only master variable that was not in range in the majority of the texts analyzed. Full results are in Table 4-7.

Attributes

All data were analyzed on the basis of the 10 custom attribute dictionaries that were developed previously using a panel of experts. These attribute dictionaries were "actions", "agriculture", "bureaucracy", "carbon", "economy", "energy", "environmental", "negative attributes", "people", and "positive attributes". A list of the words in these dictionaries is in Appendix A. Again, due to the large amount of text in each text, data were analyzed using average frequency counts and a mean of those accounts for all data are reported in this section along with the total frequency count for all data.

Attributes Continued

Eight of the attributes appeared in the majority of the units of analysis: "actions" (56.90%, $n = 126$), "bureaucracy" (75.60%, $n = 149$), "carbon" (65.00%, $n = 136$), "economy" (98.40%, $n = 177$), "energy" (74.00%, $n = 147$), "environmental" (75.60%, $n = 149$), "negative attributes" (72.40%, $n = 145$), and "people" (90.20%, $n = 167$). The two attributes that appeared in less than the majority of the units were "agriculture" (35.00%, $n = 99$) and "positive attributes" (35.00%, $n = 99$).

"Economy" (M = 71.05, SD = 108.42) and "energy" (M = 14.64, SD = 35.32) had the highest mean occurrences, while "actions" (M = 1.55, SD = 2.30), "agriculture" (M = 1.85, SD = 4.08), and "positive attributes" (M = 1.16, SD = 2.30) had the lowest mean occurrences. Full results are in Table 4-8. Table 4-8 is organized by the percentage of texts in which the attribute occurred at least once as there is no normal range for these attributes because they were developed custom for this study.

As a part of the analysis for insistence scores related to tone, Diction 5.0 tracks words that appear in a text three or more times. There were some of these words that appeared across multiple texts. The emergent words or attributes that appeared in 5% or more of the units of analysis are reported here. There were four emergent attribute categories that appeared in 10% or more of the cases: "earth" or "planet" (36.30%, $n = 100$), "scientist" or "research" (11.30%, $n = 69$), "Obama" (17.70%, $n = 77$), and "alternative fuels" (10.50%, $n = 68$). Three emergent attributes appeared in at least 5% of the texts: "home" (6.50%, $n = 63$), "need" (9.70%, $n = 67$), and "health" (8.10%, $n = 65$). In the units of analysis where the emergent attributes appeared in at least 5% of the cases, there were only two attributes which appeared an average of one or more

times per case: "earth" or "planet" (M = 2.06, *SD* = 3.68) and "Obama" (M = 1.12, *SD* = 3.33). Full results are in Table 4-9. Table 4-9 is organized by the percentage of the texts in which the attribute appeared at least once. None of these attributes appeared in the majority of the texts. The highest percentage was "earth" or "planet" (36.30%, *n* = 100). Because none of these emergent attributes appeared is more than 10% of the texts, they were not used in additional analysis in this study.

Recurrence of Attributes Across Agendas

In an effort to address the second research objective in this study and to determine if the attributes that appear in the blogosphere agenda, elite media agenda, interest group agenda, and the public agenda recur in the same policies once they are passed through the House of Representatives, the mean occurrence of attributes were compared to one another based on agenda type. Results indicated that the majority of the attributes appeared in the majority of the cases, across all agendas with two notable exceptions. "Agriculture" appeared in less than 50% of cases across the input agendas of the blogosphere (25.00%, *n* = 11), elite media (36.00%, *n* = 18), and public (37.50%, *n* = 9). "Agriculture" appeared in 75% (*n* = 3) of the texts in the interest group agenda and the attribute occurred 10 times in the output variable of the policy agenda. The "positive attributes" appeared in less than 50% of the texts in the agendas of the blogosphere (38.60%, *n* = 17) and elite media (20.00%, *n* = 10). However, "positive attributes" appeared in the majority of the texts for the interest group agenda (75.00%, *n* = 3) and the public agenda (50%, n = 12). The attributes of "actions", "bureaucracy", "carbon", "economy", "energy", "environmental", "negative attributes", and "people" all appeared in the majority of the texts across the agendas of the blogosphere, elite media, interest group, and public. All attributes appeared in the policy agenda at least

once. "Actions" appeared in the policy agenda twice, "agriculture" appeared 10 times, "bureaucracy" 29, "carbon" 48, "economy" 545, "energy" 267, "environmental" 33, "negative attributes" 35, "people" 63, and "positive attributes" appeared nine times. These results indicated that the attributes within the input agendas recur in the policy agenda. Full results are in Table 4-10, 4-11, 4-12, 4-13, and 4-14.

Tone Based on Agenda Type

In order to investigate the third research objective and to determine the difference in tone depending on the agenda, the attributes of tone were broken down by agenda. The calculated variables for tone of "insistence", "embellishment", and "variety" tracked similar across agendas. This varied on the calculated variable of "complexity" where the blogosphere had a mean score of 5.03 (SD = .28) and elite media had a mean of 14.71, however the standard deviation was 68.15. The other calculated variables tracked closely to one another across agenda, which indicated there was little difference in tone based on agenda type for the calculated variables of tone. The percentage of texts in range for the calculated variables of tone was 25% or less across all agendas. Again, this indicated the texts in this study were not similar to other standard text based on the calculated variables of tone. Full results are in Table 4-15 and 4-16.

The master variables for tone also tracked similarly across all agendas. All standard scores were around 50.00, which is of note because 50 is in range for all master variables of tone as seen previously in Table 4-6. It is notable that the master variables of tone were more likely to be in range for this data than the calculated variables with "activity" "optimism", "realism", and "commonality" all having the majority of the cases in each agenda falling within normal range. The one exception to this is the

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variable "certainty" which all agendas have 38% or less of the units of analysis falling in the standard range. Full results are in Table 4-17 and 4-18.

Predictive Relationship of Agendas on The Policy Agenda

In an effort to determine the exact predictive relationship of the blogosphere agenda, elite media agenda, interest group agenda, and the public agenda on the policy agenda, the hypothesized model of relationships was tested using structural equation modeling. Underlying assumptions for SEM (normality, sampling adequacy, and no extreme multicollinearity) (Byrne, 2009) were tested and confirmed to be acceptable before the researcher conducted the main hypothesis testing. However, in the case of the measured variable time for the interest group agenda, it had to be dropped from the model due to sampling inadequacies (Table 4-18). In order to test the hypotheses in this study, structural equation modeling analysis was used with the method of maximum likelihood. AMOS 17 was employed to perform the data analyses. The exogenous latent variable was the policy agenda. There were four endogenous latent variables, including the blogosphere agenda, elite media agenda, specialized public agenda, and the interest group agenda. A breakdown of the latent and measured variables is in Table 4-19.

The first step in the model testing was to estimate the goodness-of-fit for the hypothesized model. The X^2 test was significant which suggested the estimated model did not fit well with the observed data. However, the X^2 test is sensitive to sample size and often leads to model rejection. Therefore, it is suggested that if an X^2/degree of freedom ratio does not exceed five, the model fit is acceptable (Bollen, 1989). Because the X^2/degree of freedom ratio of the current hypothesized model was estimated at 1.96 (X^2 = 1178.13, df = 550), CFI was .90, NFI was .82, and RMSEA was .68, it was

concluded that the hypothesized model was acceptable despite the significant X^2 statistic. CFI stands for Comparative Fit Index, the CFI depends extensively on the average size of the correlations in the data. If the average correlation between variables is not high, then the CFI will not be very high (Byrne, 2009). The CFI for the hypothesized model was near 1 at .90, which is considered high. RMSEA stands for Root Mean Square Error of Approximation. This is another test of model fit, good models are considered to have an RMSEA of .05 or less. Models with an RMSEA of .1 or more have a poor fit (Byrne, 2009). The RMSEA in the hypothesized model in this study was .68, which indicates this model may not be a good fit. NFI stands for Normed Fit Index and is another measure of goodness of fit. A value between .90 and .95 is considered acceptable, and above .95 is considered good. The NFI in the hypothesized model in this study is .82, which is not high enough to be considered a good fit. The goodness of fit statistics for the hypothesized were not consistent in determining the goodness of fit for this model.

Additionally, after examining the significance of the regression weights, eight out of ten relationships in the model showed significant direct effects as expected (p<.01). The only two exceptions were the two-way relationship between the elite media and interest group agendas (H2d: β = .16, p>.05) and the relationship between specialized public opinion and interest group agendas. (H2f: β = .14, p>.05). These relationships were not significant (Table 4-20 and Figure 4-1).

In order to improve the model to better explain the relationship between the agendas, the literature was again examined to determine if there was an indication of a different relationship between the agendas compared in H2d and H2f, however, none

was found. Thus, the two non-significant relationships were removed from the model and it was tested again for goodness of fit. The standardized β coefficients were examined to evaluate the estimated causal relations. Six out of eight relationships were significant at p<.001, the other two were significant at the p<.01 level. As shown in Table 4-21 and Figure 4-2, the new model fit the observed data better than the previous hypothesized model, with statistical significance of the regression weights for all constructs (X^2 = 877.67, df = 545, X^2/df ratio = 1.61, CFI = .94, NFI = .85, RMSEA = .054). All of these goodness of fit statistics except for NFI indicate this model is a good fit.

The final model strongly supports eight out of ten relationships in the hypothesized model in this study. As Figure 4-2 illustrates, the blogosphere agenda (β = .68, p<.001), elite media agenda (β = .81, p<.001), interest group agenda (β = .69, p<.01), and specialized public agenda (β = .44, p<.01) all have a significant influence on the policy agenda which confirms H1. Additionally, a two-way relationship is supported by this data for the blogosphere and elite media agenda (H2a: β = .76, p<.001), blogosphere and the specialized public agenda (H2b: β = .78, p<.001), blogosphere and interest group agenda (H2c: β = .43, p<.001), and between the elite media agenda and the specialized public agenda (H2e: β = .88, p<.001). However, this final model does not support a two-way relationship between the elite media agenda and interest group agenda (H2d: β = .16, p>.05) and the relationship between specialized public opinion and interest group agendas. (H2f: β = .14, p>.05).

Table 4-1. Descriptive statistics across agendas

	Number of texts	Total words	Word size		M Number of Graphics		Comments		M Number of Videos	
			M	SD	M	SD	M	SD	M	SD
Elite Media	67	55,131	5.00	.22	1.03	2.44	16.06	60.52	.01	.12
Blogosphere	65	49,950	5.00	.27	.49	.62	5.31	17.69	.08	.27
Specialized Public	42	156,219	4.69	.27	0.00	0.00	24.76	71.09	0.00	0.00
Interest Group	4	370,029	4.62	.26	-	-	-	-	-	-
Policy	1	253,627	4.93	-	-	-	.	-	-	-

Note: The interest group and policy agenda did not have an option for adding graphics, comments, or videos; texts = documents; word size = letters per word

Table 4-2. 32 Attributes of tone defined and range of standard scores for normal text

	Definition	Normal Range for Standard Scores	
		Low	High
Numerical terms	Any sum, date, or product specifying the facts in a given case. This dictionary treats each isolated integer as a single word and each separate group of integers as a single word. In addition, the dictionary contains common numbers in lexical format (*one, tenfold, hundred, zero)* as well as terms indicating numerical operations (*subtract, divide, multiply, percentage*) and quantitative topics (*digitize, tally, mathematics).* The presumption is that Numerical Terms hyper -specify a claim, thus detracting from its universality.	.30	15.04
Ambivalence	Words expressing hesitation or uncertainty, implying a writer's inability or unwillingness to commit to the verbalization being made. Included are hedges (*allegedly*, *perhaps, might*)*,* statements of inexactness (*almost, approximate, vague, somewhere*) and confusion (*baffled, puzzling, hesitate).* Also included are words of restrained possibility (*could, would, he'd*) and mystery (*dilemma, guess, suppose, seems).*	6.49	19.21
Self reference	Al first person references, including I, I'd, I'll, I'm, I've, me, mine, my, and myself. Self-references are treated as acts of indexing whereby the locus of action appears to reside in the speaker and not in the world at large (thereby implicitly acknowledging the speaker s limited vision).	0.00	15.10
Tenacity	All uses of the verb to be (*is, am, will, shall*), three definitive verb forms (*has, must, do*) and their variants, as well as all associated contraction's (*he'll, they've, ain't*). These verbs connote confidence and totality.	23.32	39.76
Leveling terms	Words used to ignore individual differences and to build a sense of completeness and assurance. Included are totalizing terms (*everybody, anyone, each, fully*), adverbs of permanence (*always, completely, inevitably, consistently*), and resolute adjectives (*unconditional, consummate, absolute, open-and-shut*).	5.02	12.76

Table 4-2. Continued

Collectives	Singular nouns connoting plurality that function to decrease specificity. These words reflect a dependence on categorical modes of thought. Included are social groupings (*crowd, choir, team, humanity*), task groups (*army, congress, legislature, staff*) and geographical entities (*county, world, kingdom, re public*).	4.04	14.46
Praise	Affirmations of some person, group, or abstract entity. Included are terms isolating important social qualities (*dear, delightful, witty),* physical qualities (*mighty, handsome, beautiful),* intellectual qualities (*shrewd, bright, vigilant, reasonable),* entrepreneurial qualities (*successful, conscientious, renowned*), and moral qualities (*faithful, good, noble*). All terms in this dictionary are adjectives.	2.77	9.59
Satisfaction	Term s associated with positive affective states (*cheerful, passionate, happiness*), with moments of undiminished joy (*thanks, smile, welcome*) and pleasurable diversion (*excited, fun, lucky),* or with moments of triumph (*celebrating, pride, auspicious).* Also included are words of nurturance: *healing, encourage, secure, relieved.*	.47	6.09
Inspiration	Abstract virtues deserving of universal respect. Most of the terms in this dictionary are nouns isolating desirable moral qualities (*faith, honesty, self-sacrifice, virtue*) as well as attractive personal qualities (*courage, dedication, wisdom, mercy).* Social and political ideals are also included: *patriotism, success, education, and justice.*	1.56	11.10
Blame	Terms designating social inappropriateness (*mean, naive, sloppy, stupid*) as well as downright evil (*fascist, blood-thirsty, repugnant, malicious*) compose this dictionary. In addition, adjectives describing unfortunate circumstances (*bankrupt, rash, morbid, embarrassing*) or unplanned vicissitudes (*weary, nervous, painful, detrimental)* are included. The dictionary also contains outright denigrations: *cruel, illegitimate, offensive, miserly.*	.06	4.16
Hardship	This dictionary contains natural disasters (*earthquake, starvation, tornado, pollution*), hostile actions (*killers, bankruptcy, enemies, vices*) and censurable human behavior (*infidelity, despots, betrayal*). It also includes unsavory political outcomes (*injustice*, *slavery, exploitation, rebellion*) as well as normal human fears (*grief, unemployment, died, apprehension*) and in capacities (*error*, *cop-outs, weakness*).	1.26	10.48

Table 4-2. Continued

Aggression	A dictionary embracing human competition and forceful action. Its terms connote physical energy (*blast, crash, explode, collide*), social domination (*conquest, attacking, dictatorships, violation), and* goal- directedness (*crusade, commanded, challenging, overcome*). In addition, words associated with personal triumph (*mastered, rambunctious, pushy*), excess human energy (*prod, poke, pound, shove*), disassembly (*dismantle, demolish, overturn, veto)* and resistance (*prevent, reduce, defend, curbed*) are included.	1.07	9.79
Accomplishment	Words expressing task-completion (*establish, finish, influence, proceed)* and organized human behavior (*motivated, influence, leader, manage*). Includes capitalistic terms (*buy, produce, employees, sell),* modes of expansion (*grow, increase, generate, construction*) and general functionality (*handling, strengthen, succeed, outputs).* Also included is programmatic language: *agenda, enacted, working, leadership*.	4.96	23.78
Communication	Terms referring to social interaction, both face-to-face (*listen, interview, read, speak*) and mediated (*film, videotape, telephone, e-mail*). The dictionary includes both modes of intercourse (*translate, quote , scripts, broadcast*) and moods of intercourse (*chat, declare , flatter, demand*). Other term s refer to social actors (*reporter, spokesperson, advocates, preacher*) and a variety of social purposes (*hint, rebuke, respond, persuade*).	2.21	11.79
Cognition	Words referring to cerebral processes, both functional and imaginative. Included are modes of discovery (*learn, deliberate, consider, compare*) and domains of study (*biology, psychology, logic, economics*). The dictionary includes mental challenges *(question, forget, re-examine, paradoxes)*, institutional learning practices (*graduation, teaching, classrooms*), as well as three forms of intellection: intuitional (*invent, perceive, speculate, interpret)*, rationalistic (*estimate, examine, reasonable, strategies*), and calculative (*diagnose, analyze, software, fact-finding*).	4.43	14.27
Passivity	Words ranging from neutrality to inactivity. Includes terms of compliance (*allow, tame, appeasement*), docility (*submit, contented, sluggish*), and cessation (*arrested, capitulate, refrain, yielding*). Also contains tokens of inertness (*backward, immobile, silence, inhibit*) and disinterest (*unconcerned, nonchalant, stoic*), as well as tranquility (*quietly, sleepy, vacation).*	2.10	8.08

Table 4-2. Continued

Spatial terms	Terms referring to geographical entities, physical distances, and modes of measurement. Included are general geographical terms (*abroad, elbow-room, locale, outdoors*) as well as specific ones (*Ceylon, Kuwait, Poland*). Also included are politically defined locations (*county, fatherland, municipality, ward*), points on the compass (*east*, *southwest*) and the globe (*latitude, coastal, border, snowbelt*), as well as terms of scale (*kilometer, map, spacious*), quality (*vacant, out-of-the-way, disoriented*) and change (*pilgrimage, migrated, frontier.*)	4.17	19.85
Familiarity	Consists of a selected number of C.K. Ogden s (1968) operation words, which he calculates to be the most common words in the English language. Included are common prepositions (*across, over, through*), demonstrative pronouns (*this, that*) and interrogative pronouns (*who, what*), and a variety of particles, conjunctions and connectives (*a, for, so*).	117.87	147.19
Temporal terms	Terms that fix a person, idea, or event within a specific time-interval, thereby signaling a concern for concrete and practical matters. The dictionary designates literal time (*century, instant, mid-morning*) as well as metaphorical designations (*lingering, seniority, nowadays*). Also included are calendrical terms (*autumn, year-round, weekend*), elliptical terms (*spontaneously, postpone, transitional*), and judgmental terms (*premature, obsolete, punctual*).	8.36	21.82
Present concern	A selective list of present-tense verbs extrapolated from C. K. Ogden's list of general and picturable terms, all of which occur with great frequency in standard American English. The dictionary is not topic-specific but points instead to general physical activity (*cough,* taste, sing, take), social operations (canvass, touch, govern, meet), and task-performance (make, cook, print, paint).	7.02	16.60
Human interest	An adaptation of Rudolf Flesch's notion that concentrating on people and their activities gives discourse a life-like quality. Included are standard personal pronouns (*he, his,* ourselves, them), family members and relations (cousin, wife, grandchild, uncle), and generic terms (friend, baby, human, persons).	18.13	45.49

Table 4-2. Continued

Concreteness	A large dictionary possessing no thematic unity other than tangibility and materiality. Included are sociological units (peasants, *African- Americans, Catholics*), occupational groups (*carpenter, manufacturer, policewoman*), and political alignments (*Communists, congressman, Europeans*). Also incorporated are physical structures (*courthouse, temple, store*), forms of diversion (*television, football, CD-ROM*), terms of accountancy (*mortgage, wages, finances*), and modes of transportation (*airplane, ship, bicycle*). In addition, the dictionary includes body parts (*stomach, eyes, lips*), articles of clothing (*slacks, pants, shirt*), household animals (*cat, insects, horse*) and foodstuffs (*wine, grain, sugar*), and general elements of nature (*oil, silk, sand*).	10.70	28.50
Past concern	The past-tense forms of the verbs contained in the Present Concern dictionary.	.97	6.19
Centrality	Terms denoting institutional regularities and/or substantive agreement on core values. Included are indigenous terms (*native, basic, innate*) and designations of legitimacy *(orthodox, decorum, constitutional, ratified*), systematicity (*paradigm, bureaucratic, ritualistic*), and typicality (*standardized, matter-of-fact, regularity*). Also included are terms of congruence (conformity, mandate, unanimous), predictability (expected, continuity, reliable), and universality (womankind, perennial, landmarks).	1.19	7.54
Rapport	This dictionary describes attitudinal similarities among groups of people. Included are terms of affinity (*congenial, camaraderie, companion*), assent (*approve, vouched, warrants*), deference ((*equivalent, resemble, consensus*).	.42	4.26
Cooperation	Terms designating behavioral interactions among people that often result in a group product. Included are designations of formal work relations (*unions, schoolmates, caucus*) and informal association s (*chum, partner, cronies)* to more intimate interactions (*sisterhood, friendship, comrade*). Also included are neutral interactions (*consolidate, mediate, alignment*), job-related tasks (*network, detente, exchange*), personal involvement (*teamwork, sharing, contribut*e), and self-denial (*public-spirited, care-taking, self-sacrifice*).	.36	8.44

Table 4-2. Continued

Diversity	Words describing individuals or groups of individuals differing from the norm. Such distinctiveness may be comparatively neutral (*inconsistent, contrasting, non-conformist*) but it can also be positive (*exceptional, unique, individualistic*) and negative (*illegitimate, rabble-rouser, extremist*). Functionally, heterogeneity may be an asset (*far-flung, dispersed, diffuse*) or a liability (*factionalism, deviancy, quirky*) as can its characterizations: *rare* vs. *queer*, *variety* vs. *jumble*, *distinctive* vs. *disobedient*.	.07	3.81
Exclusion	A dictionary describing the sources and effects of social isolation. Such seclusion can be phrased passively (*displaced, sequestered*) as well as positively (*self-contained, self-sufficient*) and negatively (*outlaws, repudiated*). Moreover, it can result from voluntary forces (*secede, privacy*) and involuntary forces (*ostracize, forsake, discriminate*) and from both personality factors (*smallmindedness, loneliness*) and political factors (*right-wingers, nihilism*). Exclusion is often a dialectical concept: *hermit* vs. *derelict, refugee* vs. *pariah, discard* vs. *spurn*).	0.00	4.31
Liberation	Terms describing the maximizing of individual choice (*autonomous, open-minded, options*) and the rejection of social conventions (*unencumbered, radical, released*). Liberation is motivated by both personality factors (*eccentric, impetuous, flighty*) and political forces (*suffrage, liberty, freedom, emancipation*) and may produce dramatic outcomes (*exodus, riotous, deliverance*) or subdued effects (*loosen, disentangle, outpouring*). Liberatory terms also admit to rival characterizations: *exemption* vs. *loophole, elope* vs. *abscond, uninhibited* vs. *outlandish*.	0.00	4.72
Denial	A dictionary consisting of standard negative contractions (*aren't, shouldn't, don't*), negative functions words (*nor, not, nay*), and term s designating null sets (*nothing, nobody, none*).	2.57	10.35
Motion	Terms connoting human movement (*bustle, job, lurch, leap*), physical processes (*circulate, momentum, revolve, twist),* journeys (*barnstorm, jaunt, wandering, travels*), speed (*lickety-split, nimble, zip, whistle-stop),* and modes of transit (*ride, fly, glide, swim*).	.17	4.35

Note: All definitions are from the user manual for Diction 5.0.

Table 4-3. Tone for all data: Means of frequency counts, means of standardized scores, and percent in range

	M Occurrence	*SD*	M Standard Score	*SD*	% in Range	n
Numerical terms	20.34	18.01	1.93	3.94	72.10	129
Cooperation	5.20	3.34	.19	.83	38.50	47
Exclusion	2.17	2.67	.02	1.23	32.00	39
Liberation	1.70	1.96	-.17	.76	26.20	32
Motion	2.23	2.30	-.01	1.09	26.20	32
Diversity	1.77	2.09	-.13	1.09	25.40	31
Centrality	6.63	4.07	.72	1.28	24.60	30
Blame	1.72	2.50	-.27	.93	24.00	29
Satisfaction	3.07	3.52	-.08	1.25	20.70	25
Communication	12.30	9.69	1.10	2.02	19.70	24
Rapport	1.74	1.54	-.31	.80	18.90	23
Self reference	2.61	4.46	-.54	.59	10.60	19
Hardship	5.09	4.40	-.18	.94	9.80	12
Aggression	4.79	3.34	-.14	.76	8.20	10
Past concern	2.79	3.03	-.37	.96	5.70	7
Praise	3.88	3.58	-.66	1.06	2.50	3
Accomplishment	15.88	6.70	.15	.71	2.50	3
Inspiration	3.82	3.18	-.53	.66	1.70	2
Passivity	3.54	2.52	-.52	.84	.80	1
Spatial terms	11.26	9.44	-.09	1.20	.80	1
Denial	4.38	3.39	-.53	.87	.80	1
Tenacity	22.92	9.52	-1.07	1.13	0.00	0
Leveling terms	5.13	3.39	-.94	.89	0.00	0
Collectives	10.29	5.10	.22	.98	0.00	0
Cognition	7.20	4.20	-.44	.87	0.00	0
Familiarity	116.11	20.86	-1.04	1.26	0.00	0
Temporal terms	13.10	5.99	-.27	.88	0.00	0
Present concern	12.34	6.13	.12	1.26	0.00	0
Human interest	12.81	8.03	-1.37	.59	0.00	0
Concreteness	24.84	10.13	.60	1.13	0.00	0
Ambivalence	12.00	7.41	-.05	1.48	0.00	0

Table 4-4. Tone calculated variables defined and standard score ranges for normal text

	Definition	Normal Range for Standard Scores	
		Low	High
Insistence	This is a measure of code-restriction and semantic contentedness. The assumption is that repetition of key terms indicates a preference for a limited, ordered world. In calculating the measure, all words occurring three or more times that function as nouns or noun-derived adjectives are identified (either cybernetically or with the user's assistance) and the following calculation performed: [Number of Eligible Words **x** Sum of their Occurrences] ÷ 10. (For small input files, high frequency terms used two or more times are used in the calculation).	9.15	111.15
Embellishment	A selective ratio of adjectives to verbs based on David Boder's (1940) conception that heavy modification slows down a verbal passage by de- emphasizing human and material action . Embellishment is calculated according to the following formula: [Praise + Blame +1] ÷ [Present Concern + Past Concern +1].	.18	1.10
Variety	This measure conforms to Wendell Johnson's (1946) Type-Token Ratio, which divides the number of different words in a passage by the passage's total words. A high score indicates a speaker's avoidance of overstatement and a preference for precise, molecular statements.	.45	.53
Complexity	A simple measure of the average number of characters-per-word in a given input file. Borrows Rudolph Flesch's (1951) notion that convoluted phrasings make a text's ideas abstract and its implications unclear.	4.31	5.01

Note: Definitions were taken from the user manual for Diction 5.0.

Table 4-5. Tone of calculated variables for all data: Mean occurrences, means of standardized scores, and percent in range

	M Occurrences	SD	M Standard Score	SD	% in Range	n
Embellishment	.78	2.50	.27	5.10	13.10	16
Complexity	8.80	43.20	1.07	.94	2.50	3
Insistence	85.34	61.07	.50	1.19	.80	1
Variety	.62	.44	2.35	2.13	.80	1

Table 4-6. Definitions of tone master variables and standard scores for normal text

	Definition	Formula	Stand Score Range	
			Low	High
Activity	Language featuring movement, change, the implementation of ideas and the avoidance of inertia.	[Aggression + Accomplishment + Communication + Motion] - [Cognitive Terms + Passivity + Embellishment]	46.74	55.48
Optimism	Language endorsing some person, group, concept or event or highlighting their positive entailments.	[Praise + Satisfaction + Inspiration] -[Blame + Hardship + Denial]	46.37	52.25
Certainty	Language indicating resoluteness, inflexibility, and completeness and a tendency to speak ex cathedra	[Tenacity + Leveling + Collectives + Insistence.] - [Numerical Terms + Ambivalence + Self Reference + Variety]	46.90	51.96
Realism	Language describing tangible, immediate, recognizable matters that affect people's everyday lives.	[Familiarity + Spatial Awareness + Temporal Awareness + Present Concern + Human Interest + Concreteness] -[Past Concern + Complexity]	46.10	52.62
Commonality	Language highlighting the agreed -upon values of a group and rejecting idiosyncratic mode s of engagement.	[Centrality + Cooperation + Rapport] -[Diversity + Exclusion + Liberation]	46.86	52.28

Note: Definitions and formulas came from the user manual for Diction 5.0.

Table 4-7. Tone master variables for all data: means of standardized scores and percent in range

	M Standard Score	SD	% in Range	n
Optimism	49.69	2.26	87.70	107
Activity	51.80	5.63	82.00	100
Realism	47.19	2.95	65.90	81
Commonality	50.41	5.43	57.70	71
Certainty	45.57	5.47	28.50	35

Table 4-8. Attributes: Total frequency and mean frequency counts for all data

	% of texts in which the attribute appeared at least once	n	M occurrence per unit of analysis	SD
Economy	98.40	177	71.05	108.42
People	90.20	167	8.65	15.57
Bureaucracy	75.60	149	4.10	6.66
Environmental	75.60	149	5.57	9.11
Energy	74.00	147	14.64	35.32
Negative attributes	72.40	145	3.92	6.66
Carbon	65.00	136	5.61	11.43
Actions	56.90	126	1.55	2.30
Agriculture	35.00	99	1.85	4.08
Positive attributes	35.00	99	1.16	2.30

Table 4-9. Emergent attributes: Total frequency and mean frequency counts for all data

	% of texts in which the attribute appeared at least once	n	M Occurrence	SD
Earth or Planet	36.30	100	2.06	3.68
Obama	17.70	77	1.12	3.33
Scientist or Research	11.30	69	.95	3.55
Alternative Fuels	10.50	68	.72	2.94
Need	9.70	67	.27	.92
Health	8.10	65	.72	3.47
Home	6.50	63	.41	1.95

Table 4-10. Attribute means, standard deviations, and ns for the

	M	SD	n
Actions	1.46	1.74	48
Economy	49.05	40.40	43
People	6.48	8.20	40
Bureaucracy	2.77	3.21	34
Environmental	6.30	12.12	31
Energy	11.45	23.36	29
Negative Attributes	2.52	8.20	28
Carbon	3.80	4.14	27
Positive Attributes	.97	2.35	17
Agriculture	1.02	2.42	11

Table 4-11. Attribute means, standard deviations, and ns for the elite media agenda

	M	SD	n
Economy	48.98	30.49	50
People	5.90	4.20	46
Energy	8.22	10.68	42
Environmental	4.04	5.22	41
Negative Attributes	2.98	3.39	41
Bureaucracy	2.64	3.76	39
Carbon	3.40	3.78	35
Actions	1.20	1.70	26
Agriculture	36.00	18.00	11
Positive Attributes	.38	1.10	10

Table 4-12. Attribute means, standard deviations, and ns for the interest group agenda

	M	SD	n
Economy	336.20	357.99	4
Environmental	16.75	10.14	4
Negative Attributes	11.00	6.98	4
People	44.50	61.80	4
Energy	95.75	82.22	3
Carbon	33.25	42.52	3
Bureaucracy	16.75	18.96	3
Positive Attributes	8.00	16.75	3
Agriculture	3.25	3.20	3
Actions	4.50	6.14	2

Table 4-13. Attribute means, standard deviations, and ns for the public agenda

	M	SD	n
Economy	93.42	126.88	23
People	10.13	15.67	20
Bureaucracy	6.42	8.42	16
Environmental	4.42	5.69	16
Energy	9.79	20.62	15
Negative Attributes	8.96	11.38	15
Carbon	7.17	12.80	14
Actions	1.96	3.04	14
Positive Attributes	1.67	2.63	12
Agriculture	1.79	3.90	9

Table 4-14. Attributes across agendas: Percent of texts with attributes and frequency counts

	Blogosphere		Elite Media		Interest Group		Public		Policy
	%	n	%	n	%	n	%	n	n
Actions	61.64	48	52.00	26	50.00	2	58.30	14	2.00
Agriculture	25.00	11	36.00	11	75.00	3	37.50	9	10.00
Bureaucracy	77.30	34	78.00	39	75.00	3	66.70	16	29.00
Carbon	61.40	27	70.00	35	75.00	3	58.30	14	48.00
Economy	97.30	43	100.00	50	100.00	4	95.80	23	545.00
Energy	65.90	29	84.00	42	75.00	3	62.50	15	267.00
Environmental	70.50	31	82	41	100.00	4	66.70	16	33.00
Negative Attributes	63.60	28	82	41	100.00	4	62.50	15	35.00
People	90.90	40	92.00	46	100.00	4	83.30	20	63.00
Positive Attributes	38.60	17	20.00	10	75.00	3	50.00	12	9.00

Note: The policy agenda only has ns and not percentages because the policy agenda only consisted of one text.

Table 4-15. Means and standard deviations of tone calculated variables broken down by agenda

	Blogosphere		Elite Media		Interest Group		Public		Policy
	M	SD	M	SD	M	SD	M	SD	n
Insistence	89.80	60.28	71.85	55.84	88.81	59.68	97.90	65.55	234.46
Embellishment	.89	2.64	.37	.25	.69	.12	1.46	4.34	.27
Variety	.71	.70	.60	.06	.45	.82	.55	.12	.33
Complexity	5.03	.28	14.71	68.15	4.62	.26	4.48	.89	4.93

Note: The policy agenda only has ns because the policy agenda only consisted of one text.

Table 4-16. Percentage of texts in range and frequency counts of tone calculated variables broken down by agenda

	Blogosphere		Elite Media		Interest Group		Public		Policy
	%	n	%	n	%	n	%	n	% In Range
Insistence	0.00	0	2.00	1	0.00	0	0.00	0	0
Embellishment	10.80	7	8.20	4	25.00	1	16.70	4	0
Variety	2.30	1	2.00	2	0.00	0	2.00	1	0
Complexity	2.30	1	0.00	0	0.00	0	8.30	2	0

Note: The policy agenda only has in range as a percent because the policy agenda only consisted of one text.

Table 4-17. Means of standard scores and standard deviations of tone master variables broken down by agenda

	Blogosphere		Elite Media		Interest Group		Public		Policy
	M	SD	M	SD	M	SD	M	SD	
Activity	51.26	6.09	52.87	2.45	51.42	1.48	50.81	8.94	48.46
Optimism	49.65	2.19	49.56	1.90	50.34	1.22	49.90	3.16	50.06
Certainty	46.38	7.99	44.94	2.86	42.70	4.75	45.83	3.80	46.56
Realism	46.63	3.16	47.40	2.64	44.61	3.77	48.39	2.61	43.04
Commonality	50.29	8.03	51.33	2.58	50.54	.41	51.33	2.58	51.70

Note: The policy agenda only has the actual number not a M or SD because the policy agenda only consisted of one text.

Table 4-18. Percentage of texts in range and frequency counts of tone master variables broken down by agenda

	Blogosphere		Elite Media		Interest Group		Public		Policy
	%	n	%	n	%	n	%	n	% In Range
Activity	86.40	38	81.60	40	100.00	4	70.80	17	100
Optimism	84.10	37	91.80	45	100.00	4	83.30	20	100
Certainty	31.80	14	22.00	11	25.00	1	37.50	9	0
Realism	54.50	24	70.00	35	50.00	2	83.30	20	0
Commonality	54.50	24	62.00	31	100.00	4	45.80	11	100

Note: The policy agenda only has in range as a percent because the policy agenda only consisted of one text.

Table 4-19. Latent and measures variables in structural equation model

Latent	Measured
Blogosphere Agenda	Custom dictionary attributes, tone master variables, comments, number of words, time
Elite Media Agenda	Custom dictionary attributes, tone master variables, comments, number of words, time
Specialized Public Agenda	Custom dictionary attributes, tone master variables, comments, number of words, time
Interest Group Agenda	Custom dictionary attributes, tone master variables, number of words, time*
Policy Agenda	Custom dictionary attributes, tone master variables

Note: *indicates variable removed due to sampling inadequacies

Table 4-20. Slopes and p values for hypothesized structural equation model

Hypothesis	β	p
H2e. elite media and specialized public (two-way)	.82	.003*
H1: elite media (one-way)	.79	.005*
H2a: blogosphere and elite media (two-way)	.77	.003*
H2b: blogosphere and specialized public (two-way)	.72	.002*
H1: blogosphere (one-way)	.68	.004*
H1: interest group (one-way)	.67	.002*
H1: specialized public (one-way)	.43	.007*
H2c: blogosphere and interest group (two-way)	.41	.008*
H2d: elite media and interest group (two-way)	.16	.192
H2f: specialized public and interest group (two-way)	.14	.112

Note: * indicates a significant value at p<.001

Table 4-21. Slopes and p values for final revised structural equation model

Hypothesis	β	p
H2e. elite media and specialized public (two-way)	.88	.000**
H1: elite media (one-way)	.81	.000**
H2b: blogosphere and specialized public (two-way)	.78	.000**
H2a: blogosphere and elite media (two-way)	.76	.000**
H1: blogosphere (one-way)	.69	.000**
H1: interest group (one-way)	.68	.002*
H1: specialized public (one-way)	.44	.005*
H2c: blogosphere and interest group (two-way)	.43	.001*

Note: * indicates a significant value at $p<.01$, **indicates a significant value at $p<.001$
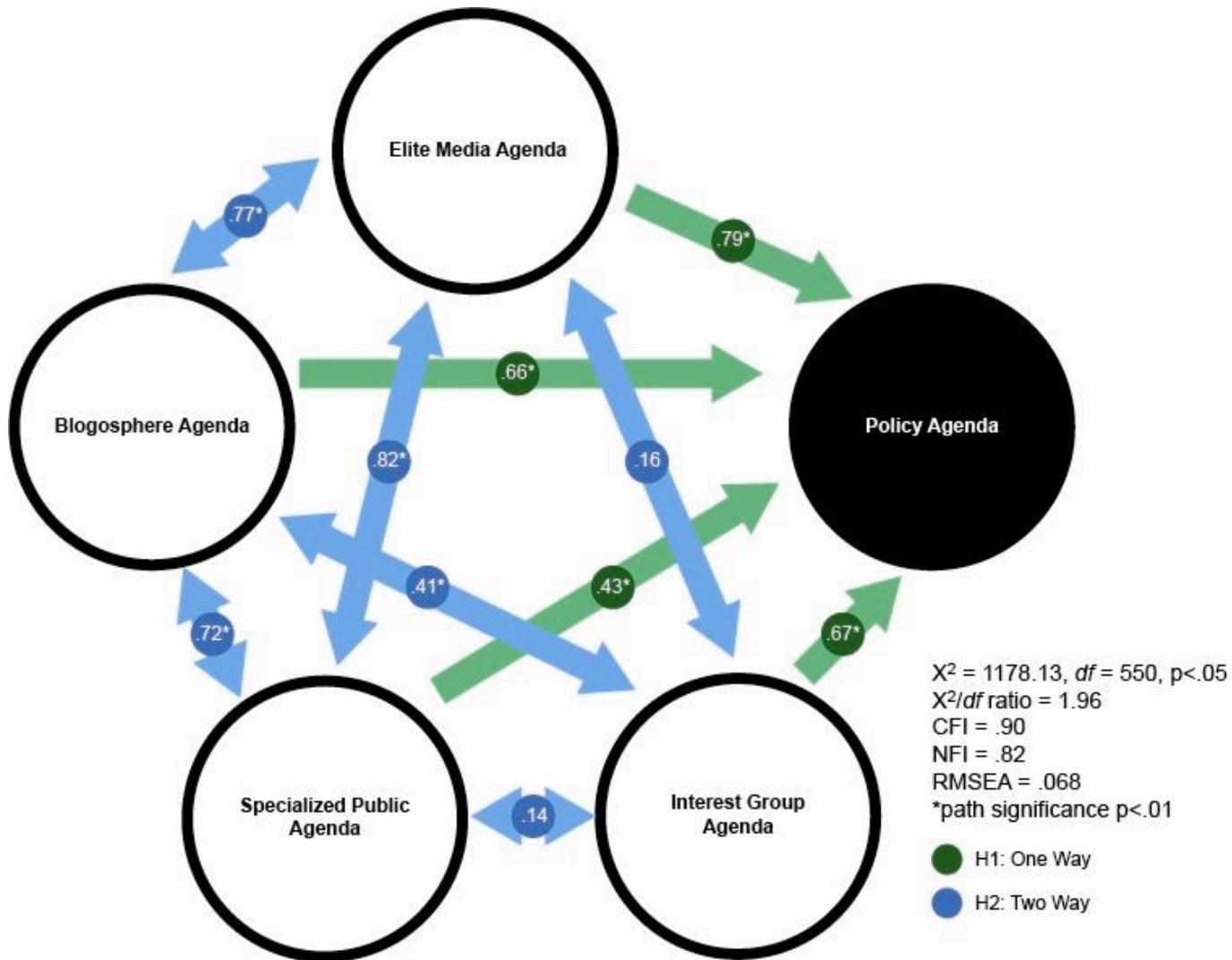
Figure 4-1. The hypothesized predictive relationship on the policy agenda
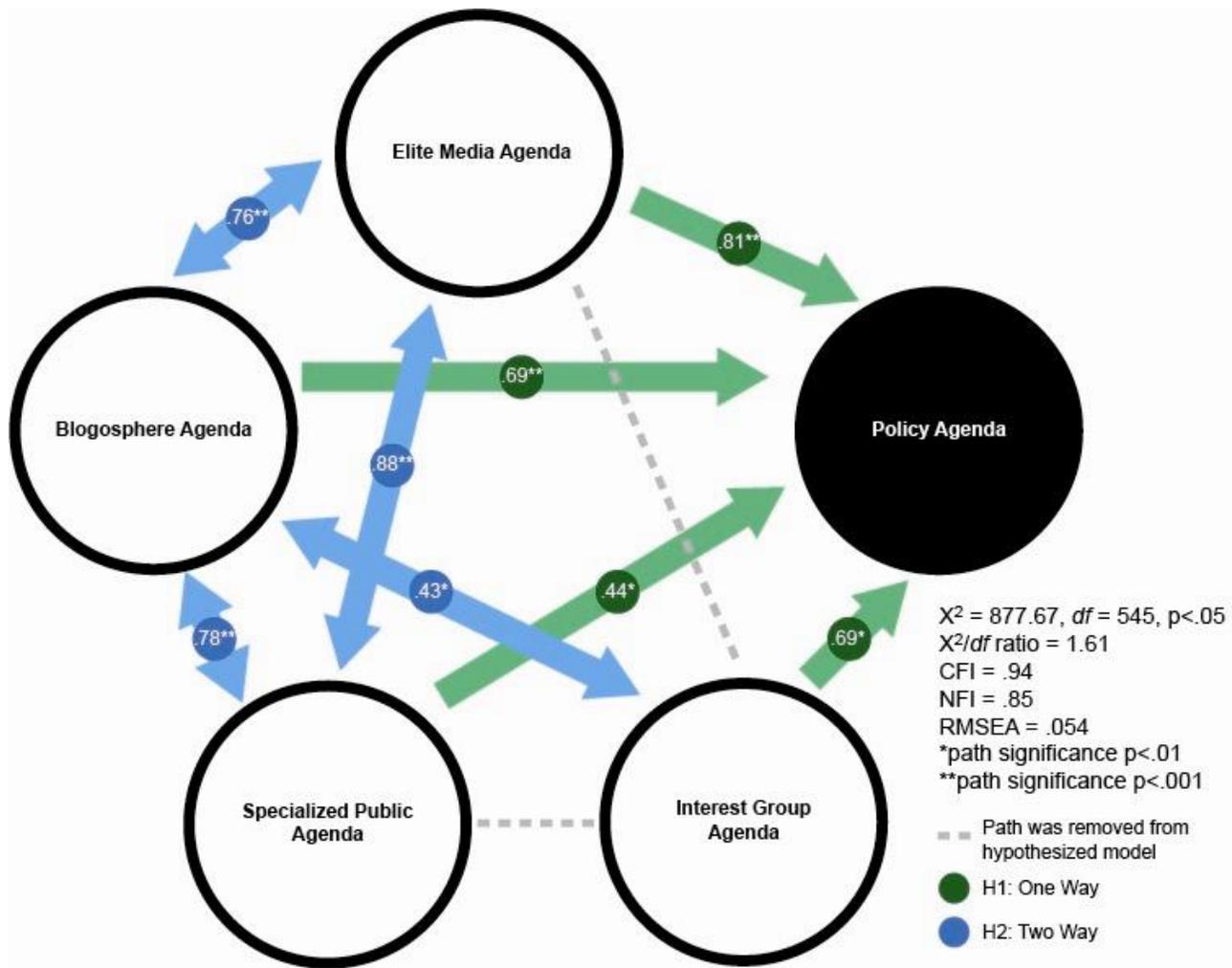
Figure 4-2. Final revised predictive relationship on the policy agenda

CHAPTER 5
CONCLUSION

Overview

The purpose of this study was to gain a greater understanding of the influences in the development of public policy, and to address gaps in the literature as to the transfer of attributes from new media agendas (blogosphere, online elite media, and online specialized public opinion) to the policy agenda. Additionally, this study was designed to determine the tone of messages related to the policy agenda in new media environments. An example piece of legislation that affects agriculture was used in this study to represent the policy agenda, 2009 Cap & Trade legislation (H.R. 2454), because of its potentially sizable effects on agricultural producers.

This study utilized a quantitative content analysis design to address the research objectives of determining if attributes were transferred across agendas, determining what tones were used when discussing the object of the 2009 Cap & Trade legislation, if there was a difference in tone depending on the agenda (blogosphere, elite media, interest group, public, and policy), and what the predictive relationship was of the blogosphere agenda, mass media agenda, interest group agenda, and public agenda on the policy agenda.

Conclusions by Objective

Determine what tones are used when discussing the object (2009 Cap and Trade legislation)

Based on the descriptive analysis, the primary tenets of tone used to describe the 2009 Cap and Trade Legislation were "numerical terms", "tenacity", "accomplishment", "familiarity", and "concreteness". The "numerical terms" and "concreteness" are likely due to the serious economic consequences of this legislation. The "familiarity" of the

discussions on this legislation in all data can likely be attributed to the purposeful

lowered reading level of the blogosphere, elite media, and comments as this variable is

tracked in Diction using the occurrences of common words and pronouns (Diction,

2010). The "accomplishment" tenet is also logical to occur regularly in these agendas,

as all of these agendas would have been reporting task completion, which is how diction

defines this tenet (Diction, 2010). "Tenacity" is calculated using verbs that convey

confidence, which is compatible with these types of agendas, as they are all reliable

reporting mechanisms and would have confidence in their statements.

The results of this study indicated that "insistence" was the most reported

calculated variable of tone for this data set. This is measured through the repetition of

key terms throughout a text (Diction, 2010), which is likely when reporting complex

policy information, as in this study. While the majority of the tenets of tone and

calculated variables of tone were out of range for standard text, the majority of the

master variables were within range for standard, contemporary texts.

The master variables for tone that were the most prominent in this study were

"activity", "optimism", "certainty", and "realism". These tones indicated the discussion of

this legislation contained language featuring movement and change, endorsement of

legislative policy, resolution and inflexibility, and tangible and immediate tones that

affect people's daily lives (Diction, 2010).

Determine if attributes that appear in the blogosphere agenda, as compared to other agendas recur in the same policies once they are passed through the House of Representatives

Attributes

The results of this study indicated that eight attributes appeared in the majority of

the texts in this data set. These attributes were "actions", "bureaucracy", "carbon",

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"economy", "energy", "environment", "negative attributes", and "people". This indicated this legislation was viewed as important because of economic issues and environmental issues. Thus is corresponds with the "numerical terms" tenet of tone appearing so high in this text. Additionally, discussion of this legislation was framed negatively in this data set. Moreover, this legislation was not portrayed as affecting agriculture.

Attributes Transferred through Agendas

"Agriculture" was more prominent in the interest group agenda than any of the other agendas. This is likely due to the ties that those testifying in the committee hearings had to the agricultural community. The attributes of "actions", "bureaucracy", "carbon", "economy", "energy", "environmental", "negative attributes", and "people" all appeared in the majority of the texts across the agendas of the blogosphere, elite media, interest group, and public. The results of the descriptive analysis indicated that there was a transfer of attribute salience to the policy agenda, as all of the attributes from the custom dictionaries ("economy", "environmental", "negative attributes", "people", "energy", "carbon", "bureaucracy", "positive attributes", "agriculture", and "actions") appeared in the policy agenda.

Determine if there is a difference in tone depending on the agenda (mass media agenda, interest group agenda, public agenda, and policy agenda)

The results of this study indicated there was no real difference in tone based on agenda. While this finding may seem unimportant on the surface, it is of value to know that the tones used to describe this legislation were consistent across agendas. While different agendas valued different attributes more or less, the overall tone was similar in the discussions of this legislation which indicated there was no real difference in discussions no matter the agenda.

Determine the predictive relationship of the blogosphere agenda, mass media agenda, interest group agenda, and public agenda on the policy agenda.

The results of this study indicated there is a predicative relationship of the blogosphere agenda, media agenda, interest group agenda, and public agenda on the policy agenda. This adds new information on agenda setting in an online environment. This study's results go beyond the idea that news coverage shapes the priorities of government officials (Baumgartner & Jones, 2001) but adds that new media also shapes the policy agenda. Specifically, this study determined that the blogosphere, online newspapers, and online public opinion shape the policy agenda. Moreover, this study furthered research on the connection between the blogosphere and political agenda, which Wallsten (2007) made, by offering empirical evidence that the blogosphere agenda has a predictive relationship on the policy agenda.

Additionally, this study confirmed there is a two-way relationship between the elite media and public opinion as determined in previous agenda setting research (McCombs & Shaw, 1972; McCombs, 2004; McCombs, 2005). This study also confirms the two-way relationship of online media and the general public (Lee, 2009). Moreover, this study confirms the conclusions of Wallsten (2007) and other case studies (Drezner & Ferrell, 2004; Kerbel, 2009) that the blogosphere has an influence on the elite media agenda and goes on to offer additional empirical information in that the elite media has an influence on the blogosphere agenda which has been assumed in case studies prior (Drezner & Ferrell, 2004; Gill, 2004). Additionally, this study offers evidence that the Interest group agenda and the blogosphere agenda are related in a two-way relationship. This study failed to show there was a two-way relationship between the

elite media agenda and the interest group agenda and the public agenda and the interest group agenda.

Discussion

It is noteworthy that despite this legislation, H.R. 2454, having sizable effects on agricultural producers, the attributes related to agriculture were lower on all agendas under investigation in this study (blogosphere, elite media, interest group, public, and policy). The attributes that were highest in salience across all agendas were economic attributes, which is not surprising considering the extraordinary costs related to implementing this type of legislation. However, economic analysis of this bill has determined that the economic effects to agricultural producers are sizable as compared to industries (Kreutzer et al., 2009).

This study offers new empirical knowledge related to the predictive nature of new media agendas on the policy agenda. The blogosphere, elite media, specialized public, and interest group agenda will have a statistically significant predictive relationship on the policy agenda. Through the testing of H1, it was determined that the blogosphere, elite media, specialized public, and interest group agendas have a statistically significant predictive relationship on the policy agenda. While literature in these areas implied there would be a predictive relationship, this study adds empirical knowledge that new media versions of the elite media and public agendas have a strong predictive relationship with the policy agenda. Additionally, this was the first time the predictive relationship on the blogosphere agenda was tested in an empirical way. Prior to this study, multiple case studies indicated there may be a predicative relationship of the blogosphere agenda on the policy agenda, but this study verifies there is a strong predictive relationship between these agendas.

Moreover, through the testing of H2 in this study it was determined that a statistically significant two-way relationship exists between the blogosphere agenda and the elite media, public, and interest group agendas. This confirms case studies that implied this relationship existed prior. It was also determined that a significant two-way relationship exists between the elite media agenda, and public opinion, which has been confirmed in previous studies. However, this test of H2 indicated there was not a two-way relationship of statistical significance between the interest group agenda and the public agenda and the interest group agenda and the elite media agenda. While this is a diversion from the relationship indicated in previous literature, there are multiple reasons for why these relationships were not significant in this study. It is possible there is not a strong connection between the interest group agenda and the elite media and public agenda in this study due to the new media format of the elite media and public agenda in this study. However, this is unlikely the cause because of the two-way relationship between the interest group agenda and the blogosphere agenda. There is justification in the literature that the public agenda and interest group agenda do not always coincide so perhaps it is less surprising that this relationship was not significant. It is surprising that the interest group agenda and the elite media agendas relationship was not significant as these agendas have been linked to each other in previous research. However, there is a possibility that the sampling inadequacies related to the interest group agenda had an effect on the significance of this relationship and the relationship between the interest group and public agendas.

While previous research indicated that the blogosphere affects political discourse (Drezner & Farrell, 2004; Pole, 2010; Wallsten, 2007), this study offers empirical evidence that the blogosphere affects actual policy in the form of the policy agenda.

Recommendations

Theoretical

The theoretical implications related to this study are associated with the new media element to this study. This research indicates agenda setting occurs in new media environments in a similar way to traditional media environments. Specifically, the agenda setting effects of the blogosphere are strong and should be considered in future agenda setting research. Due to the strong relationship of the blogosphere agenda and all other agendas in this study (elite media, public, interest group, and policy), future agenda setting studies would be remiss to not at least consider the agenda setting effect of the blogosphere on other agendas under investigation.

It is recommended that future research look into the potential two-way relationship between the interest group agenda and the public and elite media agendas. While this study did not show a significant two-way relationship between these agendas, this is not conclusive evidence that a two-way relationship does not exist. Additionally, future research should continue to look at the blogosphere agenda and other new media agendas as this type of communication continues to increase. The measure of these agendas over time will offer stronger empirical evidence as to the strength of the predictive relationship of these agendas on the policy agenda. Additionally, it would be valuable for future research to look at the influence of the lower ranked blogs and online newspapers to determine if these relationships hold true.

Practical

From an applied standpoint, when working to influence the policy agenda practitioners should consider trying to influence agendas that are more accessible to the public like the blogosphere and specialized public agendas. Additionally, due to the lower occurrence of attributes related to agriculture, it is implied that agriculture may not be on the forefront of members of these agendas minds. Therefore, there is an opportunity to educate and engage in two-way communication with members of the more accessible agendas. Because of the strong influence of new media related agendas there is an chance for people previously not asked about their opinions and ideas on policy information to engage in conversations that are influencing the policy agenda.

This study offers insight for communication professionals looking at influencing the policy agenda. It is recommended that practitioners be actively engaged in conversations in the top ranked blogs and elite media outlets that allow public comments. Because the specialized public agenda in this study consisted of comments from these sources, it is known that these discussions have an influence on the policy agenda. The only resource needed to participate in these discussions is that of the practitioners time, thus, it is recommended that communication professionals dedicate a portion of their time to comment on blog posts and stories related to their field of interest. Because previous research (Song, Chi, Hino, & Tseng, 2007) has determined that the blogosphere operates according to the principles of opinion leadership, communication practitioners only need to work to influence the top opinion leaders in online new media to have an effect on the blogosphere agenda.

Due to the lack of differences in tone based on agenda, it is difficult to recommend specific frames and/or tones to use in developing communication messages. However, in other complex policy discussions it can be inferred that tones with "numerical terms", "tenacity", "accomplishment", "familiarity", and "concreteness" may be effective. These tones can be achieved through including numbers, purposely lowered reading level, use of common words and pronouns, reporting task completion, and verbs that convey confidence.

Additionally, "insistence" was effective in this study, and can be added to messages through the use of repetition of key terms throughout a text. Moreover, "activity", "optimism", "certainty", and "realism" were effective tone frames in this study and can be added to messages communicating future policy discussion by including words language featuring movement and change, endorsement of legislative policy, resolution and inflexibility, and tangible and immediate tones that affect people's daily lives.

For Agricultural Communication Professionals

Agricultural communication professionals should continue to navigate the traditional interest group routes, in this case testifying before congress, as this played an important role in influencing the policy agenda as well. Additionally, the interest group agenda was more supportive of the "agriculture" attribute. Specific recommendations for agricultural communication professionals include: working to educate members of the blogosphere, elite media, and public agendas on the importance of agriculture in policies that may not appear to affect agriculture on the surface, engaging in conversations in new media forums that are outside of the traditional audiences of farmers and other activists, and working to establish a credible

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relationship with bloggers and online elite media to get important messages out on short notice.

This research indicates an incredible need to educate policy makers, elite media, bloggers, and the public on the importance of agriculture to political debates. Agricultural communicators must look to new audiences to spread the importance of agriculture to policy discussions related to climate change and other environmental debates. Because the results of this study indicated that inexpensive forms of communication, blogs and comments on blogs and online newspapers, were effective in influencing the policy agenda there is an opportunity to increase agricultural education efforts with minimal costs.

For Educators of Agricultural Communications

The results of this research indicate there is a need for a shift in the focus of agricultural communications education. Students should not only be educated on the basics of writing and managing communication efforts, but additionally should have the opportunity to learn about how to effectively communicate to political audiences. Additionally, educational professionals should make sure students are prepared for the rapidly evolving world of online communication. At the time of publication, this means knowing how to affect the blogosphere agenda, online elite media agenda, and social networking sites. However, what this may mean in the future of new technological communication remains unknown. Thus, it is imperative for educators to keep up with the dynamic online environment of communications in order to effectively educate their students.

Limitations

This type of study is limited in the nature of the texts themselves. One text may focus solely on a single issue and ignore another, which has a strong influence on the discussion of attributes and tone. This was addressed in this study by sampling multiple texts in order to get a large number of texts to overcome this issue. Additionally, this study was limited in time frame, due to the time constraints of the researcher and the available resources for analyzing such large amounts of text. Unfortunately, due to time this was a limitation that could not be overcome, but the large sample size helps limit the effect of this limitation. This study also had a limitation in the sampling frame for the interest group agenda in that it only included four texts for analysis, which limited the use of advance statistics for comparison between attributes and tone. In hindsight this may have been prevented by separating texts into each person testifying instead of each day serving as a text (unit of analysis). Moreover, this study had a purposive sampling frame, which indicates a sampling limitation. However, due to the hierarchical nature of the blogosphere this limitation was mitigated.

What this Means for the Future of Agricultural Communications

This research indicates a greater need for the agricultural industry to address policy issues through research recommended avenues. Specifically, this research suggests that in political discussions that are not perceived as directly related to agriculture, like climate and environmental discussions, the industry should work to influence all agendas that affect the policy agenda. Specifically, while agriculturalists appear to have been effective in reaching the interest group agenda, more focus should be given to the blogosphere agenda, elite media agenda, and the public agenda. Through continued effort in affecting these agendas and continued research in this

area, the agricultural industry can effectively communicate the importance of agriculture and see the transfer of salience of agricultural attributes and objects to the policy agenda.

Conclusions

With the theoretical framework of agenda-setting, the objectives for this quantitative content analysis were to determine 1) if attributes that appear in the blogosphere, as compared to other sources (mass media, interest groups, and the public agenda) with regard to 2009 Cap & Trade legislation (H.R. 2454), recur in the same policies once they are passed through the House of Representatives; 2) what tones are used when discussing the object of the 2009 Cap & Trade legislation (H.R. 2454); 3) if there is a difference in tone depending on the source (mass media, interest groups, public agenda, and 2009 Cap & Trade legislation (H.R. 2454)); and 4) the predictive relationship among the blogosphere, mass media, interest groups, public agenda, and 2009 Cap & Trade legislation (H.R. 2454). This study utilized a quantitative content analysis to address these research objectives and found that attributes discussed in the blogosphere, elite media, public, and interest groups agendas were transferred to the policy agenda. Moreover, there was a statistically significant predictive relationship of the blogosphere, elite media, interest group, and public agendas on the policy agenda. This study confirms that a statistically significant two-way relationship exists between the blogosphere agenda and the elite media, public, and interest group agendas. However, this study failed to conclude that a two-way relationship exists between the interest group agenda and the public and elite media agendas. It is recommended that future research look into the potential two-way relationship between the interest group agenda and the public and elite media agendas and that practitioners

seek to engage in conversations in new media forums in an effort to influence the policy

agenda.

APPENDIX: CUSTOM DICTIONARIES

Custom dictionaries developed using a panel of experts are included in this appendix. The name of each dictionary is a subhead and the words included within that dictionary are below the subhead separated by pipe and a space.

Actions

action | actions | advocating | opportunity | champion | compromise | solutions | voting | chance | prospect | supporting | encouraging | sponsoring | activist | promote | advocate | campaign | cooperation | negotiation | concession | conciliation arrangement | agreement | bargain | cooperation | negotiation | resolutions | results | clarifications

Agriculture

agriculture | agricultural | agri | agra | farmers | farmer | producers | producer | production | food | sustenance | foodstuff | agriculturalists | agriculturalist | growers | grower | ranchers | rancher | sharecroppers | sharecropper | agronomists | agronomist | planters | planter | agrarians | cultivators | farming | cultivation | husbandry | agronomy | dairy | chicken | pig | chickens | pigs | sows | sow | farm agribusiness | agri-business | ranching | cow | cows | sheep | goat | goats | barrow | barrows

Bureaucracy

bureaucracy | bureaucracies | exemptions | subsidies | regulation | trade | exceptions | exclusions | subsidy | supports | support | aids | subsidizations | appropriations | funding | government | organization | establishment | paperwork oversight | incentives

Carbon

carbon | emissions | carbon-cap | co2 | carbon-intensive | leakage | fossil | greenhouse | carbon-emitting | GHG

Economy

expense | expenses | cost | commerce | demand | export | exports | import | competitiveness | recession | financial | monetary | fiscal | pecuniary | commercial trade | industry | industry | economy | pay | supply | economically | economical | rational | cost-effective | costs | amount | credit | credits | domestic | efficient | efficiency | fund | funds | loan | loans | location-efficient | market | markets | means mean | mortgage | mortgages | expenditure | disbursement | outflow | payment | overhead | price | rate | fee | toll | premium | tariff | charge budget | expenditures | business | buying | selling | exchange | slump | downturn | collapse | depression | profitable | money-making | lucrative | profitable | uneconomical

Energy

coal | electricity | energy | energy-intensive | solar electric | energy-efficient | fuel |
gas | firewood oil | power | electrically-powered | petroleum | petrol | gasoline

Environmental

environmental | resources | environment | environments | green | greenpeace |
conservation | ecofriendly | eco-friendly | ecological | conservational |
environmentally-friendly | recyclable | sustainable | biodegradable | recycle | planet
organic

Negative Attributes

disasters | starvation | questions | waste | uncertainties | unreliable | quagmire |
problem | armageddon | catastrophe | burdens | disaster | burden | reservation |
reservations | doubts | doubt | worries | worry | fears | fear | suspicions | suspicion |
hesitation | hesitations | ambiguity | ambiguities | insecurities | insecurity | vague |
vagueness

People

citizens | people | person | administrator | community | consumers | consumer |
customer | generation | governor | president | housing | inhabitants | residents |
populations | population | nations | voters | populaces | citizenries | townsfolk
townspeople | societies | individuals | publics | public | populaces | communities
groups | nationalities | populations | families | family | ancestors | men | women

Positive Attributes

benefit | benefits | generous | happy | meaningful | admiration | admire | hope |
advantage | advantages | value | valuable | helpful | help | respected | respect |
cherished | cherish | esteemed | assistance | assist

LIST OF REFERENCES

Arthur, W. B. (1994). Complexity in Economic Theory: Inductive reasoning and bounded rationality. The American Economic Review , 84 (2), 406-411.

Baumgartner, F. R., & Jones, B. D. (April 18–21, 2001). Policy Dynamics. Annual Meeting of the Midwest Political Science Association. Chicago.

Birkland, T. A. (2005). *An introduction to the policy process: theories, concepts, and models of public policy making* (2nd ed.).

Blandford & Fulponi, (1999). Paper prepared for the European Congress on Agricultural and Food Ethics, Wageningen, the Netherlands, March 4-6, 1999.

Blossom, J. (2009). Chapter 6: The New Politics - Content Nation Redefines How Citizens Influence Governments. In Content Nation Surviving and Thriving as Social Media Changes our Work, Our Lives, and Our Future. Content Nation Online.

Bollen, K.A. and J.S. Long (eds). 1993. Testing Structural Equation Models. Newbury Park, CA: Sage, 320 pages.

Bonetta, L. (2007, May 4). Scientists enter the blogosphere. Cell , pp. 443-445.

Boyd, R., & Richerson, P. J. (2001). Norms and Bounded Rationality. In G. Gigerenzer, & R. Selten (Eds.), Bounded Rationality: The adaptive toolbox (pp. 281-296). Cambridge: The MIT Press.

Brubaker, J. (2008). The freedom to choose a personal agenda: Removing our reliance on the media agenda. Retrieved September 24, 2009, from http://www.acjournal.org/holdings/vol10/03_Fall/articles/brubaker.php

Byrne, B. M. (2009). Structural Equation Modeling with AMOS - Basic Concepts, Applications, and Programming (Vol. Second). New York: Psychology Press.

CIA World Factbook. (2009). Country Comparisons page. Retrieved from https://www.cia.gov/library/publications/the-world-factbook

Cohen, B. (1963). The Press and Foreign Policy. Princeton, NJ: Princeton University Press.

Davidson, R., & Oleszek, W. (2000). *Congress and Its Members*. Washington: Congressional Quarterly Press.

DeGregorio, C. (1988). Professionals in the U. S. Congress: An Analysis of Working Styles. *Legislative Studies Quarterly*, 13(4), 459-476.

Diction. (2010). *Diction Software*. Retrieved May 1, 2010, from
http://www.dictionsoftware.com

Drezner, D. W., & Farrell, H. (2004, November/December). Web of Influence. Foreign
Policy.

Duarte, N. (2008). Slide:ology: The art and science of creating great presentations.
Sebastopol, CA: O'Reilly Media, Inc.

Energy Information Administration [EIA]. (2009). Official Energy Statistics from the U.S.
Government. Greenhouse gases - energy explained: Your guide to
understanding energy. Retrieved on November 10, 2009 from
http://tonto.eia.doe.gov/energyexplained/index.cfm?page=environment_about_gh
g

Environmental Protection Agency [EPA]. (2009). EPA analysis of the Waxman-Markey
Discussion Draft: The American Clean Energy and Security Act of 2009.

Farrell, H., & Drezner, D. W. (2008). The power and politics of blogs. Public Choice,
134, 15-30.

Florida Farm Bureau. (2009). Issues and Public Policy. Retrieved August 15, 2009, from
Florida Farm Bureau: http://www.floridafarmbureau.org

Ghanem, S. (1997). Filling in the tapestry: The second level of agenda setting. In M.
McCombs, D. L. Shaw, & D. Weaver (Eds.), *Communication and democracy* (pp.
3–14). Mahwah, NJ: Erlbaum.

Gigerenzer, G. (2001). The Adaptive Toolbox. In G. Gigerenzer, & R. Selten (Eds.),
Bounded Rationality (pp. 37-50). Cambridge: The MIT Press.

Gigerenzer, G., & Selten, R. (2001). Rethinking Rationality. In G. Gigerenzer, & R.
Selten (Eds.), Bounded Rationality: The adaptive toolbox (pp. 1-12). Cambridge:
The MIT Press.

Gill, K. E. (2004). How can we measure the influence of the blogosphere? New York.

Grunig, L. A. (1997). Excellence in public relations. In C. L. Caywood, *The handbook of
strategic public relations and integrated communications* (pp. 286-300). New
York: McGraw-Hill.

Grunig, J. E., & Grunig, L. A. (1992). Models of public relations and communications. In
J. E. Grunig, *Excellence in public relations and communication management* (pp.
285-325). Mahwah, NJ: Lawrence Earlbaum Associates.

Grunig, J. E., & Repper, F. C. (1992). Strategic management, publics, and issues. Book chapter in Excellence in Public Relations and Communication Management edited by James E. Grunig. Lawrence Erlbaum Associates. Hillsdale, New Jersey

Gunderson, C., Kuhn, B., Offutt, S., & Morehart, M. (2004). A consideration of the devolution of federal agricultural policy. United States Department of Agriculture Economic Research Service Report number 836.

Hobbes, Locke, Rousseau, & Rawls. (2000). Democratic Governance and Public Policy Democratic Theory: Delimiting the Public What Is Government? Democratic Governance. Book chapter in Public Policy Analysis: A Political Economy Approach / Edition 1 by Kenneth N. Bickers, John T. Williams. Cengage Learning publishing

Jones, B. D. (1999). Bounded rationality. Annual Review of Political Science, 2, 297-321.

Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. American Psychologist, 58 (9), 697-720.

Kahneman, D. (2003a). A perspective on judgment and choice: Mapping bounded rationality. American Psychologist, 58 (9), 697-720.

Kahneman, D. (2003). Maps of bounded rationality: Psychology for behavioral economics. The American Economic Review, 93 (5), 1449-1475.

Kempton, W. (1997). Environment. *Science and Policy for Sustainable Development, 39(9). 12-21. doi:* 10.1080/00139159709604765

Kiousis, S. (2004). Explicating media salience: A factor analysis of New York Times issue coverage during the 2000 U.S. presidential election. Journal of Communication , 71-87.

Klein, R. (2009, June 3). *Who's who in the political blogosphere?* Retrieved May 1, 2010, from http://blogs.abcnews.com/thenote/2009/06/whos-who-in-the-political-blogosphere.html

Kreutzer, D. W., Campbell, K. A., Beach, W., Lieberman, B. & Loris, N. D. (2009). A Report of the Heritage Center for Data Analysis

Lauck, J. (2000). After deregulation: Constructing agricultural policy in the age of "Freedom to Farm". *Drake Journal of Agricultural Law,* 5(3), Retrieved from www.nationalaglawcenter.org

Lee, G. (2009). Priming as an aspect of agenda setting effects in the digital age. *Paper presented at the annual meeting of the International Communication Association, Sheraton New York, New York City, NY Online retrieved* from http://www.allacademic.com/meta/p13039_index.html

Lowi , T. J., Ginsberg, B., & Shepsle, K. A. (2007). *American Government.* W W Norton & Co Inc.

IPCC. (2007). Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working: Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M.Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Maxwell, M. E. (2004). Setting the agenda: the mass media and public opinion. Malden, MA: Blackwell Publishing, Inc.

Mayer, R. E., & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. Educational Psychologist, 38 (1), 43-52.

McCombs, M. (2005). A look at agenda-setting: Past, present, and future. Journalism Studies , 6 (4), 543-557.

McCombs, M. E. (1972). Mass Communication in Political Campaigns: Information, Gratification and Persuasion. In F. Kline, & P. J. Tichenor (Eds.), Current Perspectives in Mass Communication Research. Beverly Hills, CA: Sage.

McCombs, M. E. (2004). Setting the agenda: the mass media and public opinion. Malden, MA: Blackwell Publishing, Inc.

McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. The Public Opinion Quarterly, 36 (2), 176-187.

McNutt, K. (2008). Policy on the web: The climate change virtual policy network. Canadian Political Science Review , 2 (1), 1-15.

McQuail, D. (2008). McQuail's Mass Communication Theory (5 ed.). London: SAGE Publications Ltd.

Morris, M., & Ogan, C. (1996). The Internet as mass medium. Journal of Communication. 46(1), pages 39–50, March 1996 doi: 10.1111/j.1460-2466.1996.tb01460.x

Mullainathan, S. (2002). A memory-based model of bounded rationality. The Quarterly Journal of Economics, 117 (3), 735-774.

Pew Center. (2008). *Pew Center*. Retrieved 2010, from Pew Center.org: http://www.pewinternet.org/Commentary/2008/July/New-numbers-for-blogging-and-blog-readership.aspx

Romzek, B. S., & Jennifer A. U. (1996). Career dynamics of congressional legislative staff: preliminary profiles and research questions. *Journal of Public, Administration Research and Theory (*6), 415–41.

Reese, S. D. (1991). Setting the media's agenda: A power balance perspective. In J. A. Anderson (Ed.), Communication Yearbook (pp. 309–340). Newbury Park, CA: Sage.

Rev. M. J. (1983-1984) .Agricultural Philosophies and Policies in the New Deal; Breimyer, Harold F.

Roberts, M., Wanta, W., & Dzwo, T.-H. D. (2002). Agenda setting and issue salience online. Communication Research , 29 (4), 452-465.

Rubinstein, A. (1998). Modeling Bounded Rationality. (K. G. Persson, Ed.) Cambridge: The MIT Press.

Salwen, M. B., & Matera, F. R. (1992). Public salience of foreign nations. *Journalism Quarterly , 69* (3), 623-632.

Sappenfield, M. (2005, March 24). More politicians write blogs to bypass mainstream media. The Christian Science Monitor.

Scheufele, D. A. (2000). Agenda-setting, priming, and framing revisited: Another look at cognitive effects of political communication. Mass Communication & Society, 3 (2&3), 297-316.

Schroeder, R., Caldas, A., Mesch, G., & Dutton, W. (n.d.). The world wide web of science: Reconfiguring access to information. Oxford Internet Institute. Oxford University.

Selten, R. (2001). What is Bounded Rationality? In G. Gigerenzer, & R. Selten (Eds.), Bounded Rationality: The adaptive toolbox (pp. 13-36). Cambridge: The MIT Press.

Simon, H. A. (1991). Bounded rationality and organizational learning. Organization Science , 2 (1), 125-134.

Simon, H. A. (1997). Models of Bounded Rationality (Vol. 3). Cambridge: The MIT Press.

Simon, H. A. (1957). Models of man: Social and rational. Oxford: Wiley.

Takeshita, T. (2005). Current critical problems in agenda-setting research. International Journal of Public Opinion, 18 (3), 275-296.

Talley, I. (2009). Senate to put off climate bill until spring. The Wall Street Journal, November 18, 2009.

Trammell, K. D.,& Gasser, U. (2004). *Deconstructing weblogs: An analytical framework for analyzing online journals.* Paper presented at the International Communication Association, NewOrleans, LA.

U.S. Environmental Protection Agency. (2009). *Ag 101*. Retrieved 6 3, 2010, from Production Ag Stats : http://www.epa.gov/oecaagct/ag101/demographics.html

Wallsten, K. (2007a). Agenda setting and the blogosphere: An analysis of the relationship between mainstream media and political blogs. Review of Public Policy Research, 24 (6), 567-587.

Wallsten, K. J. (2007b) "The blogosphere's influence on political discourse: is anyone listening?" Paper presented at the annual meeting of the Midwest Political Science Association, Palmer House Hotel, Chicago, IL Online <PDF>. 2010-01-24 from http://www.allacademic.com/meta/p199101_index.html

Wallsten, Kevin(2008) 'Political blogs: Transmission belts, soapboxes, mobilizers, or conversation starters?', *Journal of Information Technology & Politics*, 4: 3, 19 — 40. doi: 10.1080/19331680801915033

Webb, E. K., & Tidwell, V. C. (2009). Communication with U.S. federal decision makers: A primer with notes on the use of computer models as a means of communication, Sandia National Laboratories Report. SAND2009-7014

Woodly, D. (2008). New competencies in democratic communication? Blogs, agenda setting, and political participation. Public Choice, 134, 109-123.

Woster, K. (2009). Higher electric bills seen from 'cap-and-trade': But speaker says bill will help South Dakotans. August 26, 2009, from http://www.rapidcityjournal.com/news/local/article_55e38faf-d231-522e-beac-831b1a770477.html

BIOGRAPHICAL SKETCH

Lauri M. Baker received her Master of Science and Doctor of Philosophy in agricultural education and communication from the University of Florida. She recently accepted a position as an Assistant Professor of agricultural communications at Kansas State University to begin May 2011. Prior to beginning her graduate work at the University of Florida, Baker was the Vice President and Director of Communications for the Texas Wheat Producers where her responsibilities included coordinating all communication efforts on behalf of the wheat producers of Texas from newsletters, websites, and printed materials, to educational materials for congressional communication and traditional educational outlets. Baker's research focus is on student recruitment, public opinion, and policy that affects agriculture.