“What Was That Supposed To Mean?”: Mass-Mediated Ambiguous Political Messages, Uncertainty Arousal, and Political Discussion

Dissertation

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Abstract

Constructive interpersonal political discussion among citizens is traditionally regarded as an indicator of a healthy democracy (e.g., Fishkin, 1991, 1995; Habermas, 1962/1989; Tarde, 1901/1989). At the same time, politics bears an inherent complexity, ambiguity, and intricacy (Delli Carpini & Williams, 1996) that makes it a topic ripe for uncertainty arousal. Considering that uncertainty arousal is more likely when situations are ambiguous, complex, and unpredictable (Babrow, Hines, & Kasch, 2000; Babrow, Kasch, & Ford, 1998), Uncertainty Reduction Theory (Berger, 1979; Berger & Bradac, 1982; Berger & Calabrese, 1975) is applied in this dissertation to study the crossroads of interpersonal discussion and the consumption of a variety of mass-mediated messages about politics. This dissertation will examine the processes by which political mass media messages that vary in their level of ambiguity arouse receiver-based uncertainty and influence subsequent interpersonal discussion. Four types of messages are investigated: two types of satire (horatian and juvenalian) and two types of news (traditional news and editorials). These four messages are differentiated by two dimensions of ambiguity—ambiguity of message goals and ambiguity of message meaning. Satire and news are argued to be different in ambiguity of message goals, whereas satire is high on goal ambiguity (Bogel, 2001; Knight, 2004; Simpson, 2003) and news is low on this type of ambiguity (McQuail, 1992). For ambiguity of message meaning, horatian satire and
traditional news are argued to be high and juvenalian satire and editorials are argued to be low. A computer-mediated discussion experiment was conducted to address 23 hypotheses that serve as the foundation for the dissertation. Results show that satirical messages (high on ambiguity of message goals) generally incite more receiver-based uncertainty and generate more uncertainty expressions during discussion.
Dedication

For my parents, Paul and Dawn Landreville. Thank you for instilling in me the love and power of learning.
Acknowledgments

I could not ask for a better advisor than Lance Holbert. Lance’s decision to take an associate professor position at The Ohio State University during my second-year as a PhD student was a blessing, no doubt. I went to Lance as a student who was not only apprehensive about the demands of a rigorous graduate program, but who was also apprehensive about becoming a first-time mother during the process. I needed guidance, inspiration, and optimism to accomplish both feats. And Lance was always there as my own personal cheerleader. Lance provided me with the confidence to pursue my research interests. He has reminded me to embrace, rather than flee from, the challenges we are given. Expectations of creativity are just as important as expectations of productivity.

Aside from professional advisement, a larger lesson that Lance has bestowed on me is the encouragement to prioritize family and quality of life. I will never give up trying to strike a balance among all the roles we have to play in life—researcher, teacher, parent, and spouse. I can say now, as I complete my graduate program, I am content in all roles. Last, it is truly amazing to witness and experience his unrelenting dedication to his advisees and all students. I can only hope that my efforts to advise my future students will be as successful as Lance’s efforts.

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no doubt Claire will continue to bestow upon me countless other virtues that will guide
me through life.

Together, Judd and Claire remind me what the essence of life is. I see the world
with more clarity, love, and beauty because they are the gravity that keeps me grounded.
They have both sacrificed in order for me to achieve my personal career goals, and I
thank them for allowing me the freedom to pursue my academic dream. Every mountain
that we conquer together strengthens us, and I cherish how we persevere as a family. My
parents, in-laws, brother, sisters-in-law, nieces, and grandparents also help remind me
what is truly important in life. I pray that God continues to bless our family.
Vita

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Publications


Fields of Study

Major Field: Communication
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Chapter 1: Theoretical Foundation

Interpersonal Communication of Politics and Democracy

Ideally, democracy and political discussion go hand in hand. Political theorists from Aristotle to James Bryce to Jürgen Habermas have argued that rational political discourse is essential for a healthy, well functioning democracy (Price, 1992). John Dewey (1922) celebrated the confrontation of ideas, which is often regarded as normatively positive, “Conflict is the gadfly of thought. It stirs us to observation and memory. It instigates to invention.” (p. 300). Jürgen Habermas (1962/1989, 2006) calls for deliberative democracy—a reliance on reasoned and inclusive public deliberation, where status is disregarded, to make consensual decisions and check institutional power. Innovative attempts by more recent scholars, such as James Fishkin’s (1991, 1995) deliberative opinion polling, seek to achieve “the ideal of face to face democracy” (Fishkin, 1995, p. 20) set forth by America’s founding fathers. Political discussion, in this light, involves a formal deliberation process where each contributor is valued equally and the process is fair, public, and rational (see Burkhalter, Gastil, & Kelshaw, 2002).

While reason is a prerequisite for a Habermasian perspective of the public sphere, for Gabriel Tarde (1901/1989) reason and more considered opinions emerge from political discussion (Katz, 2006). Political scholars that subscribe to this outlook cast a wider net of what should be considered interpersonal political discussion in the public
sphere (e.g., Barber, 1984; Walsh, 2004; Wyatt, Katz, & Kim, 2000). This perspective interprets political talk as a commonplace activity in democratic life and includes a wide variety of discussion formats. For example, casual conversation, informal deliberation, and spirited argumentation all count as political discussion (Wyatt et al., 2000). In addition, impasse, petty griping, and political jokes should be considered political talk, according to Walsh (2004). Citizens are engaging in ordinary political conversation as long as the conversations are voluntary and without specific purpose or contain a predetermined agenda (Kim, Wyatt, & Katz, 1999). The role of ordinary political conversation is just as important for democratic enrichment and should be appreciated along with other forms of political discourse (Wyatt et al., 2000).

Although scholars will likely continue to debate the boundaries of political discussion in democracy (Gleason, in press), a body of empirical evidence surrounding political discussion clearly suggests normatively positive implications for democracy (no matter what type of talk is being referenced). For one, frequency of political discussion is positively related to political knowledge (both factual knowledge and knowledge structure density) (Eveland & Hively, 2009). Political knowledge is also reliably linked to political and news discussion (e.g., Bennett, Flickinger, & Rhine, 2000; Eveland, 2004; Lenart, 1994). Research has begun to consider important moderators of the discussion-to-knowledge link, such as the nature of one’s political network (e.g., Feldman & Price, 2008). Moreover, political participation is influenced by political discussion (e.g., Eveland & Hively, 2009; Kim et al., 1999; McLeod, Scheufele, & Moy, 1999), and even by the style of political discussion (e.g., Rojas, 2008).
However, it has been argued that not all consequences of political discussion are normatively positive for democracy. There is concern over the prospect that certain types of political discussion, namely cross-cutting talk (other terms include dangerous or heterogeneous political networks, with the understanding that discussion is with non-like-minded partners) may cause ambivalence and lower levels of political participation (e.g., Eveland & Hively, 2009; Mutz, 2002a, 2002b, 2006). Additionally, confusion or misinformation about political candidates can arise from diverse networks (Feldman & Price, 2008) and from increased talk after major media campaign events (Hardy & Scheufele, 2009). Although not normatively harmful, political discussion can also change political opinions and attitudes in ways not intended by the interactants (e.g., Druckman & Nelson, 2003; Price, Nir, & Cappella, 2006). The concern here is that if opinion change is based on misinformation, message framing effects, or irrational arguments during discussion, then discussion may have interfered with democratic goals because the basis of a sound or logical decision-making process is disrupted.

Research has also implemented several approaches in studying the antecedents of political discussion. The explanations include, but are not limited to: 1) personality characteristics (e.g., Hayes, 2008; Ho & McLeod, 2008), 2) socialization (e.g., Hively & Eveland, 2009), 3) demographic variables (e.g., Eveland, Morey, & Hively, 2008), and 4) media use (e.g., Delli Carpini & Williams, 1994a; Mondak, 1995). Overall, these studies have found that individuals who are more educated and interested in politics, who engage in higher levels of newspaper reading, talk radio listening, and presidential candidate website visiting (Eveland et al., 2008), and who self-report lower levels of willingness to
self-censor (Hayes, 2008) are more likely to talk about politics in general. While these studies have shed light on predicting who is more likely to discuss politics, studies exploring the underlying motivational processes of political discussion (or lack thereof) have been relatively less common.

Nevertheless, scholars have forwarded several theoretical approaches to political discussion that have attempted to model both deliberative and everyday political discussion (e.g., Burkhalter et al., 2002; Habermas 1962/1989; Kim et al., 1999). For example, one dimension on which current political discussion theories can be differentiated is the formality of the discussion. Burkhalter et al. (2002) outline a deliberative model where the conceptualization of deliberation is: “(1) a process that involves careful weighing of information and views, (2) an egalitarian process with adequate speaking opportunities and attentive listening by participants, and (3) dialogue that bridges differences among participants’ diverse ways of speaking and knowing” (p. 416). In a similar sense, Habermas’ theory of deliberative democracy is also very formal and rule-bound (Habermas, 1962/1989). Deliberation is the focus, as opposed to a broad range of communicative behaviors taken on by everyday citizens in a variety of natural settings.

Theories that address ordinary political discussion also exist. Two examples are from Cho, Shah, McLeod, McLeod, Scholl, & Gotlieb (2009) and Kim et al. (1999). Cho et al. (2009) propose an O-S-R-O-R model that shows how political talk, messaging, and cognitive reflection mediate the influence of campaign advertising and news media use on political participation and knowledge. They argue that campaign communication,
news media in general, are complex messages and are not experienced in isolation—interpersonal communication and intrapersonal reflection of mass media are the links that are important for subsequent participation. Likewise, Kim et al.’s (1999) model attempts to answer “what stimulates political conversation?” Kim et al. (1999) predict that frequency of political talk should be positively related to (1) amount of news media use and (2) perceived friendliness of one’s conversational environment.

While both theoretical approaches present evidence that ultimately supports their models, there is a missing step between media exposure and political discussion—what cognitive or affective mechanisms are driving the motivation to discuss (or not discuss) politics? Moreover, these theories are grounded in mass communication and do not incorporate interpersonal communication theories that may provide insight into political discussion or lack thereof (see Benoit & Holbert, 2010). Recently, scholars have noted that increased integration of interpersonal communication theory into the political discussion literature is warranted (Eveland, Morey, & Hively, 2009). This dissertation addresses one possibility of what is internally motivating individuals to talk about politics with others—uncertainty. In particular, cognitive uncertainty about mass-mediated political messages could be driving interpersonal political discussion. That is to say that mass media are not the lone agents motivating political discussion. There are many complex cognitive and affective processes occurring during media reception, and uncertainty is merely one of them explored in this dissertation.

Focusing on uncertainty as a theoretical approach to interpersonal political discussion was decided upon after considering several broad interpersonal
communication theories: interpersonal adaptation theories, message productive theories, uncertainty theories, deception theories, dialectical perspectives, and mediated social interaction. Berger (2005) provides an overview for each of the six interpersonal communication theoretical perspectives. Interpersonal adaptation theories have interest in explaining why people alter their verbal and nonverbal behaviors in response to others’ actions (e.g., expectancy violations theory, Burgoon, 1993). Adaptation theories are not without merit, but they did not directly address my interest in the motivation behind interpersonal political discussion.

Deception theories and research focus on individuals’ ability to both create and detect deceptive messages (e.g., information manipulation theory, Grice, 1989), which may be a worthwhile approach to studying political discussion. However, deception theories are specific in that deception is a motivator and key outcome of the communication. A broader approach to interpersonal political discussion was needed; as well the desire to reflect what typically happens in average political discussions, which is not likely deceptive communication.

Dialectical perspectives use a small set of assumptions (contradiction, change, praxis, and totality) to help explain communication within personal relationships (e.g., relational dialectics, Baxter & Montgomery, 1996), but dialectics is not a concrete theory, it is more of a metatheoretical approach (Berger, 2005). There are specific theories that address dialectics (e.g., communication privacy management theory, Petronio, 2000, 2002), but none spoke to how political conversation could be initiated by the mass media.

Mediated social interaction includes communication that is mediated with any type of
technology, from telephones and written letters to computers and text-messaging. This dissertation was not interested in comparing or theorizing about how medium (e.g., face-to-face versus computer-mediated) effects communication, so this perspective was not chosen.

Message production theories examine planning and communication strategies that generate effective messages for attaining particular goals (e.g., persuasion) and use cognitive complexity as a key concept (e.g., action assembly theory, Greene, 1984). While message production theories are certainly applicable to political discussion, they often “sidestep the question of how social interaction goals arise in the first place” (Berger, 2005, p. 422). Given my interest in how the mass media initiates interpersonal discussion, message production theories were not as practical as uncertainty theories. Uncertainty theories focus on uncertainty arousal as a specific reason for how the social interaction goal of uncertainty reduction arises (e.g., Berger & Calabrese, 1975). Thus, from this review of the major interpersonal communication perspectives, it became clear that uncertainty-based theories could provide a theoretical grounding for understanding how and why individuals engage in interpersonal political discussion.

Uncertainty Reduction Theory and Politics

Early conceptualizations of uncertainty. One potential mechanism responsible for sparking political discussion is uncertainty. Although formally developed and articulated by Berger and Calabrese (1975), the concept of uncertainty in communication has been apparent in work within the field of communication prior to uncertainty reduction theory (URT). Berger (1979) noted that URT’s understanding of uncertainty is similar to the
way in which the concept is viewed by information theorists (Shannon & Weaver, 1949). The mathematical theory of communication (Shannon & Weaver, 1949) interprets symbolic code systems in terms of their uncertainty (Berger, 2005) and refers to the number of alternatives (i.e., choices) that could occur in a given situation and the likelihood of their occurrence (Berger & Bradac, 1982; McKinney & Donaghy, 1993). As the number of alternatives increase, so does the uncertainty (Berger & Bradac, 1982). In other words, there is a curvilinear relationship between probability and uncertainty (Brashers, 2001). When the probability is 0 or 100%, then an individual is certain. When the probability is 50%, then the individual is uncertain. When there are multiple alternatives, then uncertainty is highest when the alternatives have equal probabilities (Brashers, 2001).

An additional theory that has historically considered the role of uncertainty is social comparison theory, which postulates that the desire to reduce uncertainty about oneself and one’s social role serves as an impetus for an individual to evaluate and judge oneself against other individuals (Festinger, 1954). The uncertain partner in an interaction will seek out information from a communication partner and others (e.g., friends or family) to make social comparisons and reduce uncertainty about relationships (Festinger, 1954). These theories, although helpful in introducing uncertainty into the communication field, do not highlight the importance of uncertainty in communication to the extent of URT. It is URT that served to more firmly root the concept of uncertainty in the study of communicative acts.
Uncertainty was formally introduced to the interpersonal communication literature by Berger and Calabrese’s (1975) Uncertainty Reduction Theory (URT) and further explicated by subsequent theorizing by Berger (1979) and colleagues (Berger & Bradac, 1982). Uncertainty in interpersonal communication is generally regarded as a cognitive state that relates to knowledge and understanding of the self, partner, or relationship (Berger & Bradac, 1982). In a larger sense, uncertainty is “a self-perception about one’s own cognitions or ability to derive meaning, a person who believes himself or herself to be uncertain is uncertain” (Brashers, 2001, p. 478). Uncertainty arousal is common when situations are short on detail, ambiguous, complex, unpredictable, or probabilistic (Babrow et al., 2000; Babrow et al., 1998). Moreover, when an individual is insecure about their own state of knowledge or knowledge in general, or when information is unavailable or inconsistent, uncertainty arousal is likely (Babrow et al., 2000; Babrow et al., 1998).

In the interpersonal literature, there are three accepted types of uncertainty: self, other, and relational (Knobloch & Solomon, 1999). Self-uncertainty is defined as the inability to predict one’s own attitudes and behavior—a lack of knowledge about oneself. Second, partner-uncertainty is the perception that one is unable to predict a partner’s attitudes and behavior—a lack of knowledge about the partner. And finally, relational-uncertainty is being unable to predict a relationship’s future status as a unit and dyad—a lack of knowledge about a relationship.

One of URT’s basic assumptions is that people operate in a world of uncertainty and engage in social interactions that produce exchanges of information (i.e., verbal or
nonverbal) under varied conditions of uncertainty (Berger, 2005). This is because individuals cannot always know the effects of their communication on their communication partners, and individuals are not always sure of the intentions or internal states of their communication partners (Berger, 2005). Therefore, uncertainty in social interaction exists, and there is a continuum of individual awareness/unawareness of intentions, goals, and actions in each social interaction (Berger & Bradac, 1982). Even more important, individuals are motivated to avoid uncertainty because it produces anxiety and negative feelings, so we find methods to reduce this uncertainty (Burgoon & Hoobler, 2002). Specifically, URT describes three communicative options when an individual is confronted with uncertainty.

Individuals can passively, actively, and interactively reduce uncertainty. These three strategies are available for individuals when they experience uncertainty about the self, other, or relationship (i.e., the traditional sources of interpersonally-based uncertainty). In the original URT, Berger (1979) describes passive strategies as non-communicative. The individual takes the role of an unobtrusive observer to reduce uncertainty. There is a lack of direct communicative interaction and there are minimal effects on the partner’s behavior (i.e., the person whom the individual is uncertain about). Passive tactics include social comparison, listening, eavesdropping, and observing the partner’s behavior. Active strategies to reduce interpersonally-based uncertainty involve talking to people who already know the other person, but refraining from talking to the partner whom one is uncertain about (Berger, 1979). It is with interactive strategies
where one engages in direct communication with the individual from whom one's uncertainty is based upon (Berger, 1979).

Additional Uncertainty-Based Communication Theories

The prominence and longevity of URT have helped it take the lead in stimulating other theories that consider the role of uncertainty in social interaction (Bradac, 2001). There are several other uncertainty-based theories that are worth noting because they diverge from URT’s basic assumptions and/or incorporate other important elements: problematic integration theory (Babrow, 1992, 1995), anxiety/uncertainty management theory (Gudykunst, 1995; Gudykunst & Hammer, 1987), uncertainty management theory (Brashers, 2001, Brashers et al., 2000), predicted outcome value theory (Sennafrank, 1986, 1990), and the theory of motivated information management (Afifi & Weiner, 2004). Several of the major alternative uncertainty-based communication theories are summarized below.

**Problematic integration (PI) theory.** Babrow (1992, 1995, 2001) argues that social interaction involves more than uncertainty reduction and he proposes problematic integration (PI) theory to directly address what he views to be a too narrow focus on what drives communication engagement. That is, potential interactions occur between the likelihood that events or outcomes will occur and the perceived valence of the events or outcomes (Babrow, 1992, 2001). People integrate these two judgments—probability and evaluation—in social interactions in order to decide how to respond to potential outcomes or events. For example, when the probability that an event will occur is high, and the valence is positive, then it is easy for an individual to integrate these judgments. When
the probability and valence of an event is ambiguous, or when the probability and valence diverge (i.e., high probability of a negative event or low probability of a positive event) then people have a difficult time integrating the two judgments (Babrow, 2001). Babrow (1995, 2001) argues that communication is a source of problematic integration, yet also a resource for dealing with problematic integration. PI theory is a more complicated assessment of uncertainty than URT. Bradac (2001) argues PI theory lacks parsimony, does not lend itself easily to empirical investigation, and is difficult to interpret and understand.

Uncertainty management theory (UMT). Berger and Bradac (1982) acknowledge that in some circumstances individuals may be encouraged to increase uncertainty rather than decrease uncertainty. This notion led to the formation of UMT (Brashers, 2001, Brashers et al., 2000), which was developed in part to recognize the complexity of uncertainty in long-term health-care oriented situations. A series of focus groups and interviews with chronically ill individuals revealed the importance of accounting for uncertainty management techniques, in addition to uncertainty reduction and information seeking strategies (Brashers et al., 1998; Brashers et al., 1999; Brashers et al., 2000; Brashers et al., 2004). UMT is not a formal theory with listed assumptions, axioms, and propositions; rather, it is a different conceptualization of the link between uncertainty and communication.

There are three major contributions that Brashers (2001) offers as important areas in which communication scholars should focus. First, UMT, like PI theory, does not assume that uncertainty causes anxiety and is inherently negative, nor is there only one
uncertainty experience and meaning (e.g., there is uncertainty in probability and valence). Furthermore, in some cases, people may want to increase their uncertainty rather than reduce it (another idea that is consistent with PI theory) (Brashers, 2001; Brashers et al., 2000). As mentioned earlier, individuals may choose to maintain uncertainty, forgo information-seeking, and communicate to others in an ambiguous way with uncertain language (i.e., strategic ambiguity) in certain health contexts, such as in chronic illness like HIV/AIDS (Brashers, 2001).

According to UMT, the second major tenet that communication scholars should focus their attention on is the emotion, coping, and reappraisals that accompany uncertainty, as well as the range of cognitive and behavioral responses to manage uncertainty. For example, negative emotional appraisals of uncertainty are viewed as a threat or danger to oneself, whereas positive emotional appraisals of uncertainty are viewed as hope or optimism for the future (Brashers, 2001). Again, UMT, like PI theory, has much broader boundaries than URT (Berger, 2005).

And finally, communication scholars should explore more fully the large range of behavioral responses to managing uncertainty. Uncertainty reduction is not always a priority. Individuals can seek or avoid information in times of uncertainty in various direct and indirect ways; individuals can learn to tolerate chronic uncertainty; individuals can turn to social support to assist in uncertainty management; and individuals can learn to manage the dilemmas and conflicting information presented by the uncertainty and uncertainty reduction process (Brashers, 2001).
A major contribution of UMT is that it recognizes that “people engage in or avoid communication so that they can manipulate uncertainty to suit their needs” (Brashers, 2001, p. 491). Additionally, like PI, UMT attempts to account for more nuanced contexts of uncertainty by expanding the definition of uncertainty, eliminating the negative valence of uncertainty, and offering multiple strategies for dealing with uncertainty (in particular chronic uncertainty). However, UMT is not an axiomatic theory, which makes UMT more similar to a perspective on uncertainty and communication. Because there are no formal predictions made in UMT, and because uncertainty management, as opposed to uncertainty reduction, is the focus of the theory, it is difficult to find evidence that contradicts or does not support uncertainty management. Thus, in comparison to URT, UMT is weaker in terms of predictive power, heuristic provactiveness, and falsifiability.

Theory of motivated information management (TMIM). There have been many theories in communication that attempt to explain information seeking and information sharing, which inevitably address uncertainty, including the aforementioned URT, PI theory, and UMT. Afifi and Weiner (2004) argue there are four limitations to current theorizing in this area: (1) Uncertainty is not always recognized as a motivational force for information management and fails to go beyond regarding uncertainty as negative; (2) There is a lack of boundary conditions and contexts; (3) Efficacy is absent from current uncertainty-based theories; and (4) The role of information provider is not addressed, which compromises understanding the negotiation process of information management. They propose TMIM to address these concerns.
TMIM is “an integrated framework for viewing the information-management process within specific scope conditions” (Afifi & Weiner, 2004, p. 170). The scope conditions limit TMIM so that it regards individuals as rational decision-makers engaging in active/motivated searches for important information through interpersonal interaction. Uncertainty arises when there is a discrepancy between the amount of uncertainty the person has about an important topic and the amount of uncertainty the person desires about the topic. There are three reciprocal and nonrecursive phases—interpretation (analysis of the uncertainty and anxiety that ensues), evaluation (assessment of expected outcome assessment and efficacy), and decision (selection of information-management strategies). Recent tests of TMIM have been conducted and show support for the theory (Afifi et al., 2006; Afifi & Afifi, 2009). In sum, TMIM makes important contributions to the uncertainty and communication literature by considering other elements that URT does not (e.g., efficacy, the role of the information provider, and the consideration that uncertainty is not negative).

Uncertainty Reduction Theory as a Theoretical Foundation.

Although PI theory, UMT, and TMIM are all important contributions to the communication literature and represent important alternatives to URT, this project uses URT as a theoretical underpinning. Of prime interest to this project is the all-important link between uncertainty and communicative options (in particular, active and interactive strategies that involve discussion). Furthermore, this project seeks to bring the concept of uncertainty to the arenas of politics and mass media. URT is high in heuristic provactiveness and has been a prominent and durable theory in the communication field

Also, URT is the most parsimonious uncertainty-based theory from which to draw predictions. As noted above, it is difficult to collect empirical data to test PI theory because it is complicated and nuanced. In addition, UMT is not a formal theory; rather, it is an approach to the concept of uncertainty and its link to communication, which makes it difficult to derive specific hypotheses. Finally, TMIM is a fairly new theory in the communication literature. Several empirical works have started to address specific elements of TMIM (e.g., Afifi et al., 2006; Afifi & Afifi, 2009), but major pieces of the theory have yet to be addressed empirically. A well-established communication theory from which to ground this study is a necessary, but not sufficient condition for the production of quality research out of this dissertation, so TMIM is not ideal. This is not to say that PI theory, UMT, or TMIM are completely inappropriate for studying uncertainty and political discussion. But because this project enters new research areas, URT is the most compelling theory from which to draw hypotheses.

Babrow (2001), in the introduction to a special Journal of Communication issue on uncertainty and communication, noted that uncertainty should be a foundational and universal focus of communication research: “…whereas the concept is a focal point in a
few theories, it has received insufficient direct and sustained interest, particularly of the sort likely to generate broad, inclusive, and enriching dialogue,” (Babrow, 2001, p. 453). Using URT, this project seeks to integrate the concept of uncertainty into the political discussion literature and, in a broader sense, the mass communication and ambiguous message processing literatures as well.

*Application of URT to Politics*

Other communication sub-fields have explored uncertainty. Scholars in initial-interaction communication (e.g., Berger, Gardner, Clatterbuck, & Schulman, 1976; Calabrese, 1975; Gudykunst & Nishida, 1984; Motl, 1980), close-relationship communication (e.g., Afifi & Burgoon, 1998; Afifi & Reichert, 1996; Knobloch & Solomon, 1999, 2002; Maguire, 2007; Parks & Adelman, 1983), health communication (Brashers et al., 1999; Brashers, Neidig, Reynolds, & Haas, 1998; Gaskins & Brown, 1992; Weitz, 1989), organizational communication (e.g., Kramer, 1999; Kramer, Dougherty, & Pierce, 2004; Morrison & Bies, 1991; Sias, Kramer, & Jenkins, 1997), and computer-mediated communication (Antheunis, Valkenburg, & Peter, 2007; Flanagin, 2007; Pauley & Emmers-Sommer, 2007; Ramirez et al., 2002) have applied URT to better understand how uncertainty influences communication patterns in relationships. Mass communication scholars have also realized the potential of URT to explain gatekeeping (Dimmick, 1974), the mitigation of third-person effects (Paek, Pan, Sun, Abisaid, & Houden, 2005), parasocial relationships (Perse & Rubin, 1989; Rubin & McHugh, 1987), and uses and gratifications of news media (Boyle, Schmierbach, Armstrong, McLeod, Shah, & Pan, 2004). These latter uncertainty studies in the realm of
mass communication extend URT outside its original conceptualization and add to the understanding of interpersonal relationships, organizational and group interaction, and mass media effects.

I will be arguing in this dissertation that URT can be applied to the interpersonal communication of politics (C. R. Berger, personal conversation, May 22, 2009). It is easy to see how people can experience uncertainty when it comes to politics and that this cognitive state can shape patterns of political discussion. Politics is often regarded as a taboo topic, not to be discussed in polite company. In fact, politics, as a topic of discussion, has been viewed in a similar vein as religion, drugs, and one’s personal income (Cegala, 1981). The idea that politics is taboo and an uncomfortable topic of conversation echoes the fact that politics is often reflective of an ambiguous, controversial, multifaceted, and unpredictable world (Delli Carpini & Williams, 1996). As a result, the inherent complexity of political topics can create uncertainty about various aspects of the issue. In fact, uncertainty arousal is more likely when situations are ambiguous, complex, and unpredictable (Babrow et al., 2000; Babrow et al., 1998), which reflects a large part of what defines politics. Delli Carpini and Williams (1996) also argue that politics is fundamentally ambiguous and open for interpretation, and that political opinions can be dynamic, situationally-based, and interactive with one’s surroundings (e.g., politically-oriented mass media messages).

Therefore, even when two people regularly engage in political discussion and generally know the other person’s political orientations, uncertainty about the inherent complexities of our political world and political media may still exist. To illustrate, a
Democratic civil engineer may be uncertain about what his Republican boss thinks about President Barack Obama’s stimulus package (a multifaceted piece of public policy which he has been made aware of through several different news media stories) to supply money to infrastructure projects that directly benefit their industry and secure their jobs. In this scenario, the Democratic engineer may know his boss is Republican (and what this affiliation means for a general view of government spending), yet uncertainty still persists because personal gain (i.e., monetary benefit and job security) may trump political ideology for the Republican boss (or it may not). In this instance, the individual’s uncertainty is about what a superior thinks about a policy issue that is relevant to the industry in which they work. This uncertainty has the potential to be aroused all the more as a result of the various news reports about this matter of public policy that paint an ambiguous picture about the program and what it means directly for the industry within which these individuals work.

Uncertainty generated from mass-mediated political messages may be fairly common. Consider another example: a wife may be uncertain about what her main political discussion partner, her husband, thinks about a particular political spoof on Saturday Night Live (e.g., the satirizing of Obama’s lack of an effective public policy record, airing on 10/03/09, NBC.com, 2009). Or, a college student may be uncertain about how to interpret a political cartoon printed in the university’s student-run newspaper. Alternatively, a government employee may be uncertain about the intentions of his boss’ newspaper editorial about a particular political matter. A rookie stock market investor may come away uncertain after reading a newspaper article about how a new
financial regulation law affects her. In sum, uncertainty about a mass-mediated political message may be a relatively common occurrence that is worth understanding, and this uncertainty may be due to various types of ambiguity associated with various politically-oriented messages. This type of uncertainty is mass-media generated and receiver-based. Next, a conceptualization of receiver-based uncertainty will be detailed.

**Conceptualizations of Receiver-Based Uncertainty**

Developments in the literature that open the door for a broader conceptualization of uncertainty include (1) the emphasis on the multidimensional nature of uncertainty (e.g., Babrow, 2001; Brashers, 2001; Goldsmith, 2001; Hines, 2001) and (2) the idea of receiver-based uncertainty in the mass media (e.g., Boyle et al., 2004; Jensen, 2008; Lee & Lim, 2008; Paek et al., 2005; Peter & Valkenburg, 2008). Turning to the sources of uncertainty in mass communication, some of the first research to apply uncertainty to mass media involved the study of parasocial relationships (e.g., Perse & Rubin, 1989; Rubin & McHugh, 1987). Specifically, these studies found that parasocial relationships were similar to social relationships in that uncertainty reduction was important for audience members’ ability to predict media characters’ feelings and attitudes (Perse & Rubin, 1989; Rubin & McHugh, 1987). Although this research is in the context of mass media, the conceptualization of uncertainty as interpersonally-based did not change. That is, the sources of uncertainty for receivers were still conceptualized as the self, partner (i.e., media character), and relationship (i.e., parasocial relationship). This research did not reflect a radical departure from the traditional views of uncertainty in the interpersonal communication literature.
Nevertheless, this initial research revealed that scholars could apply successfully an uncertainty reduction framework to a particular mass media effect. Current mass media research involving uncertainty has grown in breadth and has yielded a new conceptualization of uncertainty in the process—receiver-based uncertainty (e.g., Boyle et al., 2004; Jensen, 2008; Lee & Lim, 2008; Paek et al., 2005; Peter and Valkenburg, 2008). Receiver-based uncertainty is uncertainty about mass-mediated messages, as opposed to interpersonally-based uncertainty, which is uncertainty about the self, partner, or relationship in an interpersonal interaction. Before a formal conceptualization of receiver-based uncertainty is offered, a review of current definitions is in order.

Review of conceptualizations of receiver-based uncertainty. Several recent studies in the mass communication literature illustrate the burgeoning interest in uncertainty. For example, Jensen (2008) examined the extent to which expressions of scientific uncertainty in health-based media messages influenced audience perceptions of both scientists’ and journalists’ trustworthiness, credibility, and expertise. While uncertainty-based theories are not at the forefront of the study (URT and UMT are only briefly mentioned), this work still explores receivers’ perceived scientific uncertainty and how it impacts subsequent evaluations. Scientific uncertainty is never defined explicitly, but the concept is applied both to the message creator and the message recipient. Specifically, Jensen (2008) attributes scientific uncertainty in the news story to the message creator and message source (i.e., the journalist and scientist), yet also measures the extent to which the recipient perceived scientific uncertainty in the news story. In that sense, scientific uncertainty is the acknowledgement of scientific limitations and caveats in the
news story by the message creator and source (i.e., journalist and scientist) and the message recipient.

Unlike the previous study’s minor reference to uncertainty theories, Boyle et al. (2004) base their post-9/11 information seeking study in URT. They apply the core logic of URT—individuals in uncertain situations experience discomfort, which can encourage information seeking to reduce discomfort—to explain emotional reactions and subsequent information seeking about the 9/11 tragedies. In particular, they argued that negative and positive emotional reactions to 9/11 caused information seeking in the mass media (Boyle et al., 2004). Thus, mass media messages can serve two roles: as sources of uncertainty and as reducers of uncertainty. Unfortunately, there is no clear definition or explication of receiver-based uncertainty. The study merely argues, and concludes, that mass media can potentially serve as a source of uncertainty, which can cause emotional reactions, which, in turn, can increase information seeking efforts.

Moving from news coverage to advertising, Lee and Lim (2008) considered the role of uncertainty and uncertainty avoidance in humorous consumer advertising. Uncertainty is conceptualized as both a cultural trait and a cognitive/affective state within an individual. At the cultural level, “uncertainty avoidance” is defined as the amount of risk societal members are able to tolerate (Lee & Lim, 2008). At the individual level, uncertainty is a receiver-based, two dimensional concept with both affective and cognitive components, and is defined in relation to humor perception. The cognitive component of humor-based uncertainty (i.e., incongruity resolution) arises when humor presents two seemingly incongruent events or items and the individual must resolve the
incongruence to understand the humor (Alden, Mukherjee, & Hoyer 2000; Speck 1991; Young, 2008). The affective component of humor-based uncertainty (i.e., arousal safety) “requires (1) the arousal related to the discomfoting presence, behavior, intention, or fate of another person; (2) affective uncertainty; (3) play signal; and (4) a safety judgment” (Lee & Lim, 2008, p. 73). Although this study is important because it connects humor to uncertainty, the conceptualizations of cognitive uncertainty and, in particular, affective uncertainty are unclear. Nonetheless, the individual-level conceptualization of uncertainty is receiver-based and focused on uncertainty surrounding perceptions of humorous advertising. There is no mention of any uncertainty-based theories in this work.

In another advertising study, this time in the political realm, Paek et al. (2005) examined the potential impact of uncertainty on third-person perceptions (i.e., the notion that media have greater influence on others than oneself). They suggest the third-person perception is a social judgment, a cognitive fallacy, made under varying degrees of uncertainty about (1) the effectiveness of a mass media message and (2) the orientation of another person/group toward the mass media message. Uncertainty is defined in a traditional sense of URT in that it represents an unsettling psychological state that motivates individuals to engage in communicative behavior or information seeking (Paek et al., 2005). When information is unavailable, imperfect, or ambiguous, people attempt to reduce uncertainty by using cues, such as group labels, and by using social judgments, such as perceived similarity to the target group (Paek et al., 2005). This process can lead to the third-person perception. Paek et al. (2005) conduct two experiments using political advertisements to test this thesis and find tentative support—people do make decisions
about social perceptions under conditions of receiver-based uncertainty, and sometimes people take uncertainty-reducing information into account when making social judgments like the third-person perception.

Peter and Valkenburg’s (2008) study of sexually explicit Internet material and adolescents’ sexual uncertainty serves as a final example of a receiver-based uncertainty study that involves mass media. They hypothesize that frequent exposure to sexually explicit Internet material is associated with greater sexual uncertainty. Although no uncertainty theories are employed in the study (identity-based theories serve as a framework), sexual uncertainty is still defined as a cognitive state and a self-perception: “Sexual uncertainty refers to the extent to which adolescents are not clear about their sexual beliefs and values” (Peter & Valkenburg, 2008, p. 581). They argue that sexual uncertainty may serve as an antecedent to seeking information in the media, and may result from seeking information in the media. It is the latter case that directly relates to receiver-based uncertainty. Peter and Valkenburg (2008) note two studies (Cantor, Mares, & Hyde, 2003; Steele, 1999) that reported adolescents who were exposed to sexual media messages experienced uncertainty as a result of the divergence of values between what their parents taught them and what they encountered in the media messages. Again, this is evidence of receiver-based uncertainty from mass media. In the end, the study’s findings confirm that greater exposure to sexually explicit media content leads to more sexual uncertainty in adolescents (Peter & Valkenburg, 2008).

Proposed conceptualization of receiver-based uncertainty. Among the five receiver-based uncertainty media-oriented studies reviewed, there are two common
themes: (1) uncertainty is cognitively-based, although Boyle et al. (2004) and Lee and Lim (2008) recognize the role of emotion as well, and (2) uncertainty results from confusing, incongruent, or insufficient information from a mass media message (e.g., news stories, advertisements, Internet material).

Considering past conceptualizations of interpersonally-based and receiver-based uncertainty, a tentative conceptualization of receiver-based uncertainty is offered: (1) Receiver-based uncertainty is a cognitive appraisal of one’s knowledge and understanding of a mass media message. Mass media messages are messages that are not communicated face-to-face and are intended to be disseminated to a large audience, including messages originating from television, radio, newspapers, magazines, and, at times, the Internet.

(2) Individual-level knowledge and understanding of a mass media message exist at two levels: (a) descriptive—the ability to recall and describe a message’s manifest content, and (b) explanatory—the ability to infer meaning from a message’s manifest and/or latent content (i.e., elaborate). Manifest content refers to the explicit, objective material in the message. Latent content refers to the implicit, subjective material and meaning in the message.

(3) Uncertainty arousal is likely when a mass media message is ambiguous or complex. Generally, uncertainty is more likely to exist at the explanatory level than the descriptive level because a message’s meaning is more likely to be ambiguous or complex. Message ambiguity and complexity refers to the potential for multiple, plausible interpretations and explanations.
(4) The basic cause of receiver-based uncertainty is the mass media message. In particular, uncertainty can originate from four specific sources relating to the message: (a) the message’s intentions—both the message creator’s intentions (i.e., the individual who constructed the message) and the message sources’ intentions (i.e., the individuals present within the message and who deliver the message), (b) the message’s descriptive or explanatory meaning, (c) the individual’s own meta-thoughts and meta-feelings about the message’s meaning, or (d) the individual’s thoughts and feelings of what another person or group thinks and feels about the message’s meaning. In other words, receiver-based uncertainty always originates from the message, but the specific cause can be (a) source-uncertainty, (b) message-uncertainty, (c) self-uncertainty, or (d) other-uncertainty.

(5) Outcomes of receiver-based uncertainty include cognitive, affective, and behavioral dimensions. Cognitive outcomes refer to the range of thoughts and beliefs that may result from uncertainty arousal. Affective outcomes refer to the range of emotions that may result from uncertainty arousal, which includes positive (e.g., hope, optimism), negative (e.g., fear, anxiety), and neutral (e.g., indifference, boredom) emotions. Behavioral outcomes refer to the range of communicative behaviors used to reduce uncertainty, which includes more direct (e.g., active/interactive discussion) to less direct (e.g., searching the Internet) strategies.

Receiver-Based Uncertainty Reduction

In sum, this conceptualization of receiver-based uncertainty provides clarity and organization to a growing literature on uncertainty in relation to mass media effects. It is important to reiterate the potential application of uncertainty reduction to political
communication. The link between receiver-based uncertainty and uncertainty-reduction options (in particular, more direct strategies) are of prime interest to this dissertation. Because the initial uncertainty reduction strategies proposed by URT were developed based on an interpersonally-based perspective of uncertainty, it is necessary to alter and/or make additions to the uncertainty reduction strategies to reflect a receiver-based perspective. As described above, with interpersonally-based uncertainty people can passively, actively, or interactively reduce uncertainty. With receiver-based uncertainty, people can reduce uncertainty with (1) incidental exposure, (2) message comparison and information seeking, (3) message composition, (4) discussion with others, and (5) discussion with the message creator.

*Passive strategies with receiver-based uncertainty (incidental exposure).* Passive strategies in interpersonally-based uncertainty are non-communicative and include social comparison, listening, eavesdropping, and observation. These non-communicative behaviors can also apply in a receiver-based approach to uncertainty. In particular, listening to, eavesdropping on, and observing any happenstance conversations about the uncertainty of a media message are possible. This is interpersonal incidental exposure. Likewise, mass-media incidental exposure may also reduce uncertainty. For example, a voter may be uncertain about the validity of arguments in a negative political advertisement seen on television last night and due to serendipity incidentally watches a “fact-check” analysis of that same political ad the next morning on the local news. It is possible for all four types of uncertainty (source, message, self, and other) to be reduced
by these passive strategies. The keys to passive strategies are the happenstance non-communicative methods to reduce uncertainty.

Message comparison and information seeking as receiver-based strategies. It is important to note that one interpersonal passive strategy that must be adjusted to fit receiver-based uncertainty is social comparison. In interpersonally-based uncertainty, social comparison involves comparing the uncertain individual to a similar and familiar individual. In receiver-based uncertainty, message comparison could occur, as opposed to social comparison. For instance, an individual uncertain about the seriousness and sensibility of a newspaper editorial may reduce uncertainty about the message by comparing it to a previously published editorial by the same author. This strategy is like the passive strategies outlined above; however, message comparison is a motivated process, where the individual needs to actively think of a message from which to compare the uncertain message.

An additional strategy that is not a part of URT yet applies to receiver-based uncertainty is information seeking. Using the media to find information is not a passive strategy. Information seeking requires motivation and an active effort, which is why it stands apart from the passive strategies that are essentially incidental exposure. For example, message recipients may seek further information about a political message via mass media or user-generated media (e.g., YouTube, blogs). The message recipient could engage in mass- or user-generated media information seeking for all four types of uncertainty.
For instance, if the individual has source-uncertainty, he or she may search for information regarding the message creator in hopes of gleaning insight about the source’s intentions. If the individual had message-uncertainty or self-uncertainty, he or she may read opinion articles or blogs, or watch YouTube videos, to gain knowledge about the message’s meaning(s) and about what he or she thinks about the meaning(s). If the individual has other-uncertainty (e.g., uncertain about what their best friend thinks about Obama’s health care reform speech), the Internet could be used to search for answers (e.g., searching status updates or the “political views” tab on social networking sites such as Facebook).

Essentially, message comparison and information seeking are motivated behaviors, which cause them to fall beyond the passive strategies outlined above. However, they are not classified as active strategies per se because it is important to be as consistent as possible with the original strategies outlined in URT. Active strategies, in URT, deal with communication with others. To be sure, message comparison and information seeking are not classified as active because they are non-communicative and are not classified as passive because they are motivated behavior. As a whole, all of the strategies outlined here should be considered more ordinal in nature rather than nominal, with specific strategies falling along a continuum from truly incidental to truly interactive.

**Reactive strategies in receiver-based uncertainty.** Reactive strategies to reduce uncertainty involve motivated communication through message composition, but not dialogue. The individual is motivated to compose a message in order to reduce
uncertainty, but there is no active dialogue between people. For example, self-uncertainty may provoke an individual to compose a message about their uncertainty in hopes of better understanding their own opinion on the message. Writing a blog post, commenting on articles or blogs, writing an opinion article, or letter to the editor about the political message may help individuals learn about their own opinions. Research has suggested that message construction and expression can influence individuals (Pingree, 2007), so this is an option that may produce uncertainty reduction for individuals. Although dialogue may be initiated by the message composition, in which case it becomes an active strategy, message composition alone is a reactive strategy until there is an explicit dialogue between people. All four types of uncertainty could be reduced using reactive strategies because message composition about all four types of uncertainty is possible.

Active strategies with receiver-based uncertainty. Recall that an active strategy to reduce interpersonally-based uncertainty involves talking to people who already know the person whom one is uncertain about (Berger, 1979). The person whom one is uncertain about is not engaged in the conversation directly. The conversation may involve verbal interrogation (i.e., asking questions) and self-disclosure (i.e., sharing information or opinions in hopes of reducing uncertainty about the other person). In keeping with the URT logic of active strategies not consisting of going to the exact person of uncertainty, active strategies in receiver-based uncertainty do not consist of going to the exact person of uncertainty. For source-uncertainty, this means that one does not typically have the opportunity to engage in a conversation with the mass media message creator, so any conversations about source-uncertainty that are not held with the message creator are
considered an active strategy. Likewise, conversations (i.e., back-and-forth dialogue between at least two people) about the message are regarded as an active strategy because one cannot have a conversation with a message. For example, a discussion with one’s spouse about his or her uncertainty of the meaning of the now famous The New Yorker magazine satirical cover of then presidential candidate Obama and his wife as terrorists would qualify as an active strategy of message-uncertainty reduction (see Appendix A for a copy of the cover). For self-uncertainty, conversations with other people about one’s own uncertainty about the message may also reduce uncertainty. Engaging in a dialogue with a friend about one’s uncertainty of how funny and possibly inappropriate he or she thinks last night’s South Park episode was is an active uncertainty reduction strategy.

Finally, for other-uncertainty (i.e., where uncertainty is directed at another person or group’s thoughts about a message), dialogue with others (not the specific other whom uncertainty is directed) and non-members of the group whom one is uncertain about qualifies as active strategies. For example, if one is uncertain about what the environmental group Greenpeace thinks about the political message in the blockbuster movie Avatar and one engages his or her spouse (who is not a member of Greenpeace) in a conversation about this matter, then it is an active strategy. Similarly, an individual uncertain about what another person thinks about a political message may ask a friend or family member who is familiar with the other person’s political viewpoints. In sum, if the individual engages in a conversation (either offline or online, synchronous or asynchronous) with another individual who is not the object of uncertainty, then an active strategy is employed.
**Interactive strategies with receiver-based uncertainty.** In URT, interactive strategies involve direct communication with the individual whom uncertainty is based upon (Berger, 1979). This is still the case in receiver-based uncertainty. If a Stephen Colbert fan had the opportunity to ask him a question about the purpose of his skit on Glenn Beck (*Colbert Report, 2009*), then the fan is attempting to interactively reduce source-uncertainty. For message- and self-uncertainty, any dialogue is considered active because one cannot interact with the message (for message-uncertainty reduction) and one does not engage in a dialogue with oneself (for self-uncertainty reduction). In regard to other-uncertainty, interactive strategies are possible: if a listener to Rush Limbaugh called into his radio show to ask Limbaugh a question about his opinions of MSNBC’s news coverage of the health care debate, then that is an interactive strategy to reduce other-uncertainty. In all, only source- and other-uncertainty can be reduced with interactive means, which include verbal interrogation and self-disclosure in a dialogue.

**Selection of an uncertainty reduction strategy.** Once the individual experiences one or more of the types of receiver-based uncertainty, he or she has several options as to how to react (as described above). This is where URT provides guidance—on the types of strategies to be engaged and when they will be engaged. Other contributions of URT are the suggestions as to the particular circumstances that encourage the selection of specific uncertainty management strategies. For example, the possibility of incentives or rewards; deviation from behavioral and communicative expectations, norms, or rules; the potential for future interaction; the presence of a perceived threat; and a power differential between the individuals are all suggestions from URT as to when uncertainty
is pertinent enough to engage in an uncertainty reduction behavior (Berger, 1979). Again, these are contexts in which uncertainty is particularly important to the individual, and subsequently, should increase the desire to reduce uncertainty and should impact which strategy (or strategies) is chosen.

For example, interpersonal power is regarded as the degree of influence one individual possesses over another in a relationship (Lawler & Bacharach, 1987), and results from the ability to control the rewards and costs in the relationship (Blau, 1964). Since individuals appraise other individuals’ power before broaching important subjects with an alter (Cloven & Roloff, 1993; Roloff & Cloven, 1990), power appraisal should occur before an uncertainty reduction strategy is selected. Indeed, direct searches for information (e.g., active and interactive strategies) are relatively less common when another individual is perceived as more powerful (Knobloch & Solomon, 2002).

In addition, individual-difference variables may impact uncertainty reduction strategy selection. The presence of particular personality traits, such as the willingness to self-censor (Hayes, 2008; Hayes, Glynn, & Shanahan, 2005a, 2005b) and fear of social isolation (Neuwirth, Frederick, & Mayo, 2007; Noelle-Neumann, 1974, 1984), may make an individual less likely to engage in direct strategies of uncertainty reduction. As mentioned previously, self-monitoring also influences selection of uncertainty reducing strategies in that high self-monitors are more flexible in interactive strategies (Tardy & Houseman, 1982), and are better able to recall and explain their passive strategies (Berger & Douglas, 1981; Berger & Perkins, 1978).
TMIM highlights the importance of efficacy. Efficacy is a belief about one’s ability to behave in a particular manner to successfully attain certain goals (Bandura, 1997). One specific type of efficacy that is expected to be relevant is communication efficacy, which Afifi and Weiner (2004) describe as “an individuals’ perception that they possess the skills to complete successfully the communication tasks involved in the information-management process” (p. 178).

Likewise, communication competence is a similar construct that emphasizes communication performance in social interaction and has been regarded as “the ability of an interactant to choose among communicative behaviors in order that he may successfully accomplish his own interpersonal goals during an encounter while maintaining the face and line of his fellow interactants within the constraints of the situation” (Weimann, 1977, p. 198). Individuals with higher levels of communication efficacy and competence will feel more confident in their ability to access desired information from others and may engage in more discussion (i.e., active and interactive strategies).

To conclude, this section (1) reviewed the basic tenets of URT and other uncertainty-based communication theories, (2) argued for the application of URT to political communication, (3) reviewed past receiver-based uncertainty conceptualizations, (4) proposed a conceptualization of receiver-based uncertainty, and (5) proposed how receiver-based uncertainty can be reduced. Beyond the above-mentioned points, this dissertation argues that uncertainty about mass-mediated political messages may be a relatively common occurrence that is worth understanding. The next section addresses the
junction of interpersonal and mass communication and offers arguments for how this
dissertation advances the literature in this crucial area.

Intersection of Interpersonal Communication and Mass Communication

An Argument for Integration

There are many fields in communication that overlap and share theoretical
boundaries. For example, health and political communication share concepts (e.g.,
efficacy) and models of campaigning and persuasion (e.g., the elaboration likelihood
model, ELM, Petty & Cacioppo, 1986). However, there is possibly no greater schism in
the communication literature than that which exists between mass media scholars and
interpersonal communication scholars (see Feeley, 2008 for a bibliographic analysis of
communication journals and citation patterns). Mass media research tends to avoid
interpersonal communication theories and vice versa. This is unfortunate given that
people are not often socially isolated in their media use (Delli Carpini & Williams,
1994a, 1994b, 1996; Benoit & Holbert, 2010). For instance, people report talking back to
the television itself and also talking with co-viewers during and after mass media
exposure (Delli Carpini & Williams, 1994a, 1994b, 1996). It is clear that communication
scholars should be investigating the interplay between mass media and interpersonal
discussion.

Chaffee (1986) noted that mass media and interpersonal communication should
not be at odds with each other. The search for mass media effects and interpersonal
influence should not be treated as solely competitive. Scholars should move beyond
comparing significance values to determine which type of communication is more
influential (i.e., which outlet or channel has the greatest effect). While research in competitive influence is worthwhile, there is another approach that needs attention—the study of complementary effects (Holbert, 2005; Holbert & Benoit, 2009). If communication scholars are to understand how people make sense, interpret, and negotiate the mass media content they are exposed to every day, they must examine the dynamics, both subtle and complex, between mass media consumption and interpersonal discussion.

**Review of Mass-Interpersonal Literature**

In general, there is not a wealth of literature located at this intersection. In the research that does examine this dynamic, it is uncommon for theories of interpersonal and mass communication to be integrated. Moreover, mass media-initiated interpersonal discussion is typically tangential to the studies’ foci (e.g., Collins, Elliott, Berry, Kanouse, & Hunter, 2003; Kennedy, O’Leary, Beck, Pollard, & Simpson, 2004; Nabi, Moyer-Gusé, & Byrne, 2007; Vaughn, Rogers, Singhal, & Swalehe, 2000). For instance, in the health context, Collins et al. (2003) examined how viewing a *Friends* episode that featured an ambiguous message about condom efficacy influenced teenagers’ attitudes and learning about condoms. In their survey, they ask teens to report if they have discussed the episode and its content with parents. They found that among teens who reported discussing the episode with parents there was an increase in perceived learning. Thus, entertainment media exposure led to discussion, which led to increases in perceived learning. This study shows that entertainment media can facilitate discussion. Yet, there
are no theoretical reasons presented as to why discussion would occur in the first place and why perceived learning would be affected by discussion.

Other health communication studies that touch on discussion are in the entertainment-education literature (see Moyer-Gusé, 2008, for theoretical overview). Kennedy et al. (2004) reported increases to the CDC STD and HIV/AIDS hotline following the airing of an American soap opera that included an HIV/AIDS storyline. This study shows that entertainment-education, which has typically been promoted in foreign countries, can occur successfully in the US. While the study does present theories for why this occurred (e.g., the health belief model and social cognitive theory predict why entertainment media influenced viewers to call the hotline), there is no focus on the content of discussion and how discussion may have influenced subsequent attitudes, beliefs, emotions, and behaviors. Again, the influence of discussion is tangential to the study.

Likewise, Vaughan et al.’s (2004) entertainment-education study in Tanzania has a similar lack of concentration on the influence of interpersonal discussion. They found that discussion mediated the relationship between exposure to a radio entertainment program and important health outcomes (i.e., decline in the number of sexual partners and increase in condom use). Therefore, it seems that interpersonal discussion of health-oriented entertainment media can impact persuasive elements of the narratives.

It is also noteworthy that there is a growing literature surrounding when and why interpersonal talk matters for mass media campaigns (e.g., Cho et al., 2009; Compton & Pfau, 2009; Hardy & Scheufele, 2009; Morgan, 2009; Southwell & Yzer, 2007, 2009).
For example, Hardy and Scheufele (2009) found that major campaign media events increase the amount of discussion citizens engage in, yet this discussion coincides with an increase of inaccuracies concerning knowledge of candidate issue stances. As mentioned earlier, Cho et al. (2009) present an O-S-R-O-R model for studying campaign effects and talk, where political talk, messaging, and cognitive reflection mediate the influence of campaign advertising and news media use on political participation and knowledge. They argue that campaign communication, and news media in general, are complex messages and are not experienced in isolation—interpersonal communication and intrapersonal reflection of mass media are the links that are important for subsequent participation. The studies in this realm investigate motives for campaign-related conversation, but they are clearly grounded in a mass communication and campaign effects theory. It appears that little interpersonal communication theories and literature have been integrated.

In terms of the intersection of mass-mediated political entertainment and interpersonal discussion, political humor consumption has been suggested to motivate discussion, akin to a sleeper effect derived from political comedy exposure (Nabi et al., 2007). Nabi et al. (2007) found evidence of this sleeper effect after subjects’ exposure to political/social humor attributed to comedian Chris Rock. When the same socio-political message was not attributed to Rock, discussion of the topic was not as common and did not influence topic-relevant attitudes one week later. Nabi et al. (2007) propose that the “memorable nature of the message may have encouraged respondents to think more about it over time,” which may encourage interpersonal political discussion (p. 49). Another potential explanation is that the respondents wanted to reduce uncertainty about the
political humor. However, this finding was not the focus of the Nabi et al. study and not theoretically grounded in interpersonal literature.

To my knowledge, the Nabi et al. work is the only study that examines the interplay between political entertainment media, interpersonal discussion, and persuasive outcomes. Other political entertainment media studies examine outcomes such as attitude change (e.g., Holbert, Hmielowski, Jain, Lather, & Morey, in press), efficacy (e.g., Holbert, Lambe, Dudo, & Carlton, 2007), and learning (e.g., Young, 2004). However, the exploration of the added influence of interpersonal discussion is not common. Thus, the next example of recent effects research in political communication and discussion is news media oriented. Specifically, McLeod et al. (1999) use interpersonal political discussion and news media exposure to predict political participation—pitting discussion and news media exposure in competition with each other to examine which has greater influence.

This is common practice in political communication research—the attempt to disentangle multiple communication outlets’ influence on a political outcome variable—and there are several problems with this approach (e.g., multicollinearity and attenuation of effects) (Eveland, Hayes, Shah, & Kwak, 2005; Holbert & Benoit, 2009).

To review, there are a few studies in health communication that examine the link between entertainment media, discussion, and outcome variables, and even fewer in political communication. These studies do not include discussion as a major conceptual or theoretical piece of the puzzle of untangling mass media effects. The problem is a lack of understanding about how audiences negotiate mass media content (e.g., political news and political satire) on the interpersonal level. Although the majority of research has not
centered on the interplay between mass media, discussion, and outcome variables, there is one example that has examined this dynamic.

The research agenda carved by Delli Carpini and Williams (1994a, 1994b, 1996) is the one exception. Their work focuses on audiences’ conversations with television and fellow audience members and the subsequent construction and reconstruction of public opinion. Delli Carpini and Williams suggest that mass media research does not consider the message recipient enough in the negotiation of meaning and public opinion. They argue that politics is fundamentally ambiguous and open for interpretation, and public opinion research should consider that political opinions can be dynamic, situationally-based, and interactive with one’s surroundings (Delli Carpini & Williams, 1996). Using a series of focus groups, they reveal individuals use mass media content (news and entertainment) and interpersonal communication about the mass media content to shape, understand, illustrate, and bolster their political opinions: “We argue that it is useful to conceptualize public opinion as a conversation wherein citizens ‘discover’ their political views in the give-and-take of discussions with others” (Delli Carpini & Williams, 1994a, p. 799).

Although Delli Carpini and Williams’ research bridges the gap between interpersonal and mass communication, the research is grounded in public opinion and political communication. No interpersonal theories are used to guide or explain the intersection of mass media and interpersonal discussion. Therefore, integrating interpersonal theories with mass media research would shed light on the potential processes that lead to interpersonal communication following mass media consumption.
In the interests of this dissertation, URT would be helpful in illuminating the process by which interpersonal communication arises after exposure to mass media-based political messages.

As argued earlier, there is a high potential for uncertainty arousal with political messages. Delli Carpini and Williams (1996) note how politics is fundamentally ambiguous and open for interpretation. Likewise, political messages can also be ambiguous and open for interpretation. This dynamic is ripe for uncertainty arousal. Moreover, Delli Carpini and Williams’ research shows that people talk about entertainment just as much as news in the context of political issues. A missing part of the puzzle is understanding why audience members have the desire to engage in interpersonal communication about mass media, and, in particular, political messages. What is needed from communication scholars is a theoretical explanation for how and why mass media influence interpersonal discussion (Landreville, Holbert, & LaMarre, in press), and how and why interpersonal discussion may influence attitudes, beliefs, emotions, and behaviors. The motivation to reduce, or manage, uncertainty that was aroused by the political message is one explanation for interpersonal communication. Thus, this study argues that URT can provide direction when studying this process.

In light of the extant research described above and Chaffee’s (1982) notion that complementary relationships, rather than competitive relationships, among media and interpersonal outlets should be investigated, I argue that mass-mediated political messages can arouse various types of uncertainty and can subsequently serve as a stimulant for interpersonal communication about politics. The next component of this
argument that needs to be introduced is message ambiguity and how messages with different goals and interpretative demands have varying levels of ambiguity. The relative degree of ambiguity, in turn, has a potential impact on uncertainty arousal and interpersonal discussion.

Message Ambiguity

Ambiguity can be approached in many different ways: high subtlety, high complexity, low definitiveness, low clarity, low obviousness, low transparency, and low sidedness. All of these related terms imply there is an openness of relationship between the message and the receiver. This project conceptualizes ambiguity on two dimensions: ambiguity of message goals and ambiguity of message meaning. These distinctions imply that there are various levels of openness between the message and receiver about a given message’s (1) goals (i.e., why the message was created and with what intentions/motivations) and (2) meaning (i.e., what the message’s interpretation and implications are). Awareness of a message’s goals raises an individual’s clarity about the message, which will decrease uncertainty about the message. Likewise, awareness of a message’s meaning raises an individual’s clarity about the message, which will also decrease uncertainty.

When considering the two dimensions (goals and meaning), four types of messages come into view: two types of news stories (traditional news stories and news editorials) and two types of satire (horatian satire and juvenalian satire). For the first dimension, ambiguity of message goals, news stories and editorials are relatively low. It is common knowledge that traditional news attempts to inform us (i.e., educate) and
editorials attempt to influence us (i.e., persuade). Alternatively, satire (both juvenalian and horatian) are relatively high on ambiguity of message goals. It is sometimes unclear to the audience if the goal of a piece of satire is to inform, influence, entertain, or reveal: “Although satire often contains both humor and criticism, attempts to find the precise amount of each are not particularly useful,” (Feinberg, 1967, p. 4).

The second dimension, ambiguity of message meaning, represents the degree of interpretative load placed on the message recipient. In traditional news, the lack of definitiveness and clarity in its conclusions (i.e., presenting both sides of an issue) leaves the message more ambiguous compared to editorial news. Likewise, in horatian satire, the lack of clarity and the presence of more gentle, subtle, and wry message delivery makes the interpretation more ambiguous than juvenalian satire. Horatian satire, named for the first Roman satirist Horace (65 – 8 BC), is “to tell the truth, laughing” of a social and ethical problem (Hight, 1962, p. 234). This is a softer approach compared to juvenalian satire. Juvenalian satire, named for a second early Roman satirist Juvenal (60 – 140 AD), is a more definitive, bitter, and angry approach to satire (Hight, 1962; Sander, 1971). The two types of satire have been described as opposites in terms of their techniques: “If Horace’s satire borders on comedy, Juvenal’s comes close to tragedy. If Horace’s satire evokes laughter, Juvenal’s provokes indignation, the half-smile that vanishes as the barb and lash are applied relentlessly” (Sander, 1971, p. 254). While the techniques differ in that ambiguity of message meaning is lower with juvenalian and higher with horatian satire, both are still represent higher levels of ambiguity of message goals because one cannot be certain of the larger purpose the satirist is writing for.
To review, traditional news stories are low on ambiguity of message goals and high on ambiguity of message meaning. Editorials are low on both ambiguity of message goals and ambiguity of message meaning. Horatian satire is high on both ambiguity of message goals and ambiguity of message meaning. Last, juvenalian satire is high on ambiguity of message goals and low on ambiguity of message meaning. Further arguments for why each mass media message was placed in the corresponding category are detailed next.

Message Goals in News and Satire

Message goals in news. In modern Western society, the traditional news’ goal is to inform the audience, whereas performance is based upon the most frequently occurring, overarching values of freedom, justice/equality, and order/solidarity (McQuail, 1992). “These seem to be the basic principles which lie at the heart of most expectations concerning public communication,” argues McQuail (1992, p. 67). Freedom refers to the protection of speech, movement, assembly, association, and access to information. Justice/equality means equal access to receive information and equal access to send information, as well as justice and equality in reporting facts and opinion, while order/solidarity refers to the significance of public communication to maintain social order (McQuail, 1992).

Of utmost importance to the concepts of uncertainty and ambiguity, which are chief to this dissertation, is the value of justice/equality. Within this value of justice/equality is the objectivity technique that traditional news exercises in order to most transparently inform the people (Westerståhl, 1983). There is no doubt that the goal
of informativeness is behind the practice of objectivity. Schudson’s (1999) trustee model regards objectivity as the foundation of journalism. Professional journalism is built upon the idea that the public needs to be informed by a disinterested media in order to be active, informed participants in democracy (Schudson, 1999).

At its core, objectivity is both a media practice and an attitude toward information collection, processing, and dissemination: “It means adopting a position of detachment and neutrality from the object of reporting (thus an absence of subjectivity or personal involvement and also of partisanship)” (McQuail, 1992, p. 72). Objectivity as a principle was designed to benefit the public by providing neutral and balanced reporting from which people could base their opinions and draw their conclusions about the world (Holbert & Zubric, 2000; Schudson, 1999). This role can be likened to that of an educator in the marketplace of ideas (Hindman 1997). For instance, if ten different journalists all practiced objectivity in their news reporting, then all ten accounts should be similar (i.e., replication). This practice goes beyond a news norm and becomes a technique not unlike the scientific method: “reporters meticulously gather, question, verify and re-question information until they are convinced of its authenticity” (Holbert & Zubric, 2000, p. 54).

Thus, it is expected that journalists execute the goal of informativeness using their objectivity techniques during information gathering and reporting. Specifically, journalists are responsible for ensuring that their news reports (1) correspond to reality (i.e., accuracy), (2) are a full account of reality (i.e., offer completeness), (3) clearly distinguish fact from opinion, interpretation, or comment and avoid vagueness and redundancy (i.e., factualness), (4) provide significant and current information for the
audience (i.e., relevance), (5) provide equal or proportional access (balance), and (6) are non-evaluative and non-sensational (i.e., retain impartiality) (McQuail, 1992).

While the goal to inform seems uncontroversial, the technique of objectivity does have its critics who argue (1) objectivity is a goal that can never be achieved (e.g., Glasser, 1988) and, for that matter, (2) should not be achieved (e.g., Glasser, 1984; Hemánus, 1976). First, pure objectivity is unattainable because the process of news selection must entail subjective evaluation (McQuail, 1992). Moreover, several constraints (time, financial, and space) on news media suggest that some information is omitted, which is essentially a value judgment. At the individual-level, journalists have their own ideologies and biases, some of which they may not be cognizant. Even normal news collecting practices such as the reliance on regular sources can be deemed ‘unwitting bias’ (Golding, 1981). Because empirical research consistently supports this claim that true objectivity is rare (e.g., Cohen & Young, 1973; Gerbner, 1964; Lichter, 2001; Lowry & Shidler, 1995; Zaller, 1996), this implies that perfect clarity and precision of information is also rare.

Then there are those who believe objectivity is undesirable because it is a form of bias against the watchdog role of the press, against independent thinking, and against genuine responsibility for the consequences of reporting information (McQuail, 1992). Facts are treated with no moral implication (Hemánus, 1976), and some argue this reinforces the interests of the powerful (Gans, 1979). Instead of serving as a watchdog role for the public, objective journalism becomes a guard dog for the elite (Edelman, 1988; Olien, Donohue, & Tichenor, 1995).
Public journalism is sometimes suggested as an alternative to traditional journalism (e.g., Bowman, 1997; Charity, 1995; Grimes, 1997). In public journalism, the main goal is to aid the public in addressing and solving mutual problems within the community; in other words, to encourage active participation in democracy. Instead of treating readers like customers, they are regarded as citizens in public journalism (Holbert & Zubric, 2000).

Other alternatives to objective news include commentary, editorials, partisan news sources, and advocacy journalism (McQuail, 1992; Schudson, 1999). No objectivity claim is made in these presentation styles (McQuail, 1992; Schudson, 1999). In Schudson’s (1999) advocacy model of journalism, journalists serve the public by arguing a certain point of view and attempting to advance a political or social movement (Schudson, 1999). Yet, the primary goal—to inform—still remains in advocacy journalism, but with an additional motive: to influence (Schudson, 1999). The goal to influence is transparent to the audience because of the lack of objectivity and presence of clearly stated opinion. While traditional news and opinion news do differ in terms of their approach to informing citizens (i.e., traditional news values objectivity, whereas opinion news does not), both traditional and opinion news are transparent in terms of their goals. The overarching goal of informativeness does not escape the two different styles, and the secondary goal of influence is clearly a part of opinion news. Moreover, both standard news coverage and opinion coverage are obvious in their emphasis on controversy and contentiousness (Mutz & Reeves, 2005). This makes the news genre a relatively low source of ambiguity for message goals.
Message goals in satire. News and entertainment are traditionally seen as distinct presentation styles of information (Bennett, 1998) with different goals of message clarity and ambiguity in mind. A large part of the difference can be attributed to the specific norms, values, and traditions that are of prime importance to news, but which are not the underlying motives for more entertainment-oriented messages. While informativeness is the primary motivation of news production, and objectivity is a technique to achieve informativeness, this is not the case with satire. The motivations of a particular piece of satire are not always clear, and objectivity of information presentation is not of primary concern (or even a matter of concern at all) (Holbert et al., in press; Simpson, 2003). In order to shed more light on satire’s motivations and goals as a form of information presentation, a review of the foundations and conceptualizations of satire is warranted.

Generally, most of the conceptualizations of satire are grounded in the humanistic tradition of literary criticism (e.g., Bogel, 2001; Feinberg, 1967; Highet, 1962; Knight, 2004; Sander, 1971; Simpson, 2003). The word satire originates from the Latin word satura that means full, and in the context of literature, satire means “a mixture full of different things” (Highet, 1962, p. 231). Satire was not regarded as a separate literature by ancient Greek and Roman societies (Highet, 1962); rather, satire is unique in that it exploits and manipulates existing genres, such as tragedy and comedy (Knight, 2004). Satire has been described as a “full-fledged artistic mode (‘literary’), not merely a symptom of ill humor or personal spite” (Bogel, 2001, p. 1). Satire uses laughter as a weapon to diminish or derogate a subject and evoke toward it attitudes of amusement, disdain, ridicule, or indignation (Abrams, 1999). Satire has been described as a “playfully
critical distortion of the familiar” (Feinberg, 1967, p. 19). It is not humor for humor’s sake; satire has a larger purpose than to simply generate laughter (Feinberg, 1967).

Specific strategies for creating satire include distortion (e.g., exaggeration, understatement, contextual distortion), incongruity (e.g., cliché twisting, disparaging comparison, caricatures), and surprise (e.g., unexpected honesty, logic, or letdown) (Feinberg, 1967). Irony, burlesque, lampoon, imitation, parody, hoax, and spoof are similar approaches to satire, but there are clear distinctions between these different message types (Knight, 2004).

As noted above, the two types of satire which are the focus of this study are horatian and juvenalian. It is important to note that although these two satires differ in style (i.e., horatian satire is more gentle, subtle satire compared to juvenalian satire), both types of satire are ambiguous in terms of the message goals and leave the audience wondering the true purpose of the satire (i.e., to inform, to influence, to reveal, to persuade, to entertain, to humor, etc.).

Although in theory the humor can be separated from the criticism, in practice comic devices are constantly used in order to criticize. Perhaps the best way to determine, in each case, whether humor or satire is being used it to evaluate the intention. (Feinberg, 1967, p. 4)

Feinberg’s advice on how to identify satire involves asking the message creator about their intentions. This speaks to the potentially ambiguous purpose behind satirists’ efforts.
Satire and socio-political influence. Throughout history, satire’s social and political influence has been assumed to be significant (Feinberg, 1967). Plato equated satire with magic when he proposed laws against satire and magicians. The Roman emperor Augustus passed a law against satires, for which the punishment was death by whipping. Celtic and Arabian societies brought satirists into battle to shout insults and curses at the enemies. England saw the forbiddance of the publication of satire in 1599 (Feinberg, 1967). Even in the 21st century, state-sponsored censorship and hostility toward satire continues. For example, the 2005 worldwide protests of countries’ whose newspapers published political cartoons of the Islamic prophet Muhammad led to Iran threatening to start an international Holocaust cartoon competition (BBCNews.com, 2006).

Feinberg (1967) argues that the relevancy of satirical texts can last for ages because of universal values, problems, and issues that transcend any one society. However, in spite of claims that satire plays a role in reforming society, it is unlikely to be the case according to some scholars (e.g., Feinberg, 1967; Knight, 2004). Satire does not attack the political and economic structure of society, so it does not influence the reform or reorganization of society as much as people expect or claim (Feinberg, 1967; Knight, 2004). Satirists tend to criticize hypocrisy, dullness, snobbishness, and folly; yet, by the time that satirists attack the problems in society, he/she is a symptom, not a cause of the problem (Feinberg, 1967). Moreover, satirists do not offer solutions to the problems they criticize.
Naturalism, like satire, ends unhappy but resigned—it’s too bad but that’s the way it goes, the naturalistic writer implies, and all we can do is accept it quietly. But most satires that survive to do not accept the inevitable defeat quietly—they gibe at it or insolently expose it—and they offer no solace, no panacea, no positive alternative. (Feinberg, 1967, p. 59)

If change does occur after political satire is released in the mass media, then the society was probably ready and eager for change (Feinberg, 1967).

While institutions may not be influenced directly by satire, individuals are influenced because satire does encourage a reappraisal of the nature of reality (Feinberg, 1967; Knight, 2004). “Satirists have a talent for seeing what is wrong: they have no special ability for seeing how it should be corrected” (Feinberg, 1967, p. 274). This insight should interest empirically-oriented political communication scholars, considering the debate about political entertainment and soft news’ influence on democratic outcomes, such as knowledge and participation (see Baum, 2002 and Prior, 2003, 2005 for competing arguments). Even though there are many claims in literature about political satire’s influence on the individual (e.g., Bogel, 2001; Feinberg, 1967; Knight, 2004; Simpson, 2003), there are relatively few empirical studies in communication and political science. As mentioned earlier, among the empirical studies that do exist, there are often conflicting, confusing, and nonsignificant results, which may reflect the ambiguity of message goals and message motivations. For example, Gruner (1965) found no persuasive influence of satire, possibly because individuals did not recognize the satire in
the humorous message. In a follow-up study, Gruner (1966) informed individuals the message was satirical, but satire did not generally lead to attitude change.

Despite the null findings, Gruner (1966) urged more research in satire’s potential persuasive influence because of its complexity and its potential persuasive power. Satire is complex and potentially persuasive because when satire is indirect, it is more entertaining; yet, when satire is more direct, it is less entertaining (Gruner, 1965). Although the audience expects entertainment and humor from political satire, the satirist often has dual goals of entertainment and enlightenment, which contributes to the potential ambiguity of message goals in the audience.

For instance, Norman Lear created the character Archie Bunker in the 1970s situation comedy All in the Family to highlight the absurdity of bigotry and racism (Vidmar & Rokeach, 1974). Lear reasoned that audiences would see that Archie Bunker had convoluted logic and his counterpart, liberal son-in-law Mike, was the one who made sense. Instead, the show was perceived by already-prejudiced audience members as condoning and even encouraging prejudice. This is an example of how satire often has two goals of entertainment and persuasion (see also Crawford, Roskos-Ewoldsen, & Roskos-Ewoldsen, 2004). When a satirist is crafting his/her message, according to Gruner (1965), the satirist needs to say what he or she needs to say, but in an indirect manner. Therein lie the conundrum—satire leaves room open for ambiguity of purpose, which may negate the satirist’s persuasive intent (Gruner, 1965; Powell, 1978).

In a more recent example, LaMarre, Landreville, and Beam (2009) explored individuals’ political ideology as a motivator for biased information processing of
deadpan political satire in *The Colbert Report*. Specifically, conservatives were more likely to report that Colbert only pretends to be joking and genuinely meant what he said, while liberals were more likely to report that Colbert used satire and was not serious when offering political statements (LaMarre et al., 2009). These two studies reveal that the intentions of the satirist are not always apparent and the effects of political satire must be investigated from a more nuanced approach. The ambiguity of intentions of political satire does not necessarily lead to contradictory, confusing, and nonsignificant effects; rather, scholars must identify theoretical frameworks for studying the literary art form (e.g., the ELM in Holbert et al., in press; biased information processing in LaMarre et al., 2009).

*Message Interpretation in News and Satire*

*Message interpretation in news*. As outlined above, traditional news objectively presents information and is transparent in these goals. As a whole, objectivity as a technique is particularly important in establishing a degree of factualness, which is an all-important indicator to the goal of informativeness. “In general, the more facts, the less uncertainty,” (McQuail, 1992, p. 204). Yet, it is noteworthy that news comprehension research points to the general conclusion that higher degrees of personalization, vividness, cut movement, special effects, and narrative structure in the message encourage comprehension and understanding (e.g., Früh & Wirth, 1997; Machill, Köhler, & Waldhauser, 2007). News reporting of this style is commonly regarded as human-interest oriented and sensational. This seems to indicate a tension between
informativeness (which calls for objectivity over ‘sensationalizing’) and message comprehension or interpretation.

Moreover, others have argued that citizens dislike exposure to the negotiation, compromise, and political maneuvering that is endemic to democratic government and traditional political journalism (Hibbing & Theiss-Morse, 1995). “People do not wish to see uncertainty, conflicting options, long debate, competing interests, confusion, bargaining, and compromised, imperfect solutions,” (Hibbing & Theiss-Morse, 1995, p. 147). There are gray areas in politics, and, subsequently, there are gray areas in the objective reporting of politics. People may be uncomfortable with that because it leaves uncertainty and does not provide clear-cut answers and solutions.

These types of reactions from viewers of traditional, objective journalism (i.e., less comprehension and less liking) suggest that the interpretative load, placed on the receiver to judge the story’s sources and information, is fairly demanding. The techniques that result from the goal of objectivity that defines traditional news (e.g., providing a balanced view of multiples sides of a given topic) are intended to reduce uncertainty about the world and let people decide their own opinion when given a neutral presentation of facts. However, this may not always be the case, among other reasons, because of the increasing complexity of events in a modern democracy (Lippmann, 1927).

For example, exposure to multiple opinions of an issue (a common traditional news practice) rather than one interpretation and evaluation of the issue (a common editorial news or punditry practice) may raise more questions than answers for someone
(see Nir & Druckman, 2008 for an example of how exposure to mixed newspaper coverage of political candidates can delay vote choice for ambivalent voters). The moral implications of facts are essentially opinions on how to view the particular issue, which are more obvious in commentaries and advocacy presentations of news (McQuail, 1992). Therefore, the argument can be made: traditional news stories can be relatively more ambiguous in terms of message meaning and implications compared to editorial and opinions news.

Consider that fifty years ago, it did not matter where Americans got their news because it was largely homogeneous (Bennett & Iyengar, 2008). There is no doubt the media environment today is exceedingly more divided, decentralized, and diverse than it was during the days of Walter Cronkite reporting the CBS evening news. From talk radio to podcasts, and cable news to YouTube videos, there is more competition among media outlets for an audience. Political junkies must use some discretion when choosing information sources because of the sheer numbers of options (e.g., CNN, Fox News, MSNBC) (Bennett & Iyengar, 2008).

One way to attract an audience is through differentiation of content and partisanship, which creates a niche market. For example, by injecting more, rather than less, political bias into the news, media owners stand to gain market share from an increasingly polarized and customization-driven audience (Gentzkow & Shapiro, 2006; Mullainathan & Shleifer, 2005). When this occurs, objectivity norms and techniques of news reporting adjust to this new media environment. Considerably more editorializing, analysis, interpretation, and punditry results and fills in the gaps for people who want
more meaning and resonance behind their news consumption. The traditional ‘inverted pyramid’ style of journalism (i.e., a summary lead followed by information of decreasing importance) is supplemented, or at times replaced, by an essay-style of news dissemination that builds to a conclusion because interpretation and opinion are included. There is evidence this is occurring in U.S. newspapers: In their content analysis of French and U.S. newspaper coverage from 1965-1997, Benson and Hallin (2007) found that U.S. newspaper coverage became increasingly interpretative and opinionated. Likewise, event-centered reporting has declined in American journalism and inclusion of themes, societal problems, and interpretation has increased (Barnhurst, 2003; Barnhurst & Mutz, 1997).

This development in media competition and fragmentation now brings varying levels of interpretative definitiveness to the news reporting process. News with higher levels of interpretation, analysis, and partisanship suggests relatively lower message ambiguity. The issue interpretation and message meaning is more transparent to the audience. Alternatively, news with lower levels of interpretation, analysis, and partisanship suggests relatively higher message ambiguity (e.g., communicating about multiple sides of an issue). The issue interpretation and message meaning is relatively more complex and multifaceted due to the balanced and neutral presentation of the issue that traditional news norms require. Multiple sides are presented, and, therefore, one must sift through and contemplate more facts and evidence.

It is important to reiterate that traditional objective reporting is intended to reduce uncertainty and improve clarity of message comprehension by providing balanced and neutral presentations of complex issues. However, this may come at a cost of more
information and issue complexity which may actually increase message ambiguity of meaning. On the other hand, interpretation of news in opinion articles and editorials can be useful for citizens because it can put the world into context for the audience (Bowman, 1997). Without this guidance, the public may become disenchanted and disinterested in the news, questioning its relevance the importance to their lives (Rosen & Merritt, 1994).

In the end, traditional objective reporting can be argued to be relatively more ambiguous due to the lack of explicit expression of opinion or punditry compared to interpretative or analytical news. While objective news gathers, processes, and presents information in a scientific manner, editorializing provides the interpretation for the audience. Opinionated news may present a one-sided view about how a particular political story fits into a broader political context, how the story should be judged, and how it impacts the audience. There should be lower levels of ambiguity in this context because news interpretation is presented to the audience. In traditional news, multiple sides are given space to argue their opinion in the realm of an objective news story, which may influence relatively higher levels of ambiguity.

Message interpretation in satire. Just as there are differences in interpretative load for news, there are also differences of interpretative load in satire. As mentioned earlier, horatian satire is essentially optimistic, believing humans are good, but blind and foolish (Highet, 1962). The tone is more gentle than demeaning, and the purpose is to heal more than to punish. On the other hand, juvenalian satire is pessimistic, believing humans are failures as a collective. The purposes to wound and criticize may take precedence over laughter and enjoyment (Feinberg, 1967; Highet, 1962). Examples of horatian satire are
much of what can be found on *The Simpsons* (see Cantor, 1999 for a critical analysis of the show), which are more gentle compared to juvenalian satire like Michael Moore’s documentary films, such as *Fahrenheit 9/11* and *Sicko* (Zimmerman, 2004).

Different levels of ambiguity of interpretation exist in these two types of satire. While horatian satire is gentle and seemingly light-hearted, juvenalian is harsh and bitter (Highet, 1962; Sander, 1971). The gentleness and subtlety of horatian satire lends itself to more ambiguity; whereas the indignation and demeaning nature of juvenalian satire imparts less ambiguity. Another example of horatian satire would be Garry Trudeau’s *Doonesbury* comic strip (Hendley, 1983). In fact, newspaper editors are not certain where to place Doonesbury—next to Peanuts in the comic strip section or on the op-ed page (Hendley, 1983). An example from a *Newsday* political cartoon would be helpful to illustrate the relatively higher levels of ambiguity in horatian satire (Handelsman, 2009).

![Figure 1. Example of Horatian Satire.](image)

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There is a subtlety to this message that may lead to multiple interpretations and increased levels of ambiguity. Indeed, results from a study that used this cartoon as a stimulus found that 66% of respondents interpreted the message as President Barack Obama building bridges between cultures and calming terrorists, which may cause America to become stronger. Alternatively, 34% of respondents thought the message argued that terrorists like and support President Barack Obama, which may cause America to become weaker. Perhaps the interpretation is both and is meant to show the outlandish claims made by both political sides.

In the same study, a second cartoon was also investigated, which showed a George W. Bush caricature with briefcase in hand walking away from the White House with a billboard-like Martin Luther King portrait featured on the side of building that read “Free at last, free at last” (see Appendix B for the cartoon). This cartoon was even more ambiguous for respondents, with 51% believing the cartoon meant that America is free at last from George W. Bush as president of the United States and 49% believing that MLK’s dream of an equal America and civil rights had been achieved by the election of Obama as president. Both of these political cartoons demonstrate the ambiguous nature of horatian satire, which requires more interpretation on the part of the receiver. In fact, The New Yorker magazine even published a “quiz” for its readers on political cartoons. Several previously published political cartoons were featured with multiple choice answers that provided different interpretations of the cartoon (The New Yorker, 2009). Readers took the quiz and then could compare their answers with the cartoonists’ motives and interpretation of the message (see Appendix C for an excerpt from the magazine).
This again illustrates the oftentimes ambiguous nature of horatian satirical cartoons that possess multiple interpretations.

Certainly no one is debating the meaning of filmmaker Michael Moore’s documentaries that represent juvenalian satire (Zimmerman, 2004). For example, Moore narrates a scene in *Fahrenheit 9/11* that shows former President George W. Bush reading a book to schoolchildren on the morning of Sept. 11, 2001:

> When informed of the first plane hitting the World Trade Center, where terrorists had struck just eight years prior, Mr. Bush decided to go ahead with his photo opportunity. When the second plane hit the tower, his chief of staff entered the classroom and told Mr. Bush, “The nation is under attack.” Not knowing what to do, with no one telling him what to do, and no secret service rushing in to take him to safety, Mr. Bush just sat there and continued to read *My Pet Goat* with the children. (Moore, 2004).

What makes this scene especially hard-hitting is the nonverbal communication Bush expresses when learning of the second attack as he is present with school children. Moore’s critique of Bush is piercing and sharp. This type of satire imparts less ambiguity on the audience than you would typically find in a more horatian piece of satire, for the opinion and interpretation of the message is straightforward and provocative.

*Satire and Uncertainty Arousal*

Because satire is inherently open for interpretation of both goals and meaning (Knight, 2004), it is ripe for studying receiver-based uncertainty. Scholars can look to English literary criticism work to help create models that account for how satire’s
ambiguity relates to the arousal of receiver-based uncertainty from satire. Specifically, a basic triad of satirist, satirized, and satiree is discussed in the literature, and the potential for uncertainty arousal among any one of those elements exists (Bogel, 2001; Knight, 2004; Simpson, 2003).

The satirist is the message composer, the satirized is the message target, and the satiree is the message recipient. In order for the satire to be comprehended and perceived as humorous, a specific interplay among the components must occur (Bogel, 2001; Knight, 2004; Simpson, 2003). Simpson’s (2003) model of satirical uptake describes the many requirements needed for processing satire. Simpson (2003) applies and adapts Habermas’ criteria for communication understanding (i.e., universal validity claims) to the study of satire; in such that comprehension (i.e., satiree understands the satire), truth (i.e., satiree shares knowledge of the satirized with satirist), sincerity (i.e., satiree recognizes the sincerity and intentions of the satirist), and appropriateness (i.e., satiree recognizes the appropriateness of the satire) are essential to the satirical interaction. See Figure 2 below for a visual representation (adapted from Figure 3 in Simpson, 2003, p. 86).

![Diagram of Satirical Interaction (adapted from Simpson, 2003, p. 86)]](image-url)

Figure 2. Triadic Structure of Satire as a Discursive Practice.
Clearly, many pieces must fall into place for satire to be successful. Successful processing of satire means the satiree interprets the satire in the same manner in which the satirist intended and shares the satirist’s comprehension, truth, sincerity, and appropriateness claims (Simpson, 2003). However, successful processing of satire does not always occur. In fact, perception of the message as satire may not even occur at all (LaMarre et al., 2009; Pfaff & Gibbs, 1997). Moreover, Simpson (2003) argues that “satirical discourse is not amenable to the sort of binarism which is calibrated through an opposition between “right” and “wrong” interpretations” (p. 156). The high cognitive load placed on the satiree, such as demand for prior knowledge (Caufield, 2008; Suls, 1972; Young, 2004), leaves much room for uncertainty to take hold.

Therefore, since “the real world of discourse is much more messy and unstable than the highly normative world encoded in the model of universal pragmatics,” interactants often redefine and reshape the communicative interaction (Simpson, 2003, p. 163). This is especially true in the negotiation of satire, where the principles of sincerity and appropriateness are often destabilized. This destabilization may result from uncertainty arousal within the satiree. For example, the satiree is asked to distrust the satirist and assume insincerity. But sometimes, the satiree misses or is uncertain about the insincerity claim, the satire misfires, and the satire is not understood. This impacts the other validity claims of truth and appropriateness. In that case, the satiree may judge the satire to be inappropriate or offensive (Simpson, 2003).

As noted earlier, a real-world example of such a scenario occurred during the 2008 presidential election when The New Yorker magazine printed a caricature of Barack
Obama and his wife dressed as gun-wielding Islamic terrorists in the White House, and the Obama campaign complained it was “tasteless and offensive” (Gaskell, 2008). In this example, the evaluation of the appropriateness of the satire was not the analogous for The New Yorker editor and the Obama campaign. Furthermore, it highlights the potential for political satire to create uncertainty in that it can be interpreted in many ways (see Appendix A for the cartoon).

There are no interpretative rules bestowed on the satiree by the political satire. Indeed, the satirist does not articulate clearly the exact message he or she is attempting to convey to the satiree. Yet, the satiree must think in certain ways in order to understand the satirical message (Knight, 2004). Thus, uncertainty arousal within the satiree is a plausible cognitive reaction to satire. To illustrate, the “reader’s uncertainty regarding context” is one source of uncertainty that may result from ignorance about the history of the satirized target (Knight, 2004, p. 47). “The problem of contextual knowledge is complicated by the openness of satiric reference. Imaginative literature is relatively indeterminate; its contextual meaning is supplied by readers,” (Knight, 2004, p. 46). This notion is similar to Simpson’s (2003) requirement of comprehension and similar to scholars’ arguments that the audience needs a certain level of knowledge to understand political humor (e.g., Caulfield, 2008; Suls, 1972; Young, 2004).

Thus far, the discussion has focused on the potential for satire to arouse uncertainty due to its (1) heavy interpretative burden placed on the satiree and (2) its ambiguity, indirectness, and subtle nature as a message type. Next, it would be helpful to provide greater structure to the various sources of receiver-based uncertainty about
political satire. The basic triad can serve as a guide (see Figure 2). First, the satirist can arouse uncertainty when the satiree feels unsure about the satirist’s motives (i.e., the sincerity claim). This is satirist-uncertainty, which is a specific kind of source-uncertainty. Second, the satirical message itself can elicit uncertainty due to its ambiguity of meaning. This is satire-uncertainty, which is a type of message-uncertainty. Third, the satiree can be uncertain about his or her own thoughts and feelings about the satire. This is satiree-uncertainty, a form of self-uncertainty. Satiree-uncertainty is somewhat of a meta-cognitive state in that the satiree may understand the satire, yet feel unsure about his or her opinions about the satire. The last potential source of receiver-based uncertainty from political satire arises from uncertainty about other people’s evaluations of the satire. Other-uncertainty occurs when the satiree may be interested, yet unclear, in how another person is perceiving or evaluating the satire.

Consider again the *The New Yorker* magazine cover with Obama and his wife. A person may not experience uncertainty about the meaning of *The New Yorker’s cover* (i.e., no satire-uncertainty is aroused); the person may be certain the magazine intended to imply they are terrorists (i.e., no satirist-uncertainty, or source-uncertainty, is aroused). But, the person may feel uncertain about what he or she thinks about the appropriateness or truthfulness of the perceived political satire (i.e., satiree-uncertainty, or self-uncertainty, is aroused). Moreover, the person may feel uncertain about what their Muslim neighbor thinks about that particular mass media message (i.e., other-uncertainty is aroused).
In sum, the indirect, subtle, and shrewd techniques of satire make the message-type a potential source for (1) humor, (2) social commentary, and (3) uncertainty. The key is how the satire is processed. If there is uncertainty at any part of the basic triad of satirical interaction, then there is a chance that the satire may not be processed “successfully” (i.e., the satirist’s intended interpretation falls short). To review, specific sources of uncertainty are: satirist-uncertainty (a type of source-uncertainty), satire-uncertainty (a type of message-uncertainty), satiree-uncertainty (a type of self-uncertainty), and other-uncertainty. The ambiguity of satire and the heavy interpretative burden placed on the satiree are the two central factors responsible for uncertainty arousal.

Hypotheses

Current theories and lines of inquiry into political discussion focus on mass media as motivation for discussion. I offer a specific cognitive process (uncertainty) as a potential motivation for political discussion. The application of URT to political discussion and ambiguous mass media messages is relatively unchartered territory. In doing so, there are several general research questions which will guide this dissertation. For one, what uncertainty do people express in relation to political media they consume? How does the ambiguity of message goals influence this process? To what extent does the ambiguity of message meaning affect conversation about political messages? What language do people use to discuss their uncertainty or confusion about politically-oriented media messages? Last, what types of uncertainty (i.e., the four types outlined above) are aroused and expressed?
Four types of politically-oriented media messages are examined in this dissertation in order to begin to answer these questions. These four messages can be categorized according to the varying levels of message ambiguity they embody. Ambiguity of message goals is high in both satirical messages (horatian and juvenalian) and low in both news messages (news and editorials). Ambiguity of message meaning is high in the horatian satire and traditional news story, and it is low in the juvenalian satire and editorial. See Table 1 for a visual guide to the categorization.

<table>
<thead>
<tr>
<th>Ambiguity of Message Meaning</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Opinion News Editorial</td>
<td>Juvenalian Satire</td>
</tr>
<tr>
<td>High</td>
<td>Traditional News Story</td>
<td>Horatian Satire</td>
</tr>
</tbody>
</table>

Table 1. Ambiguity Dimensions and Mass Media Messages

The key questions and four message types named above guide my interest in examining two broad areas: (1) the ability of mass media political messages to generate uncertainty and (2) the ability of mass media political messages to influence political discussion. These two areas together form a process of influence grounded in URT. Relative to the first step of the process (i.e., the extent to which mass media political messages can stimulate uncertainty), the following hypotheses (H1a - H3) are offered:
Pre-Discussion Hypotheses

H1a: Participants exposed to a message with more ambiguous goals (i.e., satire) will report higher levels of pre-discussion source-uncertainty compared to the participants with exposure to a message with less ambiguous goals (i.e., news).

H1b: Participants exposed to a message with more ambiguous goals (i.e., satire) will report higher levels of pre-discussion message-uncertainty compared to the participants with exposure to a message with less ambiguous goals (i.e., news).

H1c: Participants exposed to a message with more ambiguous goals (i.e., satire) will report higher levels of pre-discussion self-uncertainty compared to the participants with exposure to a message with less ambiguous goals (i.e., news).

H1d: Participants exposed to a message with more ambiguous goals (i.e., satire) will report higher levels of pre-discussion other-uncertainty compared to the participants with exposure to a message with less ambiguous goals (i.e., news).

H2a: Participants to a message with more ambiguous meaning (i.e., horatian satire and traditional news) will report higher levels of pre-discussion source-uncertainty compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian satire and opinion news).

H2b: Participants to a message with more ambiguous meaning (i.e., horatian satire and traditional news) will report higher levels of pre-discussion message-uncertainty compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian satire and opinion news).
H2c: Participants to a message with more ambiguous meaning (i.e., horatian satire and traditional news) will report higher levels of pre-discussion self-uncertainty compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian satire and opinion news).

H2d: Participants to a message with more ambiguous meaning (i.e., horatian satire and traditional news) will report higher levels of pre-discussion other-uncertainty compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian satire and opinion news).

H3: Ambiguity of message goals serves as a moderator in the relationship between ambiguity of message meaning and pre-discussion uncertainty, whereas uncertainty levels for both low (i.e., news) and high (i.e., satire) message goal ambiguity will increase as message meaning ambiguity increases, but the movement from low meaning ambiguity to high meaning ambiguity will be greater for messages with high message goal ambiguity (i.e., satire).

Figure 3. Proposed Contingent Interaction for H3.
Discussion Hypotheses

In regard to the second step of the process (i.e., the extent to which political messages with various degrees of ambiguity can influence discussion), the following hypotheses (H4a - H8d) are offered:

H4a: Participants exposed to a message with more ambiguous goals (i.e., satire) will have an increased rate of question-asking in the subsequent discussion compared to the participants with exposure to a message with less ambiguous goals (i.e., news).

H4b: Participants exposed to a message with more ambiguous goals (i.e., satire) will have an increased rate of non-question uncertainty expression in the subsequent discussion compared to the participants with exposure to a message with less ambiguous goals (i.e., news).

H5a: Participants exposed to a message with more ambiguous meaning (i.e., horatian satire and traditional news) will have an increased rate of question-asking in the subsequent discussion compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian satire and opinion news).

H5b: Participants exposed to a message with more ambiguous meaning (i.e., horatian satire and traditional news) will have an increased rate of non-question uncertainty expression in the subsequent discussion compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian satire and opinion news).
H6a: Ambiguity of message goals serves as a moderator in the relationship between ambiguity of message meaning and question-as-king, whereas question-as-king for both low (i.e., news) and high (i.e., satire) message goal ambiguity will increase as message meaning ambiguity increases, but the movement from low meaning ambiguity to high meaning ambiguity will be greater for messages with high message goal ambiguity (i.e., satire).

H6b: Ambiguity of message goals serves as a moderator in the relationship between ambiguity of message meaning and non-question uncertainty expression, whereas non-question uncertainty expression for both low (i.e., news) and high (i.e., satire) message goal ambiguity will increase as message meaning ambiguity increases, but the movement from low meaning ambiguity to high meaning ambiguity will be greater for messages with high message goal ambiguity (i.e., satire).

Figure 4. Proposed Contingent Interaction for H6a and H6b.
The next array of hypotheses continues to deal with the second step of the process (i.e., the extent to which political messages with various degrees of ambiguity can influence discussion), but considers the four types of uncertainty expressed during discussion. These set of hypotheses go beyond the language of uncertainty (i.e., question-asking and non-question uncertainty expressions) and specifically get at the types of uncertainty.

H7a: Participants exposed to a message with more ambiguous goals (i.e., satire) will have more source-uncertainty expressions in the subsequent discussion compared to the participants with exposure to a message with less ambiguous goals (i.e., news).

H7b: Participants exposed to a message with more ambiguous goals (i.e., satire) will have more message-uncertainty expressions in the subsequent discussion compared to the participants with exposure to a message with less ambiguous goals (i.e., news).

H7c: Participants exposed to a message with more ambiguous goals (i.e., satire) will have more self-uncertainty expressions in the subsequent discussion compared to the participants with exposure to a message with less ambiguous goals (i.e., news).

H7d: Participants exposed to a message with more ambiguous goals (i.e., satire) will have more other-uncertainty expressions in the subsequent discussion compared to the participants with exposure to a message with less ambiguous goals (i.e., news).
H8a: Participants exposed to a message with more ambiguous meaning (i.e., horatian satire and traditional news) will have more *source-uncertainty expressions* in the subsequent discussion compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian satire and opinion news).

H8b: Participants exposed to a message with more ambiguous meaning (i.e., horatian satire and traditional news) will have more *message-uncertainty expressions* in the subsequent discussion compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian satire and opinion news).

H8c: Participants exposed to a message with more ambiguous meaning (i.e., horatian satire and traditional news) will have more *self-uncertainty expressions* in the subsequent discussion compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian satire and opinion news).

H8d: Participants exposed to a message with more ambiguous meaning (i.e., horatian satire and traditional news) will have more *other-uncertainty expressions* in the subsequent discussion compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian satire and opinion news).
Chapter 2: Method

A discussion experiment was conducted to address the 23 hypotheses that serve as the foundation for this dissertation. Before any specific details are described, an overview of the chapter is warranted due to the many steps involved in this dissertation that led up to the discussion experiment. The extensive Method section reflects the new ground this study breaks in bringing URT into the fold of political communication, dealing squarely with the interaction of interpersonal and mass communication, and developing quality measures of receiver-based uncertainty.

First, the decision-making process for selecting a topic is explained, which entailed surveying 215 undergraduate students about their political discussion interests. These students were asked to rank five issues and the most popular discussion issue was chosen. Next, stimuli development will be detailed. Using the topic selected, four stimulus messages were written (horatian satire, juvenalian satire, traditional news, and editorial news). The two satires were created by professional comedic writers and pretested with a small class of communication students (\(N = 14\)). After necessary revisions to the horatian satire, these messages were pretested again with a different group of communication students (\(N = 32\)). The news and editorial articles were created by the researcher and pretested with a different group of communication students (\(N = 32\)). It is important to note that this group of 32 students was different than 32 students
who pretested the satirical messages; no student pretested more than one stimulus message in any phase of the process. There were no more changes made to the stimuli after the 64 students pretested the four messages. These final four messages were used as the independent variable in the discussion experiment.

Second, a review of uncertainty measures will be presented. After reviewing the current measures for receiver-based uncertainty, it became clear that there was a strong need to develop more valid and reliable measures using more rigorous processes and statistical techniques. Therefore, a new operationalization of receiver-based uncertainty is proposed and pretested in two phases. In the first phase, the same 215 students who were involved with the topic selection for the discussion experiment were used to pretest the initial set of receiver-based uncertainty items developed by the researcher. After assessing reliability and face validity, some adjustments were made to the initial items. The second phase of pretesting occurred with the 64 students who pretested the four stimulus messages. Next, a confirmatory factor analysis (CFA) of the final and revised receiver-based uncertainty items is presented. The CFA includes all participants who encountered these items at any one stage of this dissertation \(N = 229\). The receiver-based uncertainty items that created the strongest measures in the CFA were used as the dependent variables for pre-discussion hypotheses (H1a – H3).

Third, the dependent variables for the discussion hypotheses (H4a – H8d) are outlined conceptually and were then tested using exploratory discussion groups. The uncertainty expression variables are conceptualized similarly to the receiver-based uncertainty items in the self-report survey, but they represent receiver-based uncertainty
expressed during discussion. The exploratory discussion groups (a series of eight face-to-face discussion groups with 35 students) were conducted in order to assess whether and how uncertainty expression occurred during group discussion. It was important to learn how receiver-based uncertainty translated into conversation. The moderator also received practice moderating during these exploratory pilot discussions. These discussions were a precursor to the online discussion experiment that is central to this dissertation.

Fourth, the online discussion experiment is explained. The benefits of using an online discussion are provided. The participants (N = 94) are described, followed by the structure of the online discussion and its procedures. The procedures outlined in this section include the logistics of the online chat room and control room, descriptions of the surveys administered to participants, and explanations of the discussion questions and moderation. Fifth, details regarding the content analysis of the group discussion are presented. Unitizing and sampling procedures are explained, followed by the codebook development process. Next, coders, coder training, and intercoder reliability are described. Finally, the analyses of the data produced are outlined. This entailed explaining how the pre-discussion and discussion hypotheses were tested.

Topic Selection and Message Development

Topic Selection

The topic selection process involved asking undergraduate students at The Ohio State University (N = 215) to rank five issues on how interesting they were to discuss. Given the initial stages of research into political communication and uncertainty, choosing a topic that had the potential to generate discussion was important. This
question was posed at the conclusion of the political cartoon study described earlier in the text (see Note 1). Students ranked five issues from (1) least interesting to discuss to (5) most interesting to discuss: economic issues and jobs ($M$ rank = 3.62, $SD$ = 1.37), health and health care issues ($M$ rank = 3.04, $SD$ = 1.32), environment and energy issues ($M$ rank = 2.99, $SD$ = 1.42), wars in Iraq and Afghanistan ($M$ rank = 2.88, $SD$ = 1.41), and education ($M$ rank = 2.53, $SD$ = 1.33). Economic issues and jobs ranked significantly higher than the second most popular issue (health and health care issues), $t(df = 201) = 6.731, p < .001$, as well as all other issues at the $p < .001$ level using a simple $t$-test comparison of means. Following these survey results, the decision to focus the messages about the economy and jobs was made. Judging from the survey, it seems that many undergraduate students were concerned about the current economic condition and finding a job during the summer or after graduation. Because this study uses undergraduate students as its participants, it is appropriate to focus on an issue that they found most interesting to discuss.

*Development and Pretesting of Satirical Stimuli*

Two professional comedic writers were hired to develop the satirical messages about the economy and jobs, with the target audience of young adults and undergraduate students in mind. These writers have previously worked with other researchers and have created satirical stimuli that were used in work that is now accepted for publication (Holbert et al., in press). One writer took the lead on the juvenalian essay, and the other took on the horatian satire. Both writers were aware of the differences between the two types of satire, have produced similar stimuli in the past (e.g., Holbert et al., in press),
and fully embraced those differences in the two types of satire in order to create distinct stimuli focused on the same topic of the economy and jobs. The authors were given one month to create the satirical pieces, which were completed in mid-January, 2010.

Both of the original satires were pretested with a small undergraduate communications class \(N = 14\). Students read either the horatian or the juvenalian satire and then answered a series of closed- and open-ended questions about how funny, interesting, and confusing the respective piece of satire was for them. From this small pilot test, there appeared to be differences in the humor appreciation and enjoyment of the satires, with the juvenalian satire being slightly more amusing. It was at this time that differences in the content and focus of the satires became a concern. The juvenalian satire suggested killing the elderly in order to create jobs for young people; this conclusion reflects the harsh, bitter, and angry tone that is typical to juvenalian satire. Alternatively, the horatian satire merely gave vague advice on how to get a job in the new economy and described what jobs will be more common in the new economy; this conclusion reflects the gentle and subtle nature of horatian satire.

Therefore, to make the thrust of the stimuli content more similar, the horatian satire was revised by the one writer to focus more on the elderly and job creation in the economy. The revised horatian version gave details about how the elderly be “phased out” and what young people can do to get a job in the new economy. This conclusion still possessed the gentle and subtle nature of horatian satire, but how the issues of the economy and job creation were approached in the horatian essay was now more similar to the juvenalian satire. This revised horatian satire and the juvenalian satire were pretested
again with several other classes of communication students, and none of the same students who completed the first pretest were used again (N = 32). Using a (1) strongly disagree to (9) strongly agree scale, results showed that the horatian satire (M = 5.67, SD = 2.02) and juvenalian satire (M = 6.52, SD = 2.62) were seen as equally funny, t(df = 30) = 1.01, p = .320 (see Appendix D for the final horatian satire and Appendix E for the final juvenalian satire).

**Development and Pretesting of News Stimuli**

Once the satirical messages were finalized, the traditional news and news editorial pieces were developed by the author.\(^2\) I searched for recent (i.e., at the time, mid-February) traditional newspaper articles about the current economic condition on major newspapers’ websites (e.g., *The New York Times, The Wall Street Journal, Los Angeles Times*). One *New York Times* story highlighted the current unemployment rate, the ambiguous evidence of an economic recovery, and the job sectors that showed promise of future growth (Goodman, 2010). This general story was similar to other top economic news stories in other major papers and was not unique to *The New York Times*. To be consistent with the satirical messages, the story was edited to expand upon the part of the story that stated the health care industry would continue to grow because of the aging population. Information and quotes from a recent *Wall Street Journal* story, which focused on the elderly and the economy (Ansberry, 2010), were added to the *Times* story. Statistics on the elderly were gathered from the Department of Health and Human Services’ Administration on Aging (*A profile of older Americans: 2009, 2010*) and added to the story as well (see http://www.aoa.gov/aoaroot/aging_statistics/index.aspx).
Unnecessary and unrelated paragraphs of the original story were deleted (e.g., references to jobless rates among African-Americans and Hispanics) in order to stay consistent with a word total of 750 words among all stimuli. In short, the news story relayed both sides of the economic story (i.e., some evidence shows the economy improving and other evidence shows the economy is not improving) and both sides of the aging population story (i.e., the elderly drain resources from the economy and the elderly provoke the need for more medical and health care jobs) (see Appendix F for the final edited traditional news story). Objectively relaying multiple sides of the story is essential to a traditional news story, as outlined in the theoretical arguments above, and this news story uses this technique.

Finally, the news editorial was developed. Editorials published on The New York Times website about the economy and jobs were searched by the author. One editorial, by prominent op-ed columnist David Brooks, argued that the elderly were draining resources from the young and he suggested that politicians were not going to do anything about it (Brooks, 2010). He concluded that the only way to change this ominous economic forecast for the young was for the elderly to lead a social movement that demanded change from government. Generally, the editorial fit well with the other stimuli and was minimally edited (see Appendix G for the final edited news editorial). For example, more information was added about the elderly taking away jobs because they are not retiring until later. Also, some paragraphs were deleted to keep with the 750 word count. The editorial represented the style of news editorials well because it was undoubtedly
opinionated and suggested a clear solution to the editorialist’s perceived problem of the elderly.

Both the news editorial and news story were pretested to ensure that the news editorial was perceived as more biased than the news story. Another set of undergraduate communication students completed this pretest \((N = 32)\), and none of the same students who completed the satire pretests were used in this phase. Using the same (1) strongly disagree to (9) strongly agree scale, results showed that the news editorial was perceived as much more biased \((M = 6.0, SD = 1.61)\) than the traditional news story \((M = 3.94, SD = 1.53)\), \(t(df = 30) = 3.719, p < .001\).

Even though the authors and titles of the stimuli were originally different, for control purposes, both the author name and title were made to be consistent across all stimuli during the experiment. The title was always, “A silver-haired tsunami in the new economy,” and the byline was always “Corey Larson.” Word counts were also similar for each message: horatian satire = 758, juvenalian satire = 748, news story = 748, news editorial = 769. Another test of similarity is a type/token ratio (TTR) test, which computes the number of unique words (types) relative to the total number of words (tokens). When texts are the same length, such as the stimuli for this study, it is helpful to ensure that language usage is similar. Indeed, a TTR test using WordSmith software shows the stimuli are similar: horatian satire = 53%, juvenalian satire = 47%, news story = 52%, and news editorial = 50% (WordSmith can be found at http://www.lexically.net/wordsmith/index.html).
Next, the four stimuli were compared to one another using the 64 students who completed the pretests of the final versions of the stimuli (i.e., the 32 students who completed the satire pretest and the 32 students who completed the news and editorial pretest). There were significant differences in: (1) humor, omnibus $F(df = 3, 59) = 11.648, p < .001$, with the each of the two satires perceived as funnier than the two news stimuli using a posthoc Bonferroni mean-comparison test; and (2) bias, omnibus $F(df = 3, 69) = 12.476, p < .001$, with the news story being perceived as less bias than all three other stimuli. It is also important to note that there is no significant difference of interest among the four messages, omnibus $F(df = 3, 60) = 1.086$. Because this final round of pretesting the stimuli produced results that were fitting and appropriate for each message, no further changes were made to the stimuli and these messages served as the independent variable.

**Message Condition as Independent Variable**

Ambiguity of message goals and ambiguity of message meaning are the two dimensions of ambiguity that are examined in this dissertation in relation to receiver-based uncertainty. One of the four stimuli represents one of the four categories of ambiguous messages: the horatian satire is high on ambiguity of message goals and ambiguity of message meaning, the juvenalian satire is high on ambiguity of message goals and low on ambiguity of message meaning, the news story is low on ambiguity of message goals and high on ambiguity of message meaning, and the editorial is low on ambiguity of message goals and low on ambiguity of message meaning (see Table 1 earlier in text). Participants were exposed to one of four messages in their respective
discussion group, which created four conditions that serve as the central independent variable.

Operationalization of Receiver-Based Uncertainty

Before an operationalization of receiver-based uncertainty is proposed, it is helpful to review the current operationalizations of interpersonally-based uncertainty and receiver-based uncertainty. Due to the lack of strong measures for receiver-based uncertainty in prior literature, this dissertation tackles the task of developing valid and reliable receiver-based uncertainty items. The pretesting process occurred in two phases (an initial phase using 215 students and final phase using 64 students). Then, a confirmatory factor analysis using all participants who were given the final receiver-based uncertainty items was performed to establish the final measures used in the analyses.

Operationalizations of Interpersonally-Based Uncertainty

In general, uncertainty and uncertainty reduction strategies are measured with self-report survey items that ask respondents to indicate the extent of their uncertainty about the study’s specific topic and the extent of their uncertainty reduction strategies (e.g., Afifi et al., 2006; Afifi & Schrodt, 2003; Hammer, Wiseman, Rasmussen, & Bruschke, 1998; Knobloch & Solomon, 1999; Kramer 1993; Kramer, Dougherty, & Price, 2004; Maguire, 2007; Schumacher & Wheeless, 1997). For instance, Afifi and Schrodt’s (2003) family communication study asks respondents to assess the amount of uncertainty about the behaviors, feelings, emotions, attitudes, and values of their family members and their perceived accuracy of their predictions. These items were modeled
after Kellermann & Reynolds (1990) scale, which itself was adapted from Clatterbuck (1979). Indeed, nearly all of the interpersonally-based uncertainty studies use Clatterbuck’s (1979) scale (i.e., CLUES7) or variations of the scale, which operationalizes uncertainty as attributional confidence (Williams, 1995). Seven Likert-type items probe how well the respondent thinks he or she can predict the attitudes, feelings, and behaviors of a target person (Clatterbuck, 1979). Nonetheless, some studies create their own uncertainty questionnaire items due to the unique and specific nature of uncertainty studies. Kramer et al. (2004) investigate organizational uncertainty, and asked airline flight crews to report their levels of uncertainty about finances, work settings, and customers. These self-report uncertainty items are common in both survey research and experimental research (e.g., posttest survey after dyadic interaction).

The uses of hypothetical scenarios and projective behavior have also been implemented to measure uncertainty in surveys and experiments (e.g., Gudykunst, 1983, 1985; Gudykunst & Nishida, 1984). Researchers ask the participant to project their communicative behavior after experiencing uncertainty. For example, Gudykunst (1983) asked participants to project how they would behave at a party in their home culture when meeting a student from another culture whom they do not know.

Another common approach to measuring uncertainty is the use of focus groups (e.g., Brashers, Neidig, & Goldsmith, 2004; Brashers, Neidig, Haas, Dobbs, Cardillo, & Russell, 2000) and in-depth interviews (e.g., Knobloch & Solomon, 1999; Kramer, 1993; Kramer et al., 2004). Brashers and colleagues used focus groups to understand how HIV/AIDS patients manage uncertainty in their lives. The researchers asked participants
to talk generally about their experiences since being diagnosed, describe things that made them feel uncertain, discuss how uncertainty affected their lives, and describe methods that they used to manage this uncertainty (Brashers et al., 2000). Generally, these questions are straightforward and transparent. Likewise, Knobloch and Solomon (1999) conducted in-depth interviews in their development of a relational uncertainty scale, and the questions were fairly straightforward and subjective.

Uncertainty has also been operationalized behaviorally, where objective measures like speech pause rate (Lalljee & Cook, 1973), mean word length (Sherblom & Van Rheenen, 1984), and question asking rate (Ayres, 1979; Berger & Kellermann, 1983; Douglas, 1987) are collected and analyzed. These approaches quantitatively measure uncertainty from the communication itself. For example, quantitative content analysis can be used to determine the number of questions asked during a small group discussion, which can serve as an indicator of the group’s uncertainty. This approach is more objective than using thematic analysis or other qualitative analyses to understand a group’s relative uncertainty during the discussion. Yet, how people make meaning from uncertainty may be missed in the more objective approach to uncertainty analysis because counts (e.g., number of questions) are used to describe the conversation rather than a holistic review of the conversation (Knobloch & Solomon, 1999).

There seems to be urgency in the uncertainty literature to develop more valid and reliable measures. “Although URT advances a nuanced conceptualization of uncertainty, current operationalizations fail to capture the breadth of this construct,” (Knobloch & Solomon, 1999). For example, observational and physiological techniques have been
suggested to examine parent-child avoidance on topics with varying uncertainty (Afifi & Schrodt, 2003). Participant observation of overt behavior in an experimental setting would be an improvement from hypothetical scenarios and projective behavior (Gudykunst, 1983). Depending on the study’s goals, objective and subjective uncertainty measures may differ in appropriateness as well.

This dissertation is interested in studying (1) uncertainty that arises in response to a media message and (2) how uncertainty impacts communicative behavior about the message. Because communication can influence uncertainty, it is important to gauge receiver-based uncertainty before communication occurs, which speaks to the study’s first goal. Thus, a self-report measure of receiver-based uncertainty is needed. In addition, analyzing uncertainty expressions during the discussion about the message is another manner in which to measure uncertainty. As participants engage in communication, uncertainty may or may not be expressed, and it is important to understand how each message is stimulating uncertainty in a discussion.

**Prior Operationalizations of Receiver-Based Uncertainty**

Unlike measures of interpersonally-based uncertainty, measures of receiver-based uncertainty have not been clearly established in the literature. Due to the lack of a measure of receiver-based uncertainty from mass-mediated messages in the extant communication literature, an initial survey was developed to establish a self-report measure of each of the four types of receiver-based uncertainty (source, message, self, and other). Before the details of these measures are presented, it is important to review the current operationalizations of receiver-based uncertainty.
Operationalizations of receiver-based uncertainty vary significantly. Jensen (2008) manipulates scientific uncertainty as the presence (or absence) of hedging, powerless language, limitations, and caveats of scientific research findings in news stories. Uncertainty is used as an independent variable because the focus is on how expressions of uncertainty impact evaluations of journalistic values (trustworthiness, expertise, and credibility). Scientific uncertainty is measured though, as a manipulation check, with one item that asked the extent to which “the limitations of this study were presented clearly” (Jensen, 2008, p. 356). Results revealed that message recipients were more likely to agree that limitations were presently clearly when scientific uncertainty (e.g., hedging and powerless language) was present (Jensen, 2008), confirming the manipulation of scientific uncertainty. This approach to measuring uncertainty is similar to the interpersonally-based uncertainty measurements in that both pose a fairly straightforward, self-report survey item to the participant.

Boyle et al.’s (2004) study of post-9/11 emotional reactions and information seeking does not empirically measure uncertainty. Uncertainty reduction is used as a theoretical framework and is assumed to cause increased levels of emotional arousal, so emotional arousal is measured and reported.

Uncertainty in Lee and Lim’s (2008) humorous consumer advertising study is measured at both the cultural-level as a trait and at the individual-level as cognitive/affective states in response to the advertisement. At the cultural-level, six items measured uncertainty avoidance on a strongly disagree to strongly agree, seven-point scale. The items include statements such as, “For people around me, uncertainty is a
normal part of their life and they deal with it when it comes,” and “Fear of ambiguous situations is normal for people in my society.”

At the individual-level, two items measured affective uncertainty on a four-point scale of not at all to very much: (1) “This is a feeling type of ad with arousal related to the uncomfortable presence, behavior or intention of characters in the ad.” (2) “When I viewed the ad, I felt uncertain about whether characters could get out of the uncomfortable situation or not.” Cognitive uncertainty was measured on the same scale with the following items: (1) “This is a thinking type of ad with arousal created by contrasts between unexpected and expected behavior[s] situation[s] of the characters.” (2) “When I viewed the ad, I felt uncertain about resolving the unexpected plot” (Lee & Lim, 2008).

Paek et al.’s (2005) study of uncertainty and political advertising did not measure uncertainty. Although uncertainty was conceptualized, in part, as receiver-based uncertainty to a mass media message (in this study, it was a political attack advertisement), uncertainty was used as an independent variable only and there was no manipulation check to determine to what extent participants actually felt uncertain about the political advertisements. Rather, participants either read a certainty-eliciting statement (“Please be informed that a series of scientific studies has shown quite conclusively that attack ads in political campaigns have no statistically significant impact on voters in general.”) or not. Then, participants viewed the ads and completed TPP measures.
Peter and Valkenburg’s (2008) sexual uncertainty and Internet study asked participants to report the extent they agreed or disagreed with the following items, which all started with, “As far as sex is concerned . . .”: (a) “my beliefs often change,” (b) “I am not sure about what I like and what I dislike,” (c) “I wonder what I really want,” (d) “my opinions vary,” (e) “I think one day like this and another day like that,” and (f) “it is difficult for me to form a clear opinion.” These items do not focus on perceptions of uncertainty after exposure to media content. This is likely because the study is a cross-sectional survey rather than an experiment with a clear message referent. However, the study uses sexual uncertainty as a criterion outcome variable and uses Internet use as a predictor of uncertainty. It is logical that the same items could be used in an immediate posttest questionnaire in an experiment with participants who just viewed a mass media message.

A review of several operationalizations of receiver-based uncertainty reveals significant variance and universal weakness in the measures. Two studies did not measure uncertainty (Boyle et al., 2004; Paek et al., 2005), one study used merely one item as a manipulation check (Jensen, 2008), and the remaining two studies measured uncertainty as a dependent variable and provided the text of the exact items (Lee & Lim, 2008; Peter & Valkenburg, 2008). Taken together, it is evident that little attention has been paid to measurement and there is a lack of strong measures for receiver-based uncertainty. There is a need to operationalize receiver-based uncertainty using proper measurement development procedures. Therefore, this study proposes its own receiver-based uncertainty measure to rectify this situation.
Development and Pretesting of Receiver-Based Uncertainty Scales.

Initial scale development. In order to develop items for receiver-based uncertainty from a mass media message, an initial survey was conducted \((N = 215)\). The purpose of this initial phase of measure development was to establish reliability and face validity of the measures. Respondents looked over two ambiguous political cartoons (one at a time) that had multiple interpretations so that uncertainty had the potential to arise (see Note 1). Next, respondents answered a series of questions about their source-uncertainty, message-uncertainty, self-uncertainty, and other-uncertainty. For source-uncertainty and message-uncertainty, respondents rated how strongly they (1) disagree to (7) agree with statements such as, “I know what the cartoonist was trying to say with this cartoon” (source-uncertainty item) and “It is clear to me what this cartoon means” (message-uncertainty item). For the analyses, items were coded so that low numbers on the scale represent less uncertainty and high numbers represent more uncertainty. There were six statements for each the source- and message-uncertainty scales that were averaged, respectively, to produce a single score of source-uncertainty and a single score of message-uncertainty. Results from the reliability analysis \((N = 215)\) show that source-uncertainty formed a reliable index for both cartoon stimuli: cartoon 1 Cronbach’s \(\alpha = .819\), cartoon 2 Cronbach’s \(\alpha = .846\). Message-uncertainty also formed a reliable index for both cartoon stimuli: cartoon 1 Cronbach’s \(\alpha = .844\), cartoon 2 Cronbach’s \(\alpha = .813\).

For self-uncertainty, participants answered a series of questions geared toward their own uncertainty about the entertainment value and the appropriateness of the cartoons. For other-uncertainty, participants answered questions about their perceptions.
of others’ uncertainty about the entertainment value and appropriateness of the cartoons. This created two dimensions of self-uncertainty and two dimensions of other-uncertainty—an entertainment dimension (consisting of four items) and an appropriateness dimension (also consisting of four items). For both dimensions, respondents rated how strongly they (1) disagree to (7) agree with the respective statements. For example, an entertainment value item is “I feel the cartoon was amusing” and an appropriateness item is “I feel the cartoon was an accurate representation of reality.” A reliability analysis shows that both self-uncertainty dimensions made reliable indices: entertainment dimension cartoon 1 Cronbach’s $\alpha = .974$, entertainment dimension cartoon 2 Cronbach’s $\alpha = .974$, appropriate dimension cartoon 1 Cronbach’s $\alpha = .925$, appropriate dimension cartoon 2 Cronbach’s $\alpha = .875$. Likewise, other-uncertainty dimensions were similar: entertainment dimension cartoon 1 Cronbach’s $\alpha = .970$, entertainment dimension cartoon 2 Cronbach’s $\alpha = .975$, appropriate dimension cartoon 1 Cronbach’s $\alpha = .936$, appropriate dimension cartoon 2 Cronbach’s $\alpha = .889$.

**Final scale development.** In all, the items for receiver-based uncertainty were reliable in the initial development phase described above. However, in the next phase of measure development, the phrasing of several source- and message-uncertainty items was altered to better reflect the textual stimuli used in the dissertation’s experiment (instead of cartoon stimuli used in the initial phase). Additionally, two of the source-uncertainty items were dropped in order to make the scale more efficient. The scale was expanded from a 1 to 7 scale to a 1 to 9 scale, where (1) indicated strong disagreement and (9) indicate strong agreement. Some revised items for source-uncertainty include, “I know
what the author was trying to say with this," and "The author’s motives for writing this article are clear." A few items for message-uncertainty are, "I understand this article," and "The message this article is trying to send is clear." The final scale for source-uncertainty contained four items and the final scale for message-uncertainty had six items. The final scale development phase of these items, which utilized the 64 students who pretested the four stimulus messages, revealed that revised items for source-uncertainty and message-uncertainty were reliable: source-uncertainty Cronbach’s $\alpha = .938$ and message-uncertainty Cronbach’s $\alpha = .908$. The final revised source- and message-uncertainty scales can be found in Appendix H.

While the self-uncertainty scales proved to be reliable in the initial scale development phase, more dimensions of self-uncertainty were added for the purposes of this dissertation, considering potential reactions to the various satirical and news stimuli. Other dimensions that were investigated are interest in the article, perceived balance of the article, believability of the article, and strength of arguments in the article. The phrasing of the initial items was rewritten to reflect an article stimulus as opposed to cartoon stimuli. Reliabilities were performed on the 64 students who pretested the four stimulus messages and completed this revised scale: funny ($\alpha = .92$), interesting ($\alpha = .81$), balanced ($\alpha = .84$), believable ($\alpha = .89$), and appropriate/wise ($\alpha = .93$). See Appendix H for the final self-uncertainty dimension scales.

It is important to note that for all the dimensions of self-uncertainty examined in this study, both low and high numbers on the scale represent certainty of opinion. For example, if someone responds (1) “strongly disagree” to the statement “The article was
amusing,” then the person may feel very certain the article was not amusing, whereas a (9) “strongly agree” response indicates the person felt very certain the article was indeed amusing. Thus, middle responses to the scale represent more uncertainty of opinion. In this case, the scale was collapsed to five items in order to properly represent certainty and uncertainty responses. That is, “1” and “9”, “2” and “8”, “3” and “7”, and “4” and “6” were be combined, which yielded five response options when the “5” (complete uncertainty) is included.

For other-uncertainty, a (1) “strongly disagree” to (9) “strongly agree” scale gauged the extent to which participants anticipated others’ reactions to the article. This strategy was altered from the initial phase of item development, where participants rated how others would react to the cartoon’s entertainment value and appropriateness. A broader approach to other-uncertainty was taken in the final scale development, such that participants were not rating others on merely two dimensions. This broader approach hoped to capture how participants were anticipating how others would react to the article, in a general (again, not based on just the entertainment value or appropriateness). Additionally, it would have become very repetitive and cumbersome for participants to rate how others would respond to the article on the five dimensions of self-uncertainty noted above. Some example items for the final scale of other-uncertainty include, “I can see how other people may think differently than me about this article,” and “I know what other people will think about this article.” This scale was given to the 64 students who pretested the four stimulus messages and was shown to be reliable, $\alpha = .78$. See Appendix H for the full other-uncertainty scale.
Confirmatory Factor Analysis: Pre-Discussion Receiver-Based Uncertainty

As mentioned above, reliability and face validity were assessed during the initial and final development of the receiver-based uncertainty items. Thus, when these items were used in the surveys that were distributed during the exploratory and experimental discussion groups, confidence was warranted in their reliability and face validity. However, before the pre-discussion hypotheses were analyzed using the pre-discussion receiver-based uncertainty items, a CFA was run in order to achieve the best receiver-based uncertainty measure. Structural equation modeling-based CFA is a large sample statistical technique (Holbert & Stephenson, 2008), so the CFA included all participants, in every stage of the process who were given the final receiver-based uncertainty items ($N = 229$). Specifically, the participants used in the CFA included: the final pretesting group ($N = 64$), the exploratory pilot discussion groups ($N = 35$), the online discussion groups ($N = 94$), and any students who could not be assigned to a discussion group due to space constraints ($N = 36$).

A CFA using AMOS 18 was performed to confirm the four types of receiver-based uncertainty. The four types of receiver-based uncertainty were measured in the self-report survey conducted immediately after exposure to the stimulus. As mentioned earlier, the final item wording for source-, message-, self-, and other-uncertainty can be found in Appendix H. For the CFA, all items were coded whereas higher numbers on the scale indicated more uncertainty and lower numbers on the scale indicated less uncertainty. Each of the four types of uncertainty was a latent variable with the respective survey items serving as the observed variables (see Figure 5 for the initial measurement
model). The four latent variable uncertainty measures were allowed to covary with one another. This approach provides the advantage of establishing unidimensionality of constructs (Anderson & Gerbing, 1988). Source-uncertainty as a latent variable was comprised of four observable variables; message-uncertainty was comprised of six observable variables; self-uncertainty was comprised of five parcels (i.e., scales) that served as observable variables; and other-uncertainty was comprised of five observable variables (see Appendix H for item wording for each latent variable).

The fit statistics used to evaluate overall model fit are the comparative fit index (CFI) as an incremental fit statistic and the root mean square error of approximation (RMSEA) as an absolute fit statistic (Holbert & Stephenson, 2002). The cutoff for good fit with the CFI statistic is .95 (Hu & Bentler, 1999) and the cutoff for good fit with the RMSEA statistic is .06 (Browne & Cudeck, 1993). Moreover, the chi-square statistic with degrees of freedom noted is reported for purposes of model comparison. Last, missing data were not a problem for the dataset (i.e., out of 229 participants, no more than five participants, or 2.2%, skipped any one item); therefore, single imputation (mean replacement) was used for the few missing values.

Ideally, the CFA will yield a satisfactory fit and respecification will not be necessary. However, if the CFA does not fit well (as outlined by model fit guidelines above), the model will be respecified in a path-by-path manner, using the modification indices and theoretical reasoning, to ensure that the respecified model does not over-fit the data (MacCallum, 1995). After each modification to the model, estimates will be
recalculated and model fit reassessed. See Figure 5 on the following page for the initial measurement model.
Figure 5. Initial measurement model.

Note: Ovals represent latent variables and squares represent observable variables. The item numbers listed as observable variables are the same respective item numbers listed in Appendix H, which provides the exact item wording. Arched lines represent the covariation allowed during the confirmatory factor analysis.
The measurement model using the 229 participants, which included the four latent variables (i.e., source-uncertainty, message-uncertainty, self-uncertainty, and other-uncertainty), revealed $\chi^2 (df = 164, N = 229) = 339.8, p < .001$ and model fit statistics of CFI = .943 and RMSEA = .069 (90% confidence interval (CI) = .059 - .079). This model fit was close in terms of achieving an appropriate fit to allow for evaluation, but not fully satisfactory (i.e., CFI was slightly less than .95 and RMSEA was slightly more than .06), so the modification indices (MI) were examined. The MI showed that the funny and interesting parcels under the latent variable self-uncertainty had strongly covaried error terms (MI was more than 26). Therefore, for the respecified model, the six observable variables in the funny and interesting parcels were combined to form a single parcel, funny/interesting. Once the funny and interesting scales were combined, the measurement model offered the following statistics: $\chi^2 (df = 146, N = 229) = 302.8, p < .001$, CFI = .949, and RMSEA = .068 (90% confidence interval of .057 to .079). This fit was still not quite satisfactory, so the MI were again examined.

The MI showed that there were strongly covaried error terms (i.e., the MI were more than 10) among several observable variables in the source-, message-, and other-uncertainty latent variables. Four observable variables were deleted from the model that had strongly covaried error terms with other observable variables (item 2 in source-uncertainty, item 1 in message-uncertainty, and items 4 and 5 from other-uncertainty; see Appendix H for specific item wording). Once these four observable variables were deleted, the measurement model offered the following statistics: $\chi^2 (df = 84, N = 229) = 137.9, p < .001$, CFI = .973, and RMSEA = .053 (90% confidence interval of .037 to
This fit was satisfactory and unidimensionality of the constructs was established. See Figure 6 for the final measurement model.

In sum, the theoretical model of receiver-based uncertainty that was offered appears to be sound when subjugated to a confirmatory factor analysis. This indicates that the four types of receiver-based uncertainty are both conceptually and methodically distinct constructs. This is a contribution to the receiver-based uncertainty literature because the measures were developed over several phases and using more rigorous techniques.
Figure 6. Final Measurement Model.

Note: Ovals represent latent variables and squares represent observable variables. The item numbers listed as observable variables are the same respective item numbers listed in Appendix H. The standardized factor loadings appear to the left of each arrow and under the arches.
Receiver-Based Uncertainty Expression and Exploratory Discussion Groups

The pre-discussion receiver-based uncertainty measures were established in the previous section. These measures address H1a through H3. The discussion hypotheses, H4a through H8d, also address receiver-based uncertainty, but specifically address expressed uncertainty that is communicated during the discussion groups. Therefore, conceptualizations and operationalizations of expressed receiver-based uncertainty were in order. Once that task was accomplished, face-to-face exploratory discussion groups were administered to investigate how the concepts transferred into a communication context.

Receiver-Based Uncertainty Expression

Hypotheses 4a through 6b deal with the language of uncertainty expression, which is divided into question-asking and non-question uncertainty expression. The purpose of this division was to maintain consistency with prior work on uncertainty. Typically, question-asking is kept distinct from uncertainty expressions in the interpersonally-based uncertainty literature (Ayres, 1979; Berger & Kellermann, 1983; Douglas, 1987). Next, the type of uncertainty expression is conceptualized and operationalized. These concepts and measures reflect the pre-discussion receiver-based uncertainty operationalization that is provided above.

Language of uncertainty expression. The language of uncertainty expression (i.e., question-asking and non-question uncertainty expression) is the focus of H4a through H6d. These were not self-reported variables; rather, they needed to be content analyzed for presence in the group discussions (see Content Analysis section below for details on
coding). Question-asking was conceptually defined as expressions that attempted to retrieve information from others. Operationally, questions fell into one of two categories: (1) questions with punctuation (i.e., expressions that concluded with a question mark) or (2) questions without punctuation (i.e., expressions that included typical question-asking words and were phrased like a question, but did not explicitly use a question mark).

Typical question-asking words were considered who, what, where, when, why, how, and can. The purpose of including questions without punctuation was to capture all question-asking. Oftentimes, participants did not include punctuation or use proper grammar during the online discussion groups; thus, it was important to also code for questions without clear punctuation (e.g., “Where is this article from”).

Non-question uncertainty expressions were conceptually defined as statements that relayed uncertainty, confusion, lack of understanding, lack of knowledge, lack of clarity, hesitation, indecision, and ambiguity. The codebook displays a full list of common words and phrases that coders were instructed to code as uncertainty expressions (see Appendix I for the final codebook). Some examples include, “I don’t know,” “I’m not sure,” “Doesn’t make sense,” and “I guess.”

*Type of uncertainty expression.* The type of uncertainty expression is important to H7a through H8d. This involves categorizing expressions as uncertainty about the source, message, self, or other. Recall that conceptually source-uncertainty was defined as the message’s intentions—both the message creator’s intentions (i.e., the individual who constructed the message) and the message sources’ intentions (i.e., the individuals present within the message who deliver the message). Operationally, source-uncertainty was
defined as any questions or uncertainty expressions directed toward the author (i.e., Corey Larson), the purpose of the article (i.e., why the author wrote it), or the categorization of the article (i.e., what type of article the author wrote). For example, these statements by participants would be considered source-uncertainty expressed during discussion: (1) “Maybe the author was trying to convey an underlying message to motivate young people to work hard” and (2) “I’m not sure what type of article it is.”

Conceptually, message-uncertainty was defined as the message’s descriptive or explanatory meaning. Operationally, message-uncertainty expressed during discussion was defined as any questions or uncertainty expressions directed toward understanding the meaning or interpretation of the message (i.e., either specific parts of the article or the article in general). Examples from participants include: (1) “The part about the anatomy of the sea cow kind of confused me, I guess” and (2) “When was this article written?”

Conceptually, self-uncertainty was defined as the individual’s own meta-thoughts and meta-feelings about the message’s meaning. Operationally, self-uncertainty was defined as any questions or uncertainty expressions directed toward the participant’s personal reaction to the article. Self-uncertainty goes beyond confusion about the message. It is not confusion about specific parts of the article or about the article in general. It is personal reactions to the article (not the author). For example: (1) “I guess it was funny” and (2) “It sort of seemed one-sided to me.”

Conceptually, other-uncertainty was defined as the individual’s thoughts and feelings of what another person or group thought and felt about the message’s meaning. Operationally, other-uncertainty was defined as any questions or uncertainty expressions
about the article and directed toward any other participant or how other people would interpret the article. Some examples are (1) “People can take it personally there’s no question, I guess it’s just the type of reader you are” and (2) “I cannot really imagine anyone agreeing with this article, but then again who knows?” As noted earlier, the final codebook with full coding instructions can be found in Appendix I. Details about codebook development, intercoder reliability, and coding are in the Content Analysis section below.

**Exploratory Discussion Groups**

The purposes for discussion groups include (1) garnering a better understanding of a process or idea, (2) generating new ideas or processes that you never knew existed, (3) moving outside of academic thinking, and (4) observing a group interaction that negotiates the meaning of a process or idea (Morgan, 1998a). Because this dissertation seeks to understand how mass-mediated messages arouse uncertainty and how uncertainty is communicated, discussion groups are an ideal method by which to gain a handle on how to approach this new line in inquiry. In-depth interviews and surveys, while useful in communication research, were not enough to capture the communicative process of uncertainty expression. One-on-one interviews and survey research do not provide a strong atmosphere for uncertainty arousal and uncertainty expression by communication. Discussion groups do provide the proper atmosphere; they allow a group to share perspectives and create understanding about a message through communication.

The overarching goal of the discussion groups was to observe how people experience, express, and negotiate uncertainty generated from mass-mediated political
messages with varying degrees of ambiguity. More specifically, multiple hypotheses focus on the types of uncertainty that are generated (i.e., source-uncertainty, message-uncertainty, self-uncertainty, and other-uncertainty) and the manifestation of uncertainty (i.e., question-asking and uncertainty expression) from each article that represents a particular level of ambiguity. The group dynamic of discussion groups make it a fruitful research method for studying these processes.

Other communication researchers have used discussion groups to investigate the communication of uncertainty (e.g., in uncertainty and health communication, Brashers et al., 1998; Brashers et al., 1999; Brashers et al., 2000; Brashers et al., 2004). For example Brashers et al. (2004) conducted a discussion group study of people living with HIV or AIDS. The goal was to examine how social support may facilitate or interfere with uncertainty management about health, identity, and relationships. They found that social support helps manage uncertainty in several ways, such as assisting with information seeking and avoiding (Brashers et al., 2004). Likewise, discussion groups should also be able to assist political communication scholars in understanding how people generate meaning and negotiate uncertainty from political messages of varying ambiguity.

Before this dissertation’s online discussion groups were conducted, eight exploratory discussion groups (two discussion groups for each of the four stimuli) were conducted face-to-face over the course of two days in early April 2010. There were several purposes of the exploratory discussion groups. First, it was essential for the moderator (the author) to gain experience with moderating discussion groups before the final online discussion experiment. The face-to-face format allowed the moderator to see
participants’ verbal and nonverbal reactions to the stimuli and easily adjust questions and the flow of the conversation. At the same time, it was important for the moderator to get familiar with the structure, stimuli, and questions used during the discussion groups. If no face-to-face exploratory discussion groups were conducted, then it would have been more difficult to anticipate participants’ reactions during the online discussions that are central to the dissertation’s final experiment. Thus, the moderator’s questions were tested and finalized during the exploratory discussion groups.

Participants. Thirty-five undergraduate students from The Ohio State University were recruited from two large introductory-level communication courses. In exchange for course extra credit, they participated in a 30- to 45-minute face-to-face discussion about the economy, jobs, and a discussion stimulus (i.e., one of the four articles described earlier). There were more females ($N = 24, 68.6\%)$ than males ($N = 11, 31.4\%)$ and more whites ($N = 30, 85.7\%)$ than non-whites ($N = 5, 14.4\%)$. The average age was 19.3 years old, with a standard deviation of 1.1 years. The majority of participants were upper-middle class whose families earn more than $75,000 per year ($N = 26, 74.3\%)$. There was a mix of Democrats ($N = 11, 31.4\%)$, Republicans ($N = 16, 45.7\%)$, and independents/other party members ($N = 6, 17.1\%)$, with two participants who did not respond (5.7\%).

Because the topic of the economy and jobs may influence students of various class ranks and majors differently, these demographic variables were also recorded. Most participants were underclassmen (freshman $N = 19, 54.4\%$; sophomore $N = 8, 22.9\%$), compared to upperclassmen (junior $N = 8, 22.9\%$). Business-oriented ($N = 13, 37.1\%)$
and communication-oriented \((N = 11, 31.4\%)\) majors were most prevalent, with medical/health-oriented majors \((N = 6, 17.1\%)\) and humanities/performance majors \((N = 2, 5.7\%)\) less prevalent. Three students were undecided \((8.6\%)\).

**Structure.** In order to observe the arousal and expression of uncertainty in political conversation, relatively structured groups with a discussion stimulus (i.e., one of the four articles described earlier) were used in the exploratory discussions. Structured discussion groups have a pre-determined number of direct questions with specific objectives in mind (Morgan, 1998b). The moderator exercises fairly tight control over group dynamics with the goal being to keep the group focused on the specific topic. The role of the moderator is to encourage participants to share their thoughts, feelings, and experiences. The goal is to learn the participants’ various perspectives on the given topic (Morgan, 1998b). The moderator is there to oversee the discussion, which usually takes on a life of its own.

In focus groups, the participants want to understand each other: How can two people who seem to be so similar have such different experiences? How can people who are outwardly very different in fact share the same beliefs? These are the kinds of encounters that make the participants interested in finding out about each other, and those discussions give you the kinds of interpretive insights that you are seeking. (Morgan, 1998a, p. 12)

Therefore, structured discussion groups can provide tremendous insight into the arousal and expression of uncertainty about political messages.
Procedure. All exploratory discussion group sessions were held in the Journalism Building Room 339A on The Ohio State University’s campus. The room is designed specifically for focus group data collection, with four digital video cameras mounted on the corners of each wall and two small microphones unobtrusively hanging from the ceiling. The participants were aware they were being both video and audio recorded. Research shows there is no difference in participant behavior of audio-taped and video-taped sessions (Elderkin-Thompson & Waitzkin, 1999; Ickes, Tooke, Duck, & Hays, 1998; Ickes, Weber, & Harvey, 1994). The room had one large table in the middle with eight chairs.

Participants attended one of eight discussion groups. Participants emailed the author their top three session dates and times and were assigned based on availability and gender distribution. There was an effort made to diversify the groups by gender as much as possible in order to provide a balance. Research shows that gender influences news reception (e.g., Mastro, Lapinski, Kopacz, & Behm-Morawitz, 2009), entertainment reception (e.g., Barriga, Shapiro, & Fernandez, 2010), humor use (e.g., Martin, 2004), and humor reception (e.g., King, 2000). Once all participants were recruited, the discussion groups were assigned a condition (i.e., a stimulus article). Each condition was given a number and a random number generator (http://www.random.org) was used to assign a condition to each session. Ten participants were recruited for each of the four conditions, with five participants recruited for each session. However, not all participants attended their assigned sessions; there were nine participants in the horatian satire, news story, and editorial conditions, and eight participants in the juvenalian satire condition.
Once participants arrived and signed the informed consent form, they completed a survey (see Appendix J for the full initial survey). The survey requested demographic information and included several psychological and communication measures. The purpose of this initial survey was to keep participants occupied while waiting for other participants to arrive and begin the discussion. After completing the initial survey, participants waited quietly until the moderator began the discussion by introducing herself (see Appendix K for the moderator’s script and questions posed during the discussion group). After the participants introduced themselves and became acquainted, three general economic questions were posed to them in order to orient their thoughts on the economy and jobs. For example, “what do you see as barriers to getting a job?” The opening discussion ensued for about 10 minutes or until all participants had shared their comments and opinions.

Next, participants read the assigned stimulus article and immediately completed a survey about their reactions to the article (see Appendix L for the post-article/pre-discussion survey). There were two open-ended questions about their initial thoughts, comments, and questions about the article, as well as a multitude of closed-ended questions that measured their personal reactions to the article (e.g., perceived humor, bias, and uncertainty of the article). The purpose of this survey was to gauge their original thoughts and questions about the article before discussion began about the article. This process also allowed participants to elaborate on a few ideas before entering the conversation, and it may have helped participants feel more secure and prepared before actual discussion. Additionally, once discussion began, then the direct effects of
the article could have been altered by communicative effects of the discussion. This phase of the session typically lasted 10 minutes.

Once all participants completed the article and survey, the discussion started again. The first question was very broad and allowed discussants to guide the discussion, “People can have a host of reactions to the article you just read. What thoughts and feelings do you have about the article?” The purpose of this initial broad question was to provide the atmosphere for uncertainty expression to occur, without the moderator directly asking participants about their questions or confusion. If uncertainty expression did occur, then the moderator probed the thoughts and feelings behind that expression by asking participants to explain themselves and/or help the group understand where they were coming from.

Even though the moderator guided the discussion, participants were encouraged to talk among one another. They were told they could directly address specific comments that others made or ask questions to one another. However, if there were times when a participant made a relatively confusing, ambiguous, or unclear statement, then the moderator would probe the participant for more information. Additionally, if a related topic or future question on the moderator’s list of questions arose earlier than expected in the discussion, then the moderator would go ahead and pursue that topic at the current time.

While the participants helped guide the flow of the discussion and the moderator probed at particular points of interest, there were several preplanned discussion questions. Most of these questions focused on understanding any uncertainty arousal about the
article. However, after the first day of data collection, several more discussion questions were added to the list. In these initial groups, the moderator witnessed how the articles were being discussed and how it was necessary to focus questions on specific aspects of uncertainty (i.e., source-, message-, self-, and other-uncertainty). The discussion questions were revised and designed to elicit any thoughts or confusion about the specific sources of uncertainty (see Appendix K for the final moderator’s script and discussion questions). In all, the post-article discussions lasted about 15 to 20 minutes. Once the discussion was complete, they completed a short post-discussion survey about their experiences and were thanked and dismissed (see Appendix M for the post-discussion survey).

Experimental Online Discussion Groups

Moving forward from the exploratory discussion groups, the moderator/dissertator was more confident in the moderating process and was better equipped to probe any receiver-based uncertainty expression. Because the face-to-face discussion groups refined the discussion questions and moderation procedures, the online discussion groups were even more similar across sessions in terms of discussion questions. Additionally, the online format had several advantages in experimental control compared to the face-to-face format. For one, the online discussions were all conducted in private computer rooms, so participants were not exposed to one another. Honesty, openness, and comfort in expressing one’s full opinions may have increased due to this privacy (Campbell, Meier, Carr, Enga, James, Reedy, & Zheng, 2001; Tates, Zwaanswijk, Otten, van Dulmen, Hoogerbrugge, & Kamps, 2009). Non-verbal cues are
not possible with online discussion and this may have also mitigated group conformity. Participants may have been more encouraged to provide their true opinions without tempering their uncertainty or their certainty.

There was less of a tendency for participants to rely on the moderator for discussion flow; rather, participants were more willing to question one another directly, respond to one another’s comments, stray from discussion questions, and disagree openly. Also, without the moderator and other participants’ presence in the same room there was less pressure to answer the questions immediately. Participants could sit back and ponder the moderator’s question and one another’s remarks more carefully without the face-to-face distractions. This facilitated a group discussion with more equal participation from each person, as opposed to a discussion dominated by one opinionated participant.

Participants

Ninety-four undergraduate students from The Ohio State University were recruited from two large introductory-level communication courses. In exchange for course extra credit, they participated in a 45-minute online discussion about the economy, jobs, and a discussion stimulus (i.e., one of the four articles described earlier). There were more females \(N = 53, 56.4\%\) than males \(N = 41, 43.6\%\) and more whites \(N = 77, 81.9\%\) than non-whites \(N = 17, 18.1\%\). The average age was 20.4 years old, with a standard deviation of 2.9 years and a range from 18 to 38. The majority of participants were upper-middle class whose families earn more than $75,000 per year \(N = 61, 64.9\%\). There was a mix of Democrats \(N = 34, 36.2\%\), Republicans \(N = 30, 31.9\%\),
and independents/other party members \( (N = 27, 28.7\%) \), with three participants who did not respond to this question \( (3.2\%) \).

Most participants were underclassmen (freshman \( N = 32, 34.0\% \); sophomore \( N = 27, 28.7\% \)), compared to upperclassmen (junior \( N = 20, 21.3\% \); senior \( N = 15, 16.0\% \)). Business-oriented \( (N = 23, 24.5\%) \), communication-oriented \( (N = 32, 34.0\%) \), and medical/health-oriented majors \( (N = 19, 20.2\%) \) were most prevalent, with and humanities/performance majors \( (N = 9, 9.6\%) \) and engineering majors \( (N = 1, 1.1\%) \) less prevalent. Eight students were undecided \( (8.5\%) \) and two did not respond \( (2.1\%) \).

Just more than half of participants had a paying job or paying internship at the time of the study \( (N = 52, 55.3\%) \), and two-thirds of participants had a paying job or paying internship arranged for the summer of 2010 \( (N = 62, 66.0\%) \). However, only nine participants \( (9.6\%) \) had a paying job or paying internship arranged after they graduated college.

Interest in the economy and economic news was just more than the middle of the \( (1) \text{“no interest at all”} \text{ to (7) “extremely interested”} \) scale \( (M = 4.27, SD = 1.62) \), as was interest in job-related news \( (M = 4.93, SD = 1.45) \). Attention paid to economic news was slightly less than the middle of the \( (1) \text{“no attention at all”} \text{ to (7) “a great deal of attention”} \) scale \( (M = 3.93, SD = 1.48) \); whereas attention paid to job-related news was slightly more than the middle of the same scale \( (M = 4.47, SD = 1.53) \). Participants reported discussing politics an average of 1.53 days a week \( (SD = 1.48) \) and the economy/job-related information an average of 2.22 days a week \( (SD = 1.64) \).
Structure

The same structure was used in the online discussions as the pilot face-to-face discussions described above. Relatively structured groups with a discussion stimulus (i.e., one of the four articles described earlier) were used in the online discussions. There were 14 questions: 3 general questions about the economy and jobs posed before the article was read and 11 questions about the article and receiver-based uncertainty posed after the article was read (see Appendix K for moderator’s script and discussion questions). The moderator exercised fairly tight control over group discussion with the goal being to keep the group focused on the specific question. The moderator encouraged participants to share their unique, agreeable, and disagreeable thoughts, feelings, and experiences.

Procedure

All online discussion group sessions were held in the Journalism Building Room 339 on The Ohio State University’s campus. There are five small computer rooms that are designed specifically for private computer-based data collection, with one digital video camera and microphone mounted on the wall above the computer monitor. The camera and microphone were very small and covered with black plastic, so it was unobtrusive and fairly unnoticeable to participants. Each room had a desk, chair, and computer.

Participants attended one of twenty discussion groups; there were five groups for each of the four conditions. Participants emailed the author their top three session dates and times and were assigned based on availability and gender distribution. Like with the exploratory discussion groups, there was an effort made to diversify the groups by gender.
as much as possible in order to provide a balance. Once all participants were recruited, the discussion groups were assigned a condition (i.e., a stimulus article). Each condition was given a number and a random number generator (http://www.random.org) was used to assign a condition to each session until each condition had five groups.

A maximum of ten participants were recruited for each of the twenty sessions, with five participants able to participate at any given session. The first five participants to arrive were assigned to the online discussion group. Any additional participants that arrived were given the initial survey (demographics and psychological and communication scales), one of four articles to read, and the post-article survey; they did not participate in the online group discussion. This amounted to 36 students, which, when combined with the 64 students who pretested the four stimulus messages and the receiver-based uncertainty items, totals to 100 students who did not participate in group discussion.

All but five sessions had five participants. Reasons for falling below five participants for any one session included: failure of a participant to arrive at their assigned session, self-initiated withdrawal of a participant, technological problems with the Google Talk software, and water damage to a computer room that prevented data collection that particular day. In the end, there were 23 participants in the respective horatian satire, juvenalian satire, and editorial conditions, and 25 participants in the news story condition.

As participants arrived, they were assigned to a computer room, where they read and signed the informed consent form and completed the initial survey (see Appendix J.
for the initial survey). Once participants completed the survey, they submitted it to a research assistant waiting outside of the five computer rooms. They were told they could study or do written homework while they waited for the discussion to begin. All the while, the computer was turned on and logged into the Google Talk software that was used for group discussion. Google Talk is a free software program that allows multiple people to chat simultaneously in one online forum (see Appendix N for screen shots of the Google Talk interface). The first line of text in the discussion forum was sent by the moderator and instructed participants to avoid surfing the Internet and signing out of Google Talk. The research assistant informed the moderator once all participants completed the initial survey.

The moderator was in the control room in the Journalism Building Room 339, which is adjacent to the five individual computer rooms, and moderated the discussion groups on her personal laptop. The control room features five television monitors that can either show a participant-view (i.e., the participant sitting in the room) or a computer-view (i.e., the participant’s computer screen). Participants were not recorded. However, during the discussions, the moderator and research assistant flipped back and forth between the two views. The computer-view was displayed most often on the monitors in order to ensure that all participants shared their thoughts before the moderator moved onto the next question. The moderator could judge when there was a lull in conversation (i.e., no participants were actively typing) and assess if more probing of the current question was needed or if it was time to move onto the next question. The participant-view was used only intermittently to check upon the participants to ensure they were still
focused on the online discussion and not doing other tasks (e.g., talking on a cell phone).
The moderator and research assistant did not interrupt the participants in their closed-

door computer room with their physical presence unless passing out the surveys or a
technological problem was present and needed to be fixed on the participants’ computers
to continue the discussion. There were two sessions when technological problems with
Google Talk occurred and the moderator or research assistant had to enter the
participants’ room. There were no noticeable differences in those discussions. 7

After all participants completed the initial survey, the moderator began the
discussion by stating the guidelines for a good discussion, and then introduced herself
(see Appendix K for the moderator’s script and introduction). Next, participants were
invited to introduce themselves with a chosen name (participants were told they could use
a false name if uncomfortable using their real name), year in school, and major. Because
there were five generic screen names used to identify the participants (e.g.,
student.subject.1, student.subject.2, etc.), it was easier for participants to pick a first name
to use during discussion in order to make it more efficient to address one another.

After the participants introduced themselves, three general economic questions
were posed to them in order to orient their thoughts on the economy and jobs. For
example, “what do you see as barriers to getting a job?” The opening discussion ensued
for about 10 to 15 minutes or until all participants had shared their comments and
opinions. Next, the research assistant distributed the assigned stimulus article and the
post-article/pre-discussion survey about their reactions to the article (see Appendix L for
the post-article/pre-discussion survey). There were two open-ended questions about their
initial thoughts, comments, and questions about the article, as well as a multitude of closed-ended questions that measured their personal reactions to the article (e.g., perceived humor, bias, and uncertainty of the article). The purpose of this survey was to gauge their original thoughts and questions about the article before discussion began about the article. This process also allowed participants to elaborate on a few ideas before entering the conversation, and it may have helped participants feel more secure and prepared before actual discussion. Additionally, once discussion began, then the direct effects of the article could have been altered by communicative effects of the discussion. This phase of the session typically lasted 15 minutes.

The research assistant checked on the participants after 15 minutes to ensure they had all completed the survey. The articles and surveys were not collected at this time because participants needed to have the article and their written thoughts in front them in case they wanted to refer back to those materials during discussion. Once all participants completed the article and survey, the discussion started again. As with the face-to-face exploratory discussion groups, the first question was very broad and allowed discussants to guide the discussion, “People can have a host of reactions to the article you just read. What thoughts and feelings do you have about the article?” The purpose of this initial broad question was to provide the atmosphere for uncertainty expression to occur, without the moderator directly asking participants about their questions or confusion. If uncertainty expression did occur, then the moderator probed the thoughts and feelings behind that expression by asking participants to explain themselves and/or help the group understand where they were coming from. For example, one participant said, “I was kind
of confused at first but then got the idea,” and the moderator questioned, “What part were you confused about at first?” When participants had differing opinions, evaluations, thoughts, and emotional reactions to the article, the moderator intervened with questions about potential reasons for disagreement.

Even though the moderator guided the discussion, participants were encouraged to talk among one another. They were told they could directly address specific comments that others made or ask questions to one another. However, if there were times when a participant made a relatively confusing, ambiguous, or unclear statement, then the moderator would probe the participant for more information. Additionally, if a related topic or future question on the moderator’s list of questions arose earlier than expected in the discussion, then the moderator would go ahead and pursue that topic at the current time. In general, the moderator’s purpose was to probe the natural discussion when instances of uncertainty arise (e.g., when participants attempt to understand the article or when participants negotiate reasons for convergence or divergence of opinion).

While the participants helped guide the flow of the discussion and the moderator probed at particular points of interest, there were 14 discussion questions that all sessions were asked (see Appendix K for the final moderator’s script and discussion questions). The purpose of always posing the same questions across sessions was to keep the discussions as similar as possible (within the bounds of different stimuli and participants). Also, the discussion questions were developed with the four types of receiver-based uncertainty in mind. At least one question for each type of receiver-based uncertainty was posed to participants. For example, the perceived purpose of the article
and categorization of the article (i.e., a news story, editorial, humor/satire) were designed to probe source-uncertainty (i.e., the author’s purpose and motivation in writing the article).

Message-uncertainty was represented by directly asking participants if any parts of the article were confusing, ambiguous, or subtle. The location of this question in the discussion changed across groups. That is, sometimes uncertainty was expressed early on in the discussion and this question was then posed to participants. Other times uncertainty was not expressed unless this question was posed. It is important to note that the message-uncertainty question was not posed until the discussion was about half-way complete. This gave ample opportunity for uncertainty to arise naturally before the question was posed.

Self-uncertainty questions included asking participants if they thought the article was humorous and if they learned anything from the article. Self-uncertainty questions were designed to assess their personal reactions to the article, beyond their confusion or lack of confusion about the article. The other-uncertainty question asked participants if they had ideas as to why there were different reactions to the article, or if there were no differences of opinion, if they could imagine other people reacting differently to the article.

Beyond the questions designed to address the four types of uncertainty, the final questions of the discussion asked about participants’ experiences with media in general, if they ever feel confused by media messages, and why they do when they feel confused. The purpose of this question was to get a larger sense of if uncertainty arises with mass-
mediated messages and what people do to reduce this uncertainty. Last, participants were asked if their opinions about the economy or personal job prospects had changed since reading the article. In all, the post-article discussion lasted about 30 minutes.

At the end of the discussion, the research assistant collected the post-article/pre-discussion survey and distributed the short post-discussion survey. The participants were thanked and excused from the experiment once they completed the post-discussion survey. Care was taken in dismissing the participants so that they did not see one another while exiting the computer rooms.

Content Analysis of Discussions

Content analysis is “a research technique for the objective, systematic, and quantitative description of the manifest content of communication,” (Berelson, 1952, p. 18). The four key concepts in this definition are objectivity, systematic, quantitative, and manifest; whereas objectivity implies the unbiased analysis of content by researchers and coders who do not use their personal opinion in analyzing the communication content; systematic implies that the study uses rigorous standards throughout the study to ensure accuracy and precision of data collection and analysis (i.e., the same items are coded for each unit of analysis); quantitative implies using statistics to describe and report the content; and manifest content implies the study focuses on the overt content.

Krippendorff’s (1980, 2004) more recent definition of content analysis is more encompassing than Berelson’s (1952) definition: “Content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use,” (Krippendorff, 2004, p. 18). While both definitions
place value on replicability and systematic analysis, Krippendorff’s definition does not
require content analysis to be quantitative. His key objection to Berelson’s definition and
derivatives of the definition (e.g., Riffe, Lacy, & Fico, 1998) is the restriction of content
analysis to “manifest content of communication.” The assumption is that the
communication content has one universal meaning that is waiting to be revealed and that
any analysis of communication, whether word counts or in-depth interpretation, counts as
content analysis. Krippendorff’s definition “does not ignore the contributions that
analysts make to what counts as content,” (2004, p. 21). For example, there have been a
number of content analyses in the political communication literature that have examined
more latent content (e.g., Haigh & Heresco, 2010; Holbert, Tschida, Dixon, Cherry,
Steuber, & Airne, 2005; Niven, Lichter, & Amundson, 2003; Williams, Martin,
Trammell, Landreville, & Ellis, 2004), and this dissertation also seeks to identify more
latent content in political discussions.

Krippendorff’s definition of content analysis lends itself well to the nature of this
dissertation. Specifically, the hypotheses focus on both the manifest use of language (e.g.,
question marks) and the latent and contextual meaning of language (e.g., expressions of
four types of receiver-based uncertainty) in actual conversations. There is no precedent
for content analyzing receiver-based uncertainty in conversations because all previous
studies have used self-report surveys. This study represents an improvement in that the
four specific types of receiver-based uncertainty are coded in discussion. Describing the
four types of receiver-based uncertainty are another new contribution that this
dissertation makes in the communication literature, so there is a need to use a more
encompassing definition of content analysis. Additionally, this dissertation argues that communication and messages can have different meanings to people; that notion is more reflective in Krippendorff’s definition of content analysis that does not assume a correct or universal meaning of a message.

A review of several content analysis books and chapters (e.g., Kaid & Wadsworth, 1989; Krippendorff, 2004; Neuendorf, 2002; Riffe, Lacy, & Fico, 1998) reveals that there are several agreed-upon steps that researchers must complete in order to conduct a reliable and valid content analysis. Researchers must establish the units of analysis, universe and sample, category definitions and coding rules, and intercoder reliability before the coding of the data commences.

**Unitizing**

Unitizing involves systematic distinguishing of the segments of text (Krippendorff, 2004). There can be several units of analysis. In the case of this dissertation, the unit of analysis is at the syntactical level, where sentences, phrases, and words are indicative of questions and uncertainty expressions. It is within the participants’ language that uncertainty expressions will be examined. The “development of codebook” section below outlines the unitization process.

**Sampling**

Sampling allows the researcher to analyze a manageable amount of content that represents the population or universe of interest (Kaid & Wadsworth, 1989; Krippendorff, 2004). This dissertation’s hypotheses focus on horatian satire, juvenalian satire, news, and editorials; therefore, the universe could include any individual’s
recorded responses to any piece of satire, news, and editorial ever created. However, this dissertation does not seek to generalize to any and all pieces of satire, news, and editorials; rather, this dissertation examines evidence for the arousal of receiver-based uncertainty with texts that vary in ambiguity. While this could be done by searching for and analyzing any natural, authentic, real-world recorded responses to various mass-mediated messages, when establishing the existence of a concept (i.e., types of receiver-based uncertainty), experimental control is ideal. There needs to be a certain level of control on the part of the researcher to study this phenomenon from its arousal to its expression (e.g., creating messages on the same topic to ensure that the topic is not responsible for differences among uncertainty responses). Thus, because this study valued experimental control over ecological validity, an experimental design with online discussion groups was used to test the hypotheses. In that case, the discussion groups are the sample. Each discussion is analyzed, so there are no sampling techniques used.

Development of Codebook

The development of the codebook involves category definition and establishment of coding rules (Holsti, 1969; Kaid & Wadsworth, 1989; Krippendorff, 2004). This dissertation’s hypotheses address four types of receiver-based uncertainty (source, message, self, and other) and two types of uncertain language (questions and expressions). These concepts form the basis of the codebook.

The author developed the codebook using both theoretical reasoning and the actual discussion data from the discussion groups to guide the operationalization of the concepts. First, the language of uncertainty coding categories were developed (i.e.,
question-asking and non-question uncertainty expression), which correspond to H4a through H6b. Question-asking was conceptually defined as expressions that attempted to retrieve information from others (see “Receiver-Based Uncertainty Expression and Exploratory Discussion Groups” section for details about the conceptual and operational definitions). However, when examining the discussion transcripts, it became clear that some participants were asking questions without using traditional punctuation and proper grammar. Thus, operationally, questions fell into one of two categories: (1) questions with punctuation (i.e., expressions that concluded with a question mark) or (2) questions without punctuation (i.e., expressions that included typical question-asking words and were phrased like a question, but did not explicitly use a question mark). Again, typical question-asking words were considered who, what, where, when, why, how, and can. The purpose of including questions without punctuation was to capture all question-asking.

Then, the guidelines for content analyzing non-question uncertainty expressions were developed. Because identifying non-question uncertainty expressions was going to be more difficult than identifying punctuated and non-punctuated questions, a great deal of thought was given to being systematic in what was coded for. Given that, the discussions themselves assisted heavily in the development of this category. Even though the author already had several common phrases of uncertainty in mind before codebook development (i.e., I’m uncertain, I don’t know, I’m not sure, I’m confused), four discussions were reviewed (i.e., one of each condition) to ensure all non-question uncertainty expressions were included in the codebook. This process resulted in 14 additional expressions added to the codebook. The codebook displays a full list of
common words and phrases that coders were instructed to code as uncertainty expressions (see Appendix I for the codebook).

Next, the coding rules for type of uncertainty expression were explicated; H7a through H8d focus on the type of uncertainty expression. This involves categorizing expressions as uncertainty about the source, message, self, or other. For each type of uncertainty, conceptual definitions were provided in the codebook, followed by the operational definitions, and several examples for that type of uncertainty. The discussions themselves helped to develop the operational definitions of the four types of uncertainty. This was justified because it was important to understand how participants were discussing and referring to the different types of uncertainty. This provided clearer instructions on the codebook. For example, source-uncertainty refers to confusion or hesitation about the author and motivations behind the message. Upon reviewing the discussion transcripts, it was important to operationalize the concept as any references to “the author”, “Corey Larson” (i.e., the author), and contextual references to the author as “he, she, or they.” Participants would not always use the author’s name in referencing the author, so it was important to include pronoun references as well. These references had to be understood by reviewing the context of the statement to ensure participants were not referring to another person in the discussion.

Finally, after the author reviewed the four discussion transcripts, several instructions were noted in the codebook. These instructions described the procedures to follow when coders initiated coding. Specifically, coders were instructed to find the point in the online discussion where moderator asks the question, “People can have a host of
reactions to the article you just read. What thoughts and feelings do you have about the article?” Coding commenced from that point because that was the first question the moderator posed to participants after reading the assigned article. Coders searched for questions and uncertainty expressions from that point onward. They were instructed not to code questions or uncertainty expressions by the moderator (labeled “me” in the transcripts). Coders were also reminded to have a copy of the respective article in front of them while coding in order to understand any references to the article.

Coders, Coder Training, and Reliability

Two undergraduate research assistants enrolled at The Ohio State University conducted the content analysis. Coder training and coding was conducted in a two-step process. First, the online group discussions had to be unitized, so coders were first trained on unitization. Unitization was important because coders had to understand what constituted an uncertainty expression in order to accurately identify the type of expression. Coders were trained on the language of uncertainty section of the codebook, but were instructed not to categorize the uncertainty expression as one of three categories (i.e., question with punctuation, question without punctuation, and non-question uncertainty expression). Rather, coders were merely instructed to highlight the expression on a hard copy of the transcript. They were given four discussion group transcripts to unitize (one of each condition).

Once coders finished this task (about three days), unitizing reliability was calculated using Guetzkow’s $U$ (Guetzkow, 1950). It is based on the total number of units identified by each coder and a calculation of less than .05 is considered reliable. It is a
common reliability estimate for unitizing small group discussions (e.g., Bonito & Lambert, 2005; Pavitt & Johnson, 1999). Unitizing reliability was highly reliable at \( U = .01 \). Any disagreements between coders for the discussions used for this unitizing assessment were resolved by an independent communication researcher who was familiar with the dissertation project. Next, the remaining 16 discussion group transcripts were split between the two reliable coders to unitize.

Moving forward, the coders were then trained on the type of uncertainty and reminded on how to code the language of uncertainty. They were given the same four discussion group transcripts from which they did unitizing reliability. Once coders finished this task (about three days), intercoder reliability was assessed on the language of uncertainty and type of uncertainty variables. Krippendorff’s \( \alpha \) coefficient served as the reliability estimate, which accounts for change agreement and number of coding categories. An SPSS macro, developed by Hayes and Krippendorff (2007), was utilized in all reliability analyses. Both variables exceeded the recommended minimum reliability level of 0.667 needed for interpretation of the data (Krippendorff, 2004): language of uncertainty \( \alpha = .80 \) and type of uncertainty \( \alpha = .71 \). Thus, the language of uncertainty \( \alpha (.80) \) is highly reliable and the type of uncertainty \( \alpha (.71) \) is adequately reliable. Given the nuanced nature of the variables and the conservative nature of Krippendorff’s \( \alpha \), the reliabilities were deemed satisfactory to warrant confidence in the coders and the coding instructions of this investigation. Any discrepancies were reconciled by discussion between the coders. No retraining was necessary and coders coded the 16 remaining discussion group transcripts in one week. They were instructed to
review the codebook before each time they began a coding session, and they were instructed not to code for more than a couple of hours at a time to prevent coder fatigue.

Analyses

There are three types of hypotheses outlined in this dissertation: (1) hypotheses that propose differences between messages with high and low ambiguity of message goals (i.e., H1a – H1d, H4a – H4d, and H7a – H7d), (2) hypotheses that propose differences between messages with high and low ambiguity of message meaning (H2a – H2d, H5a – H5d, and H8a – H8d), and (3) hypotheses that propose differences among all four types of messages (H3, H6a, and H6b).

For the hypotheses that predict differences between high and low ambiguity of message goals, 46 participants from the horatian and juvenalian satire conditions were collapsed into one category (high ambiguity of message goals) and compared to 48 participants from the news and editorial conditions (low ambiguity of message goals). For the hypotheses that predict differences between high and low ambiguity of message meaning, 48 participants from the horatian satire and news conditions were collapsed into one category (high ambiguity of message meaning) and compared to 46 participants from the juvenalian satire and editorial conditions (low ambiguity of message meaning). For the hypotheses that predict differences among all four types of messages, all four message conditions were kept distinct (horatian, juvenalian, and news conditions N = 23 each; news condition N = 25).
Pre-Discussion Hypotheses

The pre-discussion hypotheses (H1a – H3) were analyzed using multivariate analysis of variance (MANOVA). MANOVA calls for the dependent variables to be both theoretically and empirically interrelated (Weinfurt, 1995). In this case, the MANOVA accounted for the correlations between the four dependent variables (i.e., the four types of uncertainty). The specific discussion group to which the participant was assigned was not accounted for in these analyses because H1a through H3 address pre-discussion uncertainty. All univariate results within the respective MANOVA analyses were examined in order to determine specific mean differences.

Discussion Hypotheses

The discussion hypotheses (H4a – H8d) address uncertainty expression during the discussion. Because these series of hypotheses are focused on the discussion itself and there were four discussion groups per condition, the influence of the discussion group must be assessed before they are analyzed. In order to assess the discussion group influence on the dependent variables, Reid and Ng (2006) suggest the first step is to run analyses of variance (ANOVAs) with discussion group as the independent variable. The six dependent variables are question-asking (H4a, H5a, and H6a), non-question uncertainty expression (H4b, H5b, and H6b), source-uncertainty (H7a and H8a), message-uncertainty (H7b and H8b), self-uncertainty (H7c and H8c), and other-uncertainty (H7d and H8d).

The next step recommended by Reid and Ng (2006) is to calculate the intraclass correlations (ICCs) for potentially nonindependent data (Hayes, 2006; Kenny & Judd,
Using ICCs to calculate the degree to which group interaction contributes to nonindependence is common for group interaction studies (e.g., Reid & Ng, 2006; Williams, Caplan, & Xiong, 2007). The ICCs denote to what extent the total variance of the dependent variable is accounted for by differences between the groups (Hayes, 2006). This statistic is important to provide because values of ICCs that are more than .05 (i.e., more than 5% of the variance in the dependent variable is explained by the group) can invalidate hypotheses tests and confidence intervals when multilevel modeling is not used (Hayes, 2006). Therefore, ICCs were calculated for each dependent variable to determine the influence of group interaction.

If the ANOVAs and ICCs indicate there is a significant group influence on any given dependent variable, then multilevel analytical techniques will be used. Specifically, the group-affected hypotheses will be tested using linear mixed-effects modeling in SPSS 18.0, which accounts for group influence (Hayes, 2006 outlines procedures for this type of multilevel modeling). If group influence is not a problem, as indicated by the ANOVAs and ICCs, then a standard ANOVA will be used. Essentially, the linear mixed-effects modeling module in SPSS is a multilevel modeling procedure that allows a level-1 fixed component (i.e., in this study, the main independent variable of stimulus message) and a level-2 random component (i.e., in this study, the group). First, evidence of a level-1 effect will be assessed using an F test statistic. If evidence of a level-1 effect exists, then I will determine if this effect is conditional on group membership (i.e., stimulus by group interaction) using a Wald Z test. Essentially, I want to detect if the level-1 effects
(stimulus message) is interacting with group membership (level-2). If there is a message by group interaction, then the significant influence of message must be taken as conditional on group membership.
Ch. 3: Results

Manipulation Checks

There are two manipulation checks because of the two dimensions of ambiguity. For the ambiguity of message goals, a question at the end of the post-article/pre-discussion survey that asked participants to identify what type of message they had just read. Participants could categorize the message as either satire/humor, news/editorial, none of those opinions, or don’t know. Categorization of a message speaks to the author’s purpose behind creating the message. Indeed, results show that the satirical pieces were significantly more likely to be incorrectly categorized than the news/editorial pieces, $\chi^2 (df = 1, N = 229) = 5.196, p < .05$. This shows support for the manipulation of ambiguity of the message’s goals.

The second dimension of ambiguity relates to the message’s meaning. For this dimension, participants were asked how confusing, unclear, straightforward (reverse coded), complicated, and subtle the article’s arguments and information were on a scale of (1) “strongly disagree” to (9) “strongly agree.” These five items comprised a confusion index. For this manipulation check, a single-factor analysis of variance revealed statistically significant differences in the confusion of the article by stimuli, $F(df = 3, N = 225) = 5.248, p < .01, \eta^2 = .065$. 

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In regard to differences between high ambiguity of meaning (i.e., the horatian satire and news article) and low ambiguity of meaning (i.e., the juvenalian satire and editorial), a contrast was conducted using an independent groups t-test, grouping the horatian satire and news article and comparing that to the juvenalian satire and editorial. This analysis revealed that the horatian satire and news group ($M = 3.10$) had higher a confusion index than the juvenalian satire and editorial group ($M = 2.76$), $t(df = 225) = 12.655, p < .001$. This indicates that the manipulation of ambiguity of meaning was successful.

Frequency of Uncertainty Expressions during Discussion Groups

Before the hypotheses are analyzed, a description of the discussions by condition and group is warranted. There were 233 expressions of uncertainty about the messages, with 47 questions and 186 non-question expressions, across all conditions and groups. The four conditions appeared to differ in overall uncertainty expression, although the differences were not significant, $\chi^2 (df = 3, N = 233) = 2.662, p = .45$. The juvenalian satire condition had the highest number of questions posed by participants ($N = 20$) and the second-highest frequency of non-question uncertainty expressions ($N = 57$). The horatian satire condition had the second-highest number of question posed by participants ($N = 13$) and the highest frequency of non-question uncertainty expressions ($N = 58$). The news condition had the lowest number of both questions ($N = 5$) and non-question uncertainty expression ($N = 30$). For a breakdown of questions and non-question expressions by condition, please see Table 2.
Table 2. Frequency of Uncertainty Expression Language by Message Type.

<table>
<thead>
<tr>
<th>Type of Article</th>
<th>Horatian</th>
<th>Juvenalian</th>
<th>News</th>
<th>Editorial</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions with or without Punctuation</td>
<td>13</td>
<td>20</td>
<td>5</td>
<td>9</td>
<td>47</td>
</tr>
<tr>
<td>Non-Question Uncertainty Expressions</td>
<td>58</td>
<td>57</td>
<td>30</td>
<td>41</td>
<td>186</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>77</td>
<td>35</td>
<td>50</td>
<td>233</td>
</tr>
</tbody>
</table>

In regard to the four types of uncertainty and their frequency among the four conditions, there were significant differences, $\chi^2$ (df = 9, N = 233) = 26.974, $p < .001$. See Table 3 for the frequencies of the specific types of uncertainty expression. The juvenalian satire condition had the highest frequency of source-uncertainty (N = 34), with the editorial (N = 27) possessing the second-highest frequency of source-uncertainty. The horatian satire incited the most message-uncertainty (N = 37) and self-uncertainty (N = 11). For other-uncertainty, the juvenalian satire condition showed the highest levels of uncertainty (N = 16).
<table>
<thead>
<tr>
<th></th>
<th>Type of Article</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Horatian</td>
</tr>
<tr>
<td>Source</td>
<td>15</td>
</tr>
<tr>
<td>Message</td>
<td>37</td>
</tr>
<tr>
<td>Self</td>
<td>11</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
</tr>
</tbody>
</table>

Table 3. Frequency of Uncertainty Expression Type by Message Type.

Not only were there differences between conditions, but there was also considerable variation within condition groups. For example, the number of uncertainty expressions (including both questions and non-questions) ranged from 9 to 15 for horatian satire groups, ranged from 10 to 23 for juvenalian satire groups, ranged from 3 to 10 for news groups, and ranged from 4 to 15 for editorial groups. Within the type of uncertainty, there was even variation within condition groups. For instance, in the juvenalian condition, there was one group that had 12 source-uncertainty expressions and only 2 source-uncertainty expressions in another group. See Table 4 the specific frequencies of uncertainty expressions (including both questions and non-questions) and the specific frequencies for the four types of uncertainty expression for all 20 groups.
<table>
<thead>
<tr>
<th></th>
<th>Horatian</th>
<th>Juvenalian</th>
<th>News</th>
<th>Editorial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
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<td>4</td>
<td>5</td>
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<tr>
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<td>2</td>
<td>3</td>
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<td>10</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Self</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
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<td>3</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
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<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
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<tr>
<td><strong>Uncertainty Expression Total</strong></td>
<td>15</td>
<td>15</td>
<td>9</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 4. Frequencies of Uncertainty Expression by Discussion Group.
Pre-Discussion Hypotheses

Hypotheses 1a through 1d posited higher levels of post-article/pre-discussion uncertainty for messages with higher levels of ambiguity of message goals (i.e., satire). Specifically, H1a examines source-uncertainty, H1b assesses message-uncertainty, H1c looks at self-uncertainty, and H1d considers other-uncertainty. As mentioned earlier, participants from the horatian and juvenalian satire conditions were collapsed into one category (high ambiguity of message goals and motivation) and compared to participants from the news and editorial conditions (low ambiguity of message goals and motivation). All uncertainty items were coded so that higher numbers on the scale indicated more uncertainty and lower numbers on the scale indicated less uncertainty.

In a MANOVA with source-uncertainty, message-uncertainty, self-uncertainty, and other-uncertainty as the dependent variables and level of ambiguity of message goals (i.e., high ambiguity of satire and low ambiguity of news/editors) as the independent variable, results revealed there was an omnibus main effect of ambiguity of message goals, $F(4, 89) = 2.772, p < .05, \eta^2 = .111$. However, only H1b was supported, with the satires (i.e., higher ambiguity of message goals) inciting more message-uncertainty ($M = 4.39, SD = 1.76$) than the news and editorial (i.e., lower ambiguity of message goals) ($M = 3.56, SD = 1.55$), $F(df = 1) = 5.815, p < .05, \eta^2 = .059$.

Source-uncertainty (H1a) was not significantly different, $F(df = 1) = 1.873, p = .17, \eta^2 = .02$, between high ambiguity of message goals (satire $M = 4.53, SD = 1.94$) and low ambiguity of message goals (news/editorial $M = 3.99, SD = 1.85$). Nor was self-uncertainty (H1b) significantly different, $F(df = 1) = 1.372, p = .25, \eta^2 = .015$, between
messages with high ambiguity of message goals (satire $M = 2.87$, $SD = .77$) and low ambiguity of message goals (news/editorial $M = 3.05$, $SD = .70$). Last, other-uncertainty was not significantly different, $F(df = 1) = .210, p = .65, \eta^2 = .002$, between messages with high ambiguity of message goals (satire $M = 3.57$, $SD = 1.70$) and low ambiguity of message goals (news/editorial $M = 3.74$, $SD = 1.82$).

Hypotheses 2a through 2d argued higher levels of ambiguity of message meaning would lead to higher levels of uncertainty. Participants from the horatian satire and traditional news conditions were collapsed into one category (high ambiguity of message meaning) and compared to participants from the juvenalian and editorial conditions (low ambiguity of message meaning). In a MANOVA with source-uncertainty (H2a), message-uncertainty (H2b), self-uncertainty (H2c), and other-uncertainty (H2d) as the dependent variables and level of ambiguity of message meaning (i.e., high ambiguity of horatian satire/traditional news and low ambiguity of juvenalian satire/editorials) as the independent variable, results revealed there was no omnibus main effect of ambiguity of message meaning, $F(4, 89) = 2.197, p = .076, \eta^2 = .09$. Nevertheless, this omnibus effect was deemed sufficiently close to achieving statistical significance to warrant analysis of the univariate results.

There were significant univariate main effects of ambiguity of message meaning on message-uncertainty, $F(df = 1) = 4.094, p < .05, \eta^2 = .043$, and self-uncertainty, $F(df = 1) = 6.055, p < .05, \eta^2 = .062$. For message-uncertainty, higher levels of ambiguity of message meaning (horatian/news $M = 4.31$, $SD = 1.79$) possessed more message-uncertainty than lower levels of ambiguity of message meaning (juvenalian/editorial $M =$
3.61, \( SD = 1.54 \), which supports H2b. Likewise, for self-uncertainty, higher levels of ambiguity of message meaning (horatian/news \( M = 3.14 \), \( SD = .64 \)) possessed more self-uncertainty than lower levels of ambiguity of message meaning (juvenalian/editorial \( M = 2.78 \), \( SD = .78 \)), which supports H2c.

H2a and H2d were not supported: there were no univariate effects of source-uncertainty (H2a), \( F(df = 1) = 1.635, p = .204, \eta^2 = .017 \) (horatian/news \( M = 4.50 \), \( SD = 1.81 \); juvenalian/editorial \( M = 4.00 \), \( SD = 1.98 \)), and other-uncertainty (H2d), \( F(df = 1) = .924, p = .339, \eta^2 = .010 \) (horatian/news \( M = 3.83 \), \( SD = 1.70 \); juvenalian/editorial \( M = 3.48 \), \( SD = 1.81 \)).

Hypothesis 3 stated that ambiguity of message goals will serve as a moderator in the relationship between ambiguity of message meaning and pre-discussion uncertainty, whereas uncertainty levels for both low (i.e., news) and high (i.e., satire) message goal ambiguity will increase as message interpretation ambiguity increases, but the movement from low interpretation ambiguity to high interpretation ambiguity will be greater for messages with high message goal ambiguity (i.e., satire). A MANOVA with the four types of uncertainty as the dependent variables and condition (i.e., message stimulus) as the independent variable, shows that there was an omnibus main effect of condition, \( F(12, 230.472) = 2.440, p < .01, \eta^2 = .100 \).

In particular, there was a significant difference among conditions for message-uncertainty, \( F(df = 3) = 4.153, p < .01, \eta^2 = .122 \), and self-uncertainty, \( F(df = 3) = 3.792, p < .05, \eta^2 = .112 \). In regard to message-uncertainty, examination of mean differences using a posthoc Bonferroni test show that the horatian satire mean (\( M = 4.97 \), \( SD = 1.86 \))
is significantly greater than the traditional news ($M = 3.70, SD = 1.50, M_{difference} = 1.28, p < .05$) and editorial ($M = 3.42, SD = 1.62, M_{difference} = 1.55, p < .01$) means.

See Figure 7 for the interaction graph for message-uncertainty. It is important to note that Figure 7 looks very similar to the hypothesized interaction graph in Figure 3 (p. 68).

For the significant interaction of self-uncertainty, examination of mean differences using a posthoc Bonferroni test show that the horatian satire mean ($M = 3.19, SD = .66$) is significantly greater than the juvenalian satire means ($M = 2.55, SD = .74, M_{difference} = .65, p < .05$). See Figure 8 for the interaction graph for self-uncertainty.
Taken together, the first set of hypotheses on pre-discussion receiver-based uncertainty shows that satire aroused more uncertainty than the news and editorial. Specifically, message-uncertainty is significantly higher in satire, which reflects the strong influence of ambiguity of message goals on message-uncertainty. Additionally, horatian satire and news resulted in higher levels of message- and self-uncertainty. This illustrates the importance of keeping message ambiguity differentiated into two dimensions. Last, the interaction of ambiguity of message goals and ambiguity of message meaning on message-uncertainty looks remarkably similar to the proposed interaction graph (see Figure 3). However, the interaction graph for self-uncertainty does
not bear likewise resemblance to the proposed interaction graph (see “Discussion” section for elaboration on this finding). The news and editorial mean levels of self-uncertainty are much higher than expected. This indicates that more theorizing is needed into how different types of receiver-based uncertainty behave.

Discussion-Based Hypotheses

As outlined in the Analyses section, before the discussion hypotheses were tested, ANOVAs and ICCs were examined to determine the influence of group placement. Results from the series of ANOVAs showed that the discussion group did not significantly influence question-asking, \( F(df = 19) = 1.445, p = .133, \eta^2 = .271 \), self-uncertainty, \( F(df = 19) = 1.614, p = .075, \eta^2 = .293 \), and other-uncertainty, \( F(df = 19) = 1.574, p = .086, \eta^2 = .288 \). However, the \( p \) values are approaching statistical significance. For the remaining three ANOVAs, results revealed a significant group influence: non-question uncertainty expression, \( F(df = 19) = 1.893, p < .05, \eta^2 = .327 \); source-uncertainty, \( F(df = 19) = 3.657, p < .001, \eta^2 = .484 \); message-uncertainty, \( F(df = 19) = 2.504, p < .01, \eta^2 = .391 \).

Next, the ICCs were calculated. All ICCs were greater than .05, the recommended cutoff point for accounting for group differences (Hayes, 2006). The ICCs were as follows: question-asking \( \sigma = .063 \), non-question uncertainty expression \( \sigma = .137 \), source-uncertainty \( \sigma = .351 \), message-uncertainty \( \sigma = .225 \), self-uncertainty \( \sigma = .085 \), and other-uncertainty \( \sigma = .099 \). There appeared to a link between ICCs and frequency of the variable in discussion, with smaller ICCs associated with those variables that were less frequent in the discussion (see Table 4). When the variable is less frequent, there was
more uniformity across the groups. The ICCs rise when there is greater frequency of the variable in discussion (larger ICCs exist for non-question uncertainty expression, source-uncertainty, and message-uncertainty). Thus, all hypothesis-testing uses linear mixed modeling in SPSS such that the fixed component (i.e., in this study, the main independent variable at level 1) is the stimuli and the random component (i.e., in this study, the influential variable at level 2) is the group. Significance will be assessed for the fixed effect, which describes the main effect of stimuli, as well as the estimates of covariance parameters, which describes the interaction of stimuli and group.

Hypotheses 4a and 4b addressed the extent to which the level of ambiguity of message goals can influence question-asking (H4a) and non-question uncertainty expressions (H4b). H4a predicted that question-asking would be more frequent in satire (high ambiguity of message goals) than news/editorials (low ambiguity of message goals). A linear mixed-model was run with question-asking as the dependent variable, ambiguity of message goals as the fixed component, and the discussion group as the random component. Results revealed there was a main effect of ambiguity of message goals on question-asking, $F(df = 1, 16.154) = 8.248, p < .01$. The satire conditions had a higher frequency of questions ($M = .72, SD = .81$) than the news/editorial conditions ($M = .29, SD = .62$), which supports H4a. There was no interaction with the group, Wald $Z = .018, p = .986$.

H4b predicted that messages with higher levels of ambiguity of message goals would lead to more non-question uncertainty expressions than messages with lower levels. Non-question uncertainty expression was the dependent variable, ambiguity of
message goals was the fixed component, and the group was the random component. Indeed, there is a main effect of ambiguity of message goals, with the satire conditions exhibiting a higher frequency of non-question uncertainty expressions ($M = 2.50$, $SD = 2.01$) than the news/editorial conditions ($M = 1.48$, $SD = 1.22$), $F(df = 1, 18.611) = 7.867$, $p < .01$. There is no interaction of group and ambiguity of message goals, Wald $Z = .596$, $p = .551$. This indicates there is a large difference in non-question uncertainty expression between satire and news/editorials, and there is no significant interaction with the group.

Hypotheses 5a and 5b posited that messages with more ambiguous meaning (i.e., horatian satire and traditional news) will have an increased rate of question-asking (H5a) and non-question uncertainty expression (H5b) in the subsequent discussion compared to messages with less ambiguous meaning (i.e., juvenalian satire and opinion news). For H5a, question-asking was the dependent variable, with ambiguity of message meaning as the fixed component (i.e., high ambiguity of horatian satire/traditional news and low ambiguity of juvenalian satire/editorials), and group as the random component. Results show that question-asking was not significantly different between the discussions with a more ambiguous message (horatian/news $M = .38$, $SD = .64$) and discussions with a less ambiguous message (juvenalian/editorial $M = .63$, $SD = .83$), $F(df = 1, 17.900) = 2.596$, $p = .125$. There was no group interaction, Wald $Z = .373$, $p = .709$.

For H5b, non-question uncertainty expressions were the dependent variable, ambiguity of message meaning was the fixed component, and group was the random component. Non-question uncertainty expressions did not significantly differ between the discussions (horatian/news $M = 1.83$, $SD = 1.77$; juvenalian/editorial $M = 2.13$, $SD =$
1.68), $F(df = 1, 18.003) = .440, p = .515$. The interaction of group and ambiguity of message meaning was not significant, Wald $Z = 1.169, p = .242$.

Hypotheses 6a and 6b proposed a contingent interaction in such that ambiguity of message goals serves as a moderator in the relationship between ambiguity of message meaning and question-asking (H6a) and non-question uncertainty expression (H6b). For H6a, question-asking served as the dependent variable, condition served as the fixed component (i.e., one of the four messages), and group served as the random component.

H6a was supported, $F(df = 3, 14.768) = 3.779, p < .01$, and an examination of mean differences using a posthoc Bonferroni test show that the juvenalian satire ($M = .87$, $SD = .87$) and the news story ($M = .20$, $SD = .50$) have significantly different question-asking rates ($M difference = .67, p < .01$). There are no significant mean differences involving the horatian satire ($M = .57$, $SD = .73$) or the editorial ($M = .39$, $SD = .72$). There is no condition by group interaction, Wald $Z = .588, p = .500$. See Figure 9 on the following page for the interaction graph for question-asking.
Moving on to H6b, there was a significant main effect of condition, $F(df = 3, 18.316) = 3.248, p < .05$, on non-question uncertainty expression. Again, there is no group interaction, Wald $Z = .413, p = .680$. A posthoc Bonferroni test to detect specific differences among conditions showed there were no significant differences. However, there is a clear trend with the two satires (horatian $M = 2.52, SD = 2.21$; juvenalian $M = 2.48, SD = 1.83$) exhibiting more non-question uncertainty expressions than the news ($M = 1.20, SD = .87$) and editorial ($M = 1.78, SD = 1.48$) conditions. But because the mean differences are not significant and the main effect was significant, H6b was only partially
supported. Figure 10 shows the graph of means for the four conditions on non-question uncertainty expression.

Figure 10. Graph of Ambiguity of Message Goals and Ambiguity of Message Meaning on Non-Question Uncertainty Expressions

The significant positive influence of ambiguity of message goals on question-asking and non-question uncertainty expression provide evidence that satire encourages more uncertainty expression during discussion than news and editorials. However, the same influence does not exist for ambiguity of message meaning; there was no significant main effect on uncertainty expression. In other words, horatian satire/news and juvenalian satire/editorials were not different in terms of uncertainty expression. When
considering the interaction graphs above (Figures 9 and 10), it is clear that the two satires display higher means than the news and editorial; although, these differences are significant only between juvenalian satire and news on question-asking. Additionally, the actual interaction graphs do not look similar to the proposed interaction graph (see Figure 4). This points to the need for more nuanced theorizing about the behavior of receiver-based uncertainty expression.

Hypotheses 7a through 7d concerned the frequency of the four types of uncertainty in the group discussions. Specifically, it posited that participants exposed to a message with more ambiguous goals (i.e., satire) will have more source-uncertainty (H7a), message-uncertainty (H7b), self-uncertainty (H7c), and other-uncertainty (H7d) expressions in the subsequent discussion compared to the participants with exposure to a message with less ambiguous goals (i.e., news/editorial). In all of the analyses below, the dependent variable was the respective type of uncertainty (source, message, self, or other), the fixed component was ambiguity of goals, and the random component was the group.

H7a was not supported, $F(df = 1, 19.412) = .296, p = .593$; there was no significant difference of source-uncertainty expressions between satire, (high level ambiguity of message goals), $M = 1.07, SD = 1.34$, and news (low level ambiguity), $M = .87, SD = 1.12$. There was a group by ambiguity of message goals interaction, Wald $Z = 2.190, p < .05$.

For message-uncertainty (H7b), messages with high levels of ambiguity of message goals produced more message-uncertainty expressions (satire $M = 1.20, SD = \ldots$
1.38) than messages with low levels (news/editorial $M = .58, SD = .89$), $F(df = 1, 18.985) = 4.421, p < .05$. There was no group by ambiguity of message goals interaction, Wald $Z = 1.436, p = .151$. Thus, H7b was supported.

For H7c, results show that messages with high levels of ambiguity of message goals produced more self-uncertainty expressions (satire $M = .43, SD = .78$) than messages with low levels (news/editorial $M = .08, SD = .28$), $F(df = 1, 18.059) = 8.691, p < .01$. There is no interaction between group and ambiguity of message goals, Wald $Z = .058, p = .954$. H7c was supported.

Likewise, H7d was also supported. In regard to other-uncertainty, messages with high levels of ambiguity of message goals yielded more other-uncertainty expressions (satire $M = .52, SD = .72$) than messages with low levels (news/editorial $M = .23, SD = .47$), $F(df = 1, 20.481) = 4.716, p < .05$. Again, there was no interaction of group, Wald $Z = .564, p = .573$.

In sum, it appears that message-, self-, and other-uncertainty expression were significantly more frequent in messages with high levels of ambiguity of message goals (satire), and there is no group interaction. Only source-uncertainty (H7a) was not significantly different and had an interaction with the group.

Hypotheses 8a through H8d predicted that participants exposed to a message with more ambiguous meaning (i.e., horatian satire/traditional news) will have more source-uncertainty (H8a), message-uncertainty (H8b), self-uncertainty (H8c), and other-uncertainty (H8d) expressions in the subsequent discussion compared to the participants with exposure to a message with less ambiguous meaning (i.e., juvenalian
satire/editorial). For all of the analyses, the dependent variable was the respective type of uncertainty expression, the fixed component was the ambiguity of message meaning, and the random component was the discussion group.

H8a was not supported, but there were significant results in the opposite expected direction. Specifically, source-uncertainty expressions were more common in the low level ambiguity of message meaning (juvenalian/editorial $M = 1.33, SD = 1.32$) compared to the high level of ambiguity of message meaning (horatian/news $M = .62, SD = 1.04$), $F(df = 1, 19.635) = 4.507, p < .05$. However, this effect is conditional on the discussion group, Wald $Z = 2.018, p < .05$.

H8b was also not supported. There was no significant difference of message-uncertainty, $F(df = 1, 18.866) = .902, p = .653$, (horatian/news $M = 1.00, SD = 1.41$; juvenalian/editorial $M = .76, SD = .90$) between messages with high and low ambiguity of message meaning. There was no interaction with group, Wald $Z = 1.686, p = .092$.

For self-uncertainty (H8c), there was no significant difference, $F(df = 1, 17.205) = .285, p = .600$, between messages with high and low ambiguity of message meaning (horatian/news $M = .29, SD = .71$; juvenalian/editorial $M = .22, SD = .47$). There was no interaction between group and ambiguity of message meaning, Wald $Z = .802, p = .422$.

Similarly, for other-uncertainty (H8d), there was no significant difference, $F(df = 1, 19.863) = 1.169, p = .293$, between messages with high and low ambiguity of message meaning (horatian/news $M = .29, SD = .46$; juvenalian/editorial $M = .46, SD = .75$). There was no interaction with group, Wald $Z = .857, p = .391$. 

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In short, H8a through H8d were not supported. Messages with higher levels of ambiguity of message meaning (horatian/news) did not generate more types of uncertainty expression than messages with lower levels (juvenalian/editorial). In fact, source-uncertainty expression was significantly greater in messages with lower levels of ambiguity of message meaning (juvenalian/editorial); however, this result was conditional on group. Considering these results and the results of H7a through H7d, it is clear that for uncertainty expression, ambiguity of message goals impacts the discussion more so than ambiguity of message meaning.
Consider once again the caricature of Barack and Michelle Obama on the cover of *The New Yorker*. This controversy about the purpose, meaning, evaluation, and perceived influence on others directly relates to this dissertation’s core question: To what extent can mass-mediated messages generate uncertainty and influence discussion? Results support the premise that messages are by no means self-explanatory. Perhaps it is inevitable that at least one individual will be confused about any given mass-mediated political message. There are patterns that emerge though in terms of the types of messages that incite more receiver-based uncertainty and evoke more uncertainty expression in discussion. As a whole, this study’s results suggest that satirical messages do not generate cookie-cutter responses. This study’s empirical findings certainly reflect the theorized effects of satire and the discursive evidence of satire in English literary criticism. The basic triad (see Figure 2) shows a relational diagram of the satirical process, where a satiree must be aware of the satirist’s goals (source-uncertainty) and understand the given satirized text (message-uncertainty). In addition, the satire must not misfire in terms of the satiree’s evaluation of the satire (self-uncertainty). One reason that the satire may misfire is due to a lack of knowledge about the satire’s impact upon others (other-uncertainty). In this study, uncertainty was expressed significantly more often as a result of satirical messages than news and editorials. This occurred at each point in the basic triad.
Furthermore, the communication of politics is not always focused on persuasion and does not always result in persuasion. Confusion can occur, and does occur, with political messages. In a real-world context, there are certainly consequences for confusing messages. In politics, uncertainty about a political message may result in question-asking and uncertainty expression during political conversations. On the other hand, people are likely bombarded with hundreds of messages every day, and people may not take the time to ask questions or express uncertainty about the uncertain message. This may encourage a spiral of uncertainty about politics that over time translates into low political efficacy. Indeed, there are likely unintended consequences of political messages, one of them being obfuscation.

Consequently, this dissertation’s results suggest that two more consequences of political messages can be integrated into the literature. There is general support that political messages can (1) arouse uncertainty and (2) encourage the expression of uncertainty in subsequent discussion. In terms of self-reported, pre-discussion uncertainty arousal from political messages, the results suggest there is a pattern where messages with higher levels of ambiguity of message goals (i.e., satire) promote more receiver-based message-uncertainty. This finding reflects the argument that satire (i.e., juvenalian and horatian satire) oftentimes has ambiguous intentions that make it difficult for individuals to feel certain that they understand the message (i.e., message-uncertainty). Moreover, messages with more ambiguous meaning (i.e., horatian satire and news) also make it difficult for individuals to feel confident that they understand the message (i.e.,
message-uncertainty) and feel strongly about their own interpretation of the message (i.e., self-uncertainty).

There is also evidence of a moderating effect of ambiguity of message goals on the relationship between uncertainty and ambiguity of message meaning. This effect was present for message-uncertainty and self-uncertainty, such that the horatian satire uncertainty levels were always the highest among the four types of political messages (see Results chapter, H3). As Figure 7 depicts graphically, the mean message-uncertainty score for horatian satire is significantly higher than both the news and editorials mean message-uncertainty scores, which supported H3 for message-uncertainty. This result is likely due to the fact that horatian satire possesses high levels of both ambiguity of message goals and ambiguity of message meaning. Alternatively, editorials possess low levels of both dimensions of ambiguity used in this study. What this indicates is that exposure to political messages that can be categorized as horatian satire are potentially inciting confusion and lack of understanding about the message itself, at least more so than political messages that can be categorized as news and editorials.

Horatian satire also invites uncertainty about what the individual thinks about the message (e.g., interest level, assessment of the arguments) (see Figure 8). If individuals cannot confidently claim they understand the message meaning, then it follows that they cannot confidently claim they have strong evaluations about the message (i.e., self-uncertainty). Interestingly, the horatian and juvenalian satire mean difference of self-uncertainty was significant. Participants held more confident evaluations of the hard-hitting, bitter juvenalian satire compared to the more subtle, gentler horatian satire. Both
messages were designed to suggest the same solution (eliminate older people from the population in order to help solve the economic problems), but the ambiguity of message meaning and the language used to convey that ambiguity (e.g., “killing” the elderly in the juvenalian satire versus “phasing” them out in the horatian satire) was more present in the horatian satire.

This highlights the importance of distinguishing satire. Traditionally, communication scholars have not differentiated political humor, let alone satire, in their work (e.g., Gruner, 1965, 1966; Powell, 1978), but this study’s results add support to recent empirical work that argues there is a need to differentiate satire (e.g., Holbert et al., in press; LaMarre et al., 2009). At times, horatian satire and juvenalian satire may attempt to convey similar meaning, but the strategies and explication of the goal may differ and cause divergent results. Such was the case with significantly different scores of self-uncertainty between horatian and juvenalian satire. Thus, this dissertation provides empirical support for literary criticism work in English that outlines conceptual differences between horatian and juvenalian satire.

The differences between the message-uncertainty graph (Figure 7) and the self-uncertainty graph (Figure 8) reveal that not all uncertainty behaves the same. When the proposed interaction was graphed (see Figure 3), the theoretical arguments were based by-and-large on thoughts concerning message-uncertainty. I believed that message-uncertainty would be the most frequent type of uncertainty in the discussion (this was nearly the case, only source-uncertainty frequency was greater than message-uncertainty, see Table 3). Thus, when proposing hypotheses, message-uncertainty took center stage.
and all four types of uncertainty were hypothesized to function in a similar fashion. However, results show that is not the case. A more nuanced theoretical approach to the four types of receiver-based uncertainty is needed so alternative predictions can be made in the future. For example, as mentioned above, the two types of satire in this study incited significantly different levels of self-uncertainty. In fact, the horatian satire mean for self-uncertainty was more similar to the news and editorial means for self-uncertainty. It is possible that evaluations and reactions to the message are formed stronger and with less uncertainty when there is a bitter, angry, and upfront style that is typical to juvenalian satire. This is just one example of more nuanced reasoning about the specific differences among the four types of uncertainty. In future theorizing, the four types of receiver-based uncertainty will be considered more uniquely when constructing hypotheses.

The discussion hypotheses (H4a through H8d) address the communicative process of receiver-based uncertainty. Twenty discussion groups of five people (with the exception of five groups that had less than five people) were conducted in order to observe the communication patterns after exposure to a political message with varying levels of ambiguity. While there was a significant influence of group on all six discussion dependent variables (as evidenced by the ANOVAs and ICCs), the ICCs were relatively small compared to other studies that use groups (e.g., see Reid & Ng, 2006). A group-by-stimuli interaction did not become significant until more than 22.5% of the variance in the dependent variable could be attributed to the group. In other words, message-uncertainty’s ICC was $\sigma = .225$ and this did not cause a significant group by stimuli
interaction, yet source-uncertainty’s ICC was $\sigma = .351$ and did cause a significant interaction.

On a related note, source-uncertainty was the only dependent variable that was influenced by a group-by-stimuli interaction. This finding, as well as the results for the discussion hypotheses in general, echoes the importance of distinguishing among the four types of receiver-based uncertainty. To elaborate, source- and message-uncertainty are highly correlated concepts in the pre-discussion receiver-based uncertainty measures (i.e., zero-order $r = .828$). Yet, as previously mentioned, source-uncertainty expression was highly dependent on group membership, much more so than message-uncertainty, which has no significant group by stimuli interaction. This indicates that it took a group member to focus especially on the issue of source-uncertainty, and that once focused upon by one member others joined in to discuss the topic. Recall that all groups were asked the same questions and given the same amount of time to answer each question. So even though all groups were asked the source-uncertainty questions, only in some groups did a group member harp on the issue of source and incite other comments about source-uncertainty from group members. The range of source-uncertainty expressions across a given condition’s groups delineates this effect. For example, within the horatian satire condition, four groups had less than two source-uncertainty expressions and one group had 11 source-uncertainty expressions (see Table 4). This type of pattern is also apparent in the juvenalian satire and editorial conditions as well, where one or two groups exhibit a much larger frequency of source-uncertainty expressions compared to the majority of the other groups. Alternatively, the frequency of message-uncertainty expressions across a
given condition’s groups was more stable. Using the horatian satire condition as an example again, message-uncertainty expressions ranged from five to 11 expressions among all five groups. Moreover, there is no correlation between the number of source-uncertainty expressions and the number of message-uncertainty expressions made by an individual in the discussion, \( r = .005 \) (see Appendix O for a correlation matrix of the four types of uncertainty expressions).

All of the current discussion speaks to the task of keeping source- and message-uncertainty theoretically and operationally distinct. Source-uncertainty deals with confusion about the author’s reasoning and purpose behind the message, while message-uncertainty concerns confusion with elements of the message itself. Because of the divergent results of source- and message-uncertainty (i.e., source-uncertainty H7a was not significant and message-uncertainty H7b was significant), there is evidence they are indeed unique concepts and this dissertation has moved forward in conceptually and operationally distinguishing them in the discussion. However, more time needs to be given to operationalizing the closed-ended source- and message-uncertainty items due to the high correlation \( (r = .828) \).

Going back to the overall discussion hypotheses results, it is clear that satire (messages with higher levels of message ambiguity of goals) encourages the expression of uncertainty in the form of both questions and statements. Satire does this more so than news and editorials. This shows that, as a whole and not differentiating among the type of uncertainty, satire spurs uncertainty disclosure in group discussion. Ambiguity of message meaning (H5a through H5d) did not significantly impact uncertainty expression.
Thus, it appears that ambiguity of message goals is more influential in inciting uncertainty expression compared to ambiguity of message meaning.

The significant results of H7b—the increased frequency of message-uncertainty expressions with satire—is consistent with the results of the pre-discussion uncertainty hypothesis about message-uncertainty (H1b). In other words, participants self-reported higher levels of message-uncertainty before the group discussion about satirical message began, and they subsequently communicated more message-uncertainty about the satires during group discussion. Participants were willing to share their self-reported message-uncertainty with the group. Moreover, there was no group by stimuli interaction, which provides stronger support for this finding.

Likewise, there was no group by stimuli interaction for the significantly higher levels of self- and other-uncertainty expression in satirical messages (H7c and H7d). Recall that there was not a significant difference between satire and news/editorials for self-reported, pre-discussion self-uncertainty and other-uncertainty. However, the finding of significant differences for self- and other-uncertainty expression still makes sense. It is possible that once discussion about the message began, participants became aware of other interpretations of the message and saw the potential for others, beyond the discussion group, to react differently to the message. Indeed, confidence was lower for how others will react to satire, compared to news/editorials, according to results for H7d. Therefore, although there are no pre-discussion differences in self- and other-uncertainty between satires and news/editorials, there are uncertainty expression differences. It is also of note that the mean self- and other-uncertainty remarks were relatively low compared to
source- and message-uncertainty. This could reflect the nature of the moderator’s discussion questions or the relative lack of concern about what oneself and others think about the message. Instead, participants devoted more attention to negotiating why the author wrote the message, what type of message it was, and what the message meant.

The non-significant results for H8a through H8d again illustrate the dominant finding that messages with high ambiguity of message goals (horatian and juvenalian satire) contribute to more uncertainty expression than messages with high ambiguity of message meaning (horatian satire and news). In short, satires confuse people more than news and editorials, which encourages them to discuss their confusion. However, in the pre-discussion uncertainty hypotheses, there was significantly more message- and self-uncertainty in horatian satire and news compared to juvenalian satire and editorials. Although, when examining the means closely, it is evident that the horatian satire means are contributing relatively more to those effects (message-uncertainty pre-discussion $M = 4.97$, self-uncertainty pre-discussion $M = 3.19$) than the news means (message-uncertainty pre-discussion $M = 3.69$, self-uncertainty pre-discussion $M = 3.08$).

Moving beyond the specific results of this project and to a bigger picture perspective, this dissertation contributes to the communication discipline in several respects. (1) Current theories and lines of inquiry into political discussion focus on mass media as motivation for discussion. While mass media certainly play a large role at initiating political discussion (Eveland, Morey, Tchernev, & Landreville, 2010), I offered a specific cognitive process (uncertainty) in response to mass-mediated messages as a potential influence on political discussion.
(2) The application of interpersonal communication theories to political discussion is a developing research area. URT was proposed as a theoretical framework from which to approach political discussion because politics is inherently complex and multidimensional. The process of uncertainty arousal from four types of political messages was analyzed, as well as the process of uncertainty expression in subsequent group discussion of the political messages.

(3) This line of research in the intersection of interpersonal and mass communication is relatively uncommon. Previous uncertainty research has largely focused on interpersonally-based uncertainty. Therefore, four types of receiver-based uncertainty were conceptually and operationally explicated, with scales developed for each type. These measures were developed and refined over the course of several samples. They were subjected to confirmatory factor analysis using structural equation modeling. The final measures were shown to be empirically solid and continued to be theoretically grounded.

(4) Two dimensions of message ambiguity were outlined in order to provide nuance to the study of satire and news. Specifically, ambiguity of message goals and ambiguity of message meaning were described in relation to satire and news. Both dimensions of ambiguity were independently conceptualized and manipulated in the discussion group experiment. Satire (horatian and juvenalian) represents relatively higher levels of ambiguity of message goals, and news (traditional and editorial) represents relatively lower levels. For ambiguity of message meaning, high levels exist in horatian
satire and traditional news, whereas low levels exist in juvenalian satire and editorial news. Results reveal the necessity to differentiate satire.

(5) A multimethod approach was used to investigate a communicative process. First, self-report surveys where participants privately reported their uncertainty were used. Second, discussion groups where participants openly conversed about their uncertainty were conducted. By using both approaches, more confidence is warranted in the overall assessment that satire arouses more uncertainty than news. The discussion groups provided a venue for uncertainty expression about the messages. In doing so, this dissertation not only measured outcomes of communication (i.e., receiver-based uncertainty generated from political messages), but also examined actual communication patterns about a mass-mediated political message. The discussion questions revolved around the four types of receiver-based uncertainty that were developed earlier in the dissertation. Thus, the development of a codebook and the content analysis of the discussion groups for the four types of uncertainty also contribute to the literature. Future investigations into receiver-based uncertainty can use the theoretical and operational definitions, as well as the codebook for coding discussions that involve receiver-based uncertainty.

Limitations

One set of limitations concerns the stimuli. A single political issue—the economy—with a single focus—the ability of young people to find jobs—was chosen as the topic for all the stimuli. This topic was chosen by undergraduate students, who were the participants in all phases of the study, and was deemed the most interesting topic to
discuss. Without any further data collection into this area of research, it is difficult claim the results of this study could not be attributed to a high-interest issue that is personalized toward the audience. Additionally, only one message for each condition was created and the messages were texts. This brings up the issue of how representative each message was of its respective category. While the manipulation checks showed that the messages functioned as planned in terms of their dimensions of ambiguity, there was a tension with prioritizing experimental control over ecological validity that may have diminished the representativeness of the horatian satire.

In other words, the horatian satire used in this study is less reflective of horatian satire in its purest form because it needed to provide the same solution to the audience as the juvenalian satire (i.e., eliminate the elderly), but in a different style. The need for consistency between the two satires took away from the even higher levels of ambiguity of message meaning that would have otherwise been present for the horatian satire. This decision in the stimuli design process is illustrated by the several revisions made to the horatian satire. At first, the horatian satire was true to its purest form, but too dissimilar to the juvenalian satire and was significantly less funny. Then, the second version was too parallel to the juvenalian satire. The third version that was used in the study was an appropriate balance of consistency with the juvenalian satire’s message and representativeness of a traditional horatian satire.

This discussion highlights the presence of a continuum of ambiguity of message goals and a continuum of ambiguity of message meaning, as opposed to nominal categories that messages tend to get assigned. This study framed the four stimuli as more
or less nominal—fitting into specific categories of high and low ambiguity dimensions. Perhaps a more nuanced conceptualization of the ambiguity dimensions is warranted. Specifically, there is a continuum of ambiguity of message goals and a continuum of ambiguity of message meaning. For example, satire, generally speaking, is on the high end of the continuum of ambiguity of message goals, and news, generally speaking, is on the low end. Yet, there are many degrees of ambiguity that suggest hybrid messages, such that there can be a satire that is largely horatian, yet also has some qualities of a juvenalian satire. See the continuum below in Figure 11. Messages can fall anywhere on the continuum and the labels provided below are there for reference. In this study, the horatian satire lies somewhere in between the horatian satire and juvenalian satire on the continuum. In sum, more work needs done on testing multiple media messages using multiple political topics and multiple media channels (e.g., visual and audio).

![Figure 11. Continuum of Ambiguity of Message Goals.](image-url)
Likewise, further limitations exist due to the prioritization of experimental control over ecological validity. For example, it is likely an uncommon occurrence that participants would encounter a media message with merely an author’s name and an article title, without any larger media organization identified, especially on television or in mainstream newspapers. This lack of context in the experiment may have inflated uncertainty arousal and expression—source- and message-uncertainty, in particular. However, today’s diverse and extensive media environment, especially on the Internet, may provide more opportunities for individuals to encounter unknown and difficult-to-classify media sources. Moreover, the lines between entertainment, news, and opinion are increasingly blurred, creating a hybridity across genres and messages (Holbert & Young, in press). This would create an environment where it is challenging for the individual to get a good grasp on the context of the message, thus arousing uncertainty. Nevertheless, in a future study, it would be worthwhile to provide participants a message with an identified media organization in order to judge how results compared to this study.

Experimental control over the online discussions also took precedence when determining the composition of the discussion groups. Individuals who did not know one another were used as participants in the discussion, which may have created artificially high levels of uncertainty. Specifically, as strangers, who do not know one another’s political stances, background, or experiences, more other-uncertainty could have been aroused than would have otherwise. Using participants who know one another and are regular political discussants would reduce this potential problem with artificially high levels of other-uncertainty. Furthermore, additional other-uncertainty measures should be
developed that focus on varying levels of social distance to the individual. The items used in this study were very broad and directed at “other people” in general. However, the third-person literature reveals that social distance (i.e., how close and similar one is to the target “other” group) and specificity of the “other” (i.e., how much identification and background information is provided to the individual) influences our third-person evaluations (Paek et al., 2005). Therefore, specification of a more specific other group and varying groups of social distance may alter the way other-uncertainty is aroused and expressed during discussion.

Another potential source of inflated levels of uncertainty during discussion is the moderator. As outlined in the Method chapter, when instances of uncertainty were expressed by participants, the moderator probed the participants for more details about that uncertainty. This may have created more elaboration about the uncertainty than would have otherwise occurred, and thus, more uncertainty expression among all participants. However, the moderator used the computer-view in the control room in order to see if other participants were typing in response to a given participant’s uncertainty expression, and the moderator waited until there was a lull in natural conversation about the expressed uncertainty to probe participants. It would be helpful to examine the online discussions at the very beginning of the conversation where the moderator invited participants to share initial thoughts about the messages. This occurred before any uncertainty-focused questions or any probing about others’ uncertainty. Isolating these initial reactions to the message and examining those natural uncertainty expressions would be an important step to take in understanding the uncertainty arousal.
and uncertainty expression process. Perhaps the satirical messages would still arouse more initial uncertainty expression than the news and editorial. A future study could include this insight.

Another limitation is the online platform used for discussion. Online chats may encourage relatively more uncertainty expression than face-to-face conversation because of the anonymity afforded by online discussions. Both mediated and non-mediated political discussion involving uncertainty should be investigated to examine whether uncertainty arousal and expression is similar across contexts (Walther, Gay, & Hancock, 2005). A future study could compare the uncertainty expression from the face-to-face discussion data, which served as the exploratory discussion groups, to the online discussion data.

On a related note, one may ask if the discussion groups used in this study are focus groups. While focus group literature was essential in developing the structure and logistics of the discussion groups, the discussion groups used in this study were not exactly representative of a focus group. These discussion groups were more experimental in that specific hypotheses were posited before conducting the discussions and the moderator already had a general sense of the outcomes of the discussions. In the true sense of a focus group study, the researcher is supposed to continue collection of focus group data until no more unique responses, opinions, and insights arise from the groups (Morgan, 1998a). This did not occur because the number of discussion groups was predetermined in order to create a sufficient sample size for quantitative analysis. Thus, this study surely does not reflect a “traditional” focus group study; however, the focus group
literature played a large role in enlightening the researcher on the logistics, question design, structure, and moderation of the discussion groups.

Another important limitation to note regarding the discussions is the lack of knowledge about the participants’ true intentions and meaning with their language use. In other words, uncertainty expression may not have been true uncertainty; rather, uncertainty expression may have been a form of polite conversation so as to not step on anyone’s toes during the discussion. Politeness theory posits that people engage in face-saving acts such as politeness in order to avoid face-threatening social interaction (Brown & Levinson, 1987). Participants may not have wanted to appear pushy or over confident about their opinions and views. A question mark or “I don’t know” expression after an otherwise opinionated statement was categorized as an uncertainty expression. However, it is possible that the participant was not in fact uncertain. Unless participants are asked to categorize their own expressions as true uncertainty or as polite language, it is impossible to claim that all uncertainty expressions coded in this dataset were true uncertainty expressions. Nevertheless, judging by the similar pre-discussion results for message-uncertainty, in that the satires created more pre-discussion message-uncertainty than news and editorials, it is likely that the majority of uncertainty expressions were indeed uncertainty rather than politeness. Also, the relative anonymity of an online chat discussion, as opposed to a face-to-face discussion, may have encouraged more honest and open expression. There was no large need to be polite to one another during an online discussion where participants did not know or see one another.
Finally, one may ask if uncertainty arousal and expression occurs in real-world political conversations and if these results can be replicated outside of the laboratory. While there is no evidence to directly answer that inquiry, there is support for general uncertainty expression in political conversations. In a September 2009 statewide survey of Ohio registered voters \((N = 226)\), respondents reported on a scale of (1) ‘not at all’ to (5) ‘all the time’ how often they mentioned confusion, uncertainty, and lack of information in their political conversations \((M = 3.08, SD = 1.06)\). As a comparison, they were also asked how often they found themselves persuading others or expressing their opinion when they initiated conversation about politics \((M = 3.12, SD = .96)\). There is no statistically significant difference between the two discussion attributes, \(t(df = 211) = .413, p = .68\). Therefore, uncertainty expression attributes of political conversations appear to be just as common as persuasive and opinion expression attributes of political conversations. This data provides evidence that uncertainty in politics and discussion does exist in the real world.

One question that does arise is to what extent uncertainty is actually reduced in the real-world through discussion. Also, uncertainty reduction may not always be the goal after uncertainty arousal. Uncertainty management theory posits that oftentimes people want to maintain uncertainty or increase uncertainty to manage their relationships and wellbeing. It is possible that people with differing political viewpoints want to maintain uncertainty or increase uncertainty about one another’s opinions concerning particular political happenings. The goal may be to facilitate a more harmonious relationship rather than reduce uncertainty. Future research in the connections among uncertainty, politics,
and communication should consider to what extent uncertainty reduction is a primary goal, as opposed to other uncertainty management techniques.

Future Research

Several suggestions for future research have already been mentioned in the discussion thus far. These include: (1) theorizing a more nuanced approach to predicting how the four types of receiver-based uncertainty will be aroused and expressed, (2) using multiple political topics and multiple media messages and outlets as stimuli in experiments, (3) requesting that participants explain the intent of the uncertainty expressions, whether it was truly uncertainty expression or merely polite language, (4) attempting to replicate these results outside the laboratory and with a different demographic, and (5) moving beyond uncertainty reduction as a communication goal and considering uncertainty management options.

Several other future research projects also lie ahead. One such project concerns examining another type of uncertainty reduction strategy that may have been used in the online discussion experiment: passive uncertainty reduction. This dissertation focuses on active uncertainty reduction by content analyzing the uncertainty expressions among the participants. However, it is possible that passive uncertainty reduction may have also occurred. Specifically, passive strategies involve listening, eavesdropping, and observing conversations to better understand the message. One study could investigate how many expressions occurred before a given participant expressed uncertainty. The longer a participant waited in the discussion to express uncertainty indicates a more passive uncertainty reduction strategy, whereas the quicker a participant expressed uncertainty...
indicates a more active uncertainty reduction strategy. People who took longer to express uncertainty may be more akin a lurker than a participant actively attempting to reduce uncertainty.

Differences in passive and active strategies may also relate to individual-difference variables like willingness-to-self-censor (Hayes et al., 2005a, 2005b) or communication apprehension (McCroskey, 1982). Several communication and psychological scales were measured in the initial survey participants completed while waiting for discussion to begin. Future research could address how these personality and communication attributes play out in influencing pre-discussion uncertainty arousal, uncertainty expression during the discussion, and the uncertainty reduction strategy used in the discussion. For example, there are pre-discussion and post-discussion uncertainty measures that can be used to assess if people with different levels of WTSC and communication apprehension had similar levels of self-reported uncertainty, yet expressed uncertainty in different ways during the conversation. I would predict that WTSC and communication apprehension would influence uncertainty expression more so self-reported uncertainty both before and after discussion, with individuals high on WTSC and communication apprehension expressing less uncertainty.

Moving in another direction, it would be worthwhile to probe if the pre-discussion uncertainty items mediate the relationship between message exposure and uncertainty expression during discussion. Mediation analysis can better examine the communication process from message exposure to uncertainty arousal to uncertainty expression (Hayes, 2009). Both the language of uncertainty (i.e., question-asking and non-question
uncertainty expression) and the type of uncertainty (i.e., the four types) can be examined in such a mediation analysis. I would predict that it is not necessary for pre-discussion uncertainty arousal to occur in order for uncertainty expression to exist during discussion. This is because it may only take one person in a group to arouse uncertainty in others during the discussion, which subsequently causes uncertainty expression from the other group members. However, given the nuanced nature of the four types of uncertainty, perhaps there is significant mediation for a particular type of uncertainty. For instance, self- and other-uncertainty were not as frequent in this dataset as source- and message-uncertainty. This may be due to the possibility that high levels of pre-discussion uncertainty needed to be present in order for expression to occur.

Although this study found that satirical messages incited more receiver-based uncertainty and encouraged more uncertainty expression than news and editorials, future research should continue to untangle how the four messages types (with varying levels of ambiguity of message goals and message meaning) compare and contrast. This study’s findings cannot claim that uncertainty arousal from news and editorials never occur. It would be an important contribution to the literature to investigate when and how news messages arouse uncertainty and influence discussion. This effort is warranted because participants in this dissertation frequently mentioned receiver-based uncertainty that went beyond the scope of the message stimuli (see Note 5). Because politics is inherently multifaceted and controversial, confusion is bound to occur, even with traditional news stories. For example, a few groups discussed uncertainty that originated from different
media reports emerging from Fox News Channel and CNN. The dialogue below from one group illustrates this idea:

Participant 2: What confuses me is when I watch Fox News, or CNN I cannot tell how much of what I am watching is really the truth. It seems to me I don’t know which outlet to believe. I just don’t trust it.

Participant 4: I watch both news outlets and then form an opinion. I don’t feel that I can trust either!10

The participants above are having a difficult time navigating the news landscape and uncertainty arousal occurs as a result.

Moving beyond politics onto other contexts, uncertainty likely plays a role in communication effects. For example, one participant said, “I have been confused about news reports based on scientific studies, I’ve later gone and looked at the studies and they don’t say what the news reporters did.” That prompted the discussion below:

Moderator: Participant 3 mentioned looking up studies to help her reduce the confusion. What else do can you do, or do you do?

Participant 5: Most of the times that George W. Bush spoke, I was both confused and greatly humored at the same time.

Participant 2: I’ll ask family and friends.

Participant 1: same.11

These examples of group discussion show that people do become confused by political media messages (and other types of medias messages as well) and use many techniques to reduce this uncertainty (e.g., exposure to multiple media outlets, information seeking,
discussion). Thus, it is worthwhile for future research to investigate uncertainty arousal with news contexts, even though this study found relatively lower levels of uncertainty in news compared to satire.

Another prospective study idea that can be offered concerns the third step of the uncertainty process (i.e., the extent to which discussion reduces uncertainty). This dissertation examined the first two steps of uncertainty arousal and uncertainty expression, but did not assess uncertainty reduction. According to URT, communication serves to reduce uncertainty. However, it is possible that discussion about an ambiguous political message may arouse further uncertainty within an individual. Although no research has measured post-discussion confusion or uncertainty per se, past research has found that discussion in politically diverse circles does not necessarily increase issue knowledge (Feldman & Price, 2008). Thus, it is important to inquire about how discussion impacts uncertainty across time. One research question in this train of thought is: Has any type of uncertainty reduction occurred as a result of group discussion? This question requires repeated measures (i.e., self-reported uncertainty before and after the discussion, which was collected for this dissertation but not analyzed). This would be an important question to consider when moving forward with this line of research.

A moderated-mediation analysis could be tested with such a research inquiry. The three variables involved in the mediation could be pre-discussion self-uncertainty, expressed self-uncertainty, and post-discussion self-uncertainty, whereas expressed self-uncertainty mediates the relationship between pre- and post-discussion self-uncertainty. The moderating variable could be the message type. For example, juvenalian satire was
significantly lower on pre-discussion self-uncertainty than the other messages (see results for H3). This means that people, on average, had more certain evaluations of the juvenalian satire. However, if a very uncertain person was present in the group and expressed that self-uncertainty, it is possible that post-discussion self-uncertainty (as measured in a self-report survey) would be higher than the pre-discussion self-uncertainty, but only as a result of the presence of high levels of expressed self-uncertainty in the discussion. Thus, message type moderates the whole mediation process. This could be tested using a multiple-group model in SEM.

Clearly there is a myriad of future endeavors using this dataset in particular and this line of research in general. This dissertation has made solid ground in advancing the literature in uncertainty, political communication, and the intersection of mass communication and interpersonal communication. Many more years worth of research questions have been generated by this study.
References


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Appendix A: The New Yorker Magazine Cover July 2008

Figure 12. The New Yorker Magazine Cover that Appeared during the 2008 Presidential Campaign and Sparked Controversy and Confusion.
Appendix B: George W. Bush and MLK Cartoon

Figure 13. The New Yorker Cartoon Used in the Political Cartoon Study.
Appendix C: The New Yorker Political Cartoon Quiz

Figure 14. The New Yorker Political Cartoon Quiz.
Appendix D: Horatian Satire Stimulus (Word Count = 758)

For the last few years, the economy has been rather a tough sell. How do you instill confidence that jobs will open up, government spending will go down, and unemployed people won’t keep trying to beg money from what turn out to be other unemployed people? Fortunately, our leaders have come together on a unanimous plan of action.

In a joint agreement between Democrats, Republicans and a very eager set of business leaders, the elderly are being phased out over a five-year period.

That’s right. The bull market is coming back, baby!

With the “elder round-up” being implemented in controlled stages, our leaders thus have solved the problem of employees whose skill set has gone out of date. At the same time, by the way, they’ve also fixed Social Security, solved the health care crisis and prevented about 70 percent of our low-speed traffic accidents.

Of course, that leaves us with a couple of problems: How do we make up for the jobs that our elderly have been doing, and how do we keep from becoming elderly ourselves?

Our aged still do fulfill several functions in the marketplace. So, with the enforced expulsion of oldsters to the tolerant nation of Denmark, America now finds itself with a desperate shortage of museum docents, polling place workers, tenured professors, small town city councilmen, inspirational relics from World War II and Pete Seeger. It’s up to all of us to pick up the slack. Volunteer at library book sales. Complain about the air conditioning in movie theaters. Get suckered by an Internet scam. Break a hip.

But since no one can get old anymore, you’ll still have to change with the times. Quickly. Technology is now moving at the speed of light – which, due to technology, by the way, is no longer the fastest speed. One of the reasons we have to pack up all those old people onto a plane (at a net economic loss, because of all those damn AARP discounts) is that they couldn’t even turn on a computer – and once they got on, they still got their email through AOL.

Yes, it was amusing to watch. But obsolescence can strike any of us, at any time. The very software used to type this article will be phased out in three weeks. Unless you upgrade your computer, you could be classified as old by as early as next summer. Indeed, entire professions are being retired. For instance, I doubt we’ll hear many objections next year when Congress outlaws stockbrokers. Brokerages have had approximately the same record of success recently as the Seattle Mariners. So they’ll be
replaced with goats. Just regular goats. We’ll spread out a copy of the Wall Street Journal and let goats chew on the stories and stock listings that show the most promise. So far, our test goats already have demonstrated a brilliant grasp of economic realities by consistently ignoring the editorial page.

So, to keep up with the changing market, all job seekers are advised to bone up on the following subject areas:

– The anatomy of the sea cow. There really isn’t time to explain this, but, long story short, all future office software will be based on the particularly large pouch connecting the ileum with the ascending colon of the manatee’s large intestine. Learn it.
– Newton’s second law of motion and Dalton's law of partial pressures, but not Newton’s first law of motion or Eotvos’ law of capillarity, both of which no longer apply to the current physical universe.
– The latest plotline for the TV show “Burn Notice.”
– How to make salt.

Get yourself caught up in these areas, and you should adapt quickly to a rapidly changing world – a fresh, vibrant world where no one is old and Billy Crystal never shows up in another movie. Just remember three very important things:

1) Newton’s First Law of Motion, which has aged out, used to say, “An object at rest tends to stay at rest.” Since this no longer applies, look out. Stuff is going to start flying everywhere.
2) The Seattle Mariners are not actually the worst team in baseball (that would be the Washington Nationals), therefore stockbrokers are not actually the worst predictors of stocks (that would be Jim Cramer). And finally …
3) The elderly are being phased out over a five-year period. Wait … Did I already mention that? I’m forgetting stuff lately. … Uh oh, I hear helicopters …
Appendix E: Juvenalian Satire Stimulus (Word Count = 748)

Let’s face it, the adjective “New” never bodes good things: New Coke, New Age, New Jersey -- all horrible experiments that turned out badly for everyone involved. The New Economy is no different.

It sounds exciting: maximizing output while minimizing costs! Asset Based Economy! Limitless possibilities! Blogosphere! But beneath its shiny 2.0 exterior, the New Economy has a dirty little secret: it’s going to screw the little guy. You. Yes, you, the eager young undergrad, the witty freelance writer, the snarky dwarf accountant; you are all little and screwed. Sure, they tell you the possibilities of the New Economy are limitless but there is a limit to that limitlessness.

It’s called reality.

See, the New Economy is all about streamlining and you are a potential speed bump on the progress highway. The workforce of the New Economy is being downsized. One computer is doing the job of six of you. Competition amongst you and workers of all ages is on the rise. It’s like GLADIATOR but with resumes and portfolios instead of swords and those cool axe things. To survive, you are going to need a strategy.

I have that strategy: kill everyone over 65.

I told you it was like GLADIATOR.

I know: “How Swiftian of me!” But this is no modest proposal. Kill them. Kill them all.

Allow me to elucidate in terms your college-educated mind can understand: less people = more jobs for you.

See how easy that is.

Why Old People? Why not everyone over 55? Or 45? Or 35? Great questions; here are some answers. First, I am 38. Second, you need a job. Third, I am not a monster. And finally, Old People become irrelevant as they age. They simply have nothing to offer the fast paced world of the twenty-first century. They are like VHS Tapes. They served their purpose, once upon a time, but in this era of DVD and Blu-Ray, VHS has become the opposite of whatever de rigeur means. I loved my VHS tapes but I threw away my VHS Tapes; threw them right in the garbage.
Before you get all judgmental about killing millions of Americans so you have a better chance of getting a job, there is a humane aspect to this plan. Due to economic hanky-panky within the New Economy, Old People are forced to work past the age of retirement to supplement their income. I don’t care how much fun he has in the commercials, a retired Mailman (sorry, “Mail Carrier”) with 40 years on the job does not want to spend the twilight of his years saying “Welcome to McDonalds, can I take your order?” He’d rather be eating at that McDonalds. (Well, drinking their coffee.) Killing him, and millions like him, will put them out of their misery with dignity and respect while leaving the McDonalds’ job open for you.

Speaking of jobs and killing Old People: killing Old People creates jobs! I can bet you dollars to donuts that 82% of the Old People out there will not just walk in off the street and say: “I’m ready to die, Sonny.” We are going to need people to bring them in. A New Industry is born! The New Economy loves innovation, awarding it with grants, articles in WIRED Magazine and jobs. Such a venture would require at least ten-thousand jobs and I haven’t even begun to talk about training, construction, disposal and cuisine.

That means New Jobs. For you. You!

Plus, killing all the Old People has long reaching fiduciary benefits. You essentially eliminate Medicare and Social Security payments putting about $1.6 trillion back into the economy. That is your money. You earned it. Well, they earned it, but they’ll be dead so they won’t need it. You need it now and your children need it soon. $1.6 trillion buys a lot of Health Care, Education and Grief Counseling. If that doesn’t stimulate your package, I don’t know what will.

I know this is a controversial strategy. I also know that it is a brilliant one. While this may seem extreme, just remember that Old People were once like you. They were young, they had their shot and they thrived. That was the Old Economy. Now it’s your turn. If you are feeling guilty take comfort in the knowledge that someday, you too will end up like them and it will be your turn to go. That’s the other dirty little secret of the New Economy -- eventually everyone gets screwed.
The unemployment rate unexpectedly dipped to 9.7 percent in January, from 10 percent in December, the government reported Friday, buoying hopes that the worst job market in at least a quarter-century is finally improving.

But a different survey in the Labor Department’s report found that the economy lost 20,000 net jobs during the month, muddying the picture and underscoring the formidable struggles still confronting millions of Americans. Yet with the pace of decline slowing, most experts focused on signs that the economy was recovering after the longest recession since the Great Depression.

Health care, long a bright spot in a dismal economy, grew by 17,000 jobs. Economists attributed the continued boom in health care to an aging population. Older Americans spend 12.5% of their total expenditures on health, more than twice the proportion spent by all consumers, according to the U.S. Department of Health & Human Services.

The older population—persons 65 years or older—represented 12.8% of the population in the year 2009, and they are expected to grow to be 20% of the population, or 71.5 million Americans, by 2030.

“This opens a myriad of job opportunities in the health care industry,” said Alison Lockhart, a professor of economics at Stanford University. “Jobs that cater to the elderly include nurses, physician assistants, doctors, physical therapists, pharmacists, pharmaceutical companies and sales, and the office and clerical jobs that support them.”

Lockhart noted that health care jobs often place high on lists of “best jobs” that account for pay, job growth potential, and quality of life. For example, physician assistants, nurse practitioners and physical therapists place in the top 10. Anesthesiologists, pharmacists, occupational therapists, nurse anesthetists, and physicians make the top 20.

Some say the growth in health care jobs to treat the elderly comes at a heavy cost to young Americans.

“Putting a strain on the average American family is the fact that every single penny of 2009 federal tax revenue went to pay for mandatory spending programs, such as Social Security and Medicare,” said Eugene Steuerle of the Urban Institute. “This implies higher tax rates, less growth and fewer opportunities. Already, pension costs in many states are squeezing education spending.”
Also consider that baby boomers and the aging population will be holding onto their jobs longer.

During past recessions, older workers simply would have retired rather than search want ads and apply for jobs, said John Beard, director of the Department of Ageing and Life Course at the World Health Organization.

“But these days, with outstanding mortgages, bank loans and high medical bills, many of them cannot afford to be out of work,” Beard said. “Many seniors complain that federal spending programs designed to help them, such as Social Security and Medicare, are helpful and critical, but aren’t enough.”

Although the debate about the benefits and challenges of an aging population will continue for decades to come, there is no doubt that any job growth in this recession is a good thing.

“The economy is continuing to improve,” said John E. Silvia, chief economist at Wells Fargo in Charlotte, N.C. “You don’t have a boom, but you have an economic recovery. It’s a positive sign.”

Despite encouraging indications for the future, the government’s monthly snapshot of the labor market revealed that last year’s collapse was considerably more severe than previously recorded. And the report came wrapped in substantial statistical uncertainty, intensifying debate about the staying power and vigor of the apparent recovery.

The Labor Department revised previous data to show that the economy contained 1.36 million fewer jobs in December, a downward adjustment of roughly 1 percent. The revisions showed the economy lost 150,000 jobs in December, far more than the 85,000 initially reported.

In calculating the unemployment rate, the report used new census estimates of the population, an annual adjustment. That prompted some economists to dismiss the drop in the jobless rate as a statistical quirk, though the Labor Department said the change was negligible.

“Everyone goes crazy over today’s number,” said Joshua Shapiro, chief United States economist at MFR Inc. in New York, “but history has been rewritten.”

Shapiro focused on the economic anxiety and tight finances that still grip many households, suggesting this would dampen consumer spending, which represents more than two-thirds of the economy. That would keep employers reluctant to hire.

“The question is, what is the rate of improvement going to be?” he asked. “Very slow.”
Other job sectors that grew were retail, professional and business services, manufacturing and temporary workers.
Appendix G: News Editorial Stimulus (Word Count = 769)

We like to think that in days gone by, the young respected the elderly. But that wasn’t always so. In “As You Like It,” Shakespeare’s morose character, Jaques, calls old age “second childishness and mere oblivion.” Walt Whitman hoped that the monotony and pettiness of his senior years would not infect his poetry.

Developmental psychologists, when they treated old age at all, often regarded it as a period of withdrawal. The elderly slowly separate themselves from the world. They cannot be expected to achieve new transformations. “About the age of fifty,” Freud wrote, “the elasticity of the mental processes on which treatment depends is, as a rule, lacking. Old people are no longer educable.”

And all of us feel those unpleasant side effects of aging—mainly in our pocketbook and bank account. You see, we are living in an age where, far from serving the young, the old are now taking from us. First, they are taking our money. According to Julia Isaacs of the Brookings Institution, the federal government now spends $7 on the elderly for each $1 it spends on children and young people.

Second, old people are taking away freedom. In 2009, for the first time in American history, every single penny of federal tax revenue went to pay for mandatory spending programs, according to Eugene Steuerle of the Urban Institute. As more money goes to pay off promises made mostly to the old, such as Social Security and Medicare, the young have less control and less freedom.

Third, they are taking our opportunities. For decades, federal spending has hovered around 20 percent of G.D.P. By 2019, it is forecast to be at 25 percent and rising. The higher tax rates implied by that spending will mean less growth and fewer opportunities. Already, pension costs in many states are squeezing education spending.

And finally, old people are actually taking away jobs. During past recessions, old workers simply would have retired rather than search want ads and apply for jobs. But these days, with outstanding mortgages, bank loans and high medical bills, many of them can’t afford to be out of work. Many seniors complain that Social Security and Medicare, though helpful and critical, aren’t enough.

So now while the oldsters are still pulling in that monthly government check, they are also competing with us young people for the same limited number of jobs. This is devastatingly disconcerting.
Ask the average American what he or she wants most, and the likely answer will be a job. Just look at projected unemployment. The Council of Economic Advisors foresees 10% unemployment through the rest of 2010, falling only to 9.2% in 2011. The result is a giant drag on the economy, not to mention pain for millions of American families.

Americans want to pay their own way: Feed, clothe and house themselves. That is their No. 1 priority, and it should be the government's priority to ensure this happens. Working Americans pay taxes, which increases the government's income and reduces the deficit. Working Americans rely less on government programs such as unemployment benefits, food stamps and the like, which raise government spending.

Unfortunately, a major obstacle for the new economy and job creation is the elderly—they suck up resources, plain and simple. So are there any good options as to how to solve this geezer crisis?

I used to think that political leaders could avert fiscal suicide. But it's now clear that change will not be led from Washington. On the other hand, over the past couple of years we've seen the power of spontaneous social movements: first the movement that formed behind Barack Obama, and now, equally large, the Tea Party movement.

Spontaneous social movements can make the unthinkable thinkable, and they can do it quickly. It now seems clear that the only way the U.S. is going to avoid an economic crisis is if the oldsters take it upon themselves to arise and force change. The young lack the political power. Only the old can lead a generation revolution—millions of people demanding changes in health care spending and the retirement age to make life better for their grandchildren.

It may seem unrealistic—to expect a generation to organize around the cause of nonselfishness. But in the private sphere, you see it every day. In the private sphere, seniors provide wonderful gifts to their grandchildren, they give them loving attention that will linger in their young minds and provide support for decades to come. Old people now have the time, the energy and, with the Internet, the tools to organize.

The elderly. They are our future.
Appendix H: Receiver-Based Uncertainty Measures

For the analyses of the hypotheses and research questions, all items were coded whereas higher numbers on the scale indicated more uncertainty and lower numbers on the scale indicated less uncertainty.

**Source-Uncertainty Items (1 strongly disagree and 9 strongly agree)**
1. I am confident I understand the author’s motives for writing this article. (reverse-coded)
2. I know what the author was trying to say with this. (reverse-coded)
3. It is obvious to me why the author wrote this article. (reverse-coded)
4. The author’s motives for writing this article are clear. (reverse-coded)

**Message-Uncertainty Items (1 strongly disagree and 9 strongly agree)**
1. I understand this article. (reverse-coded)
2. It is clear to me what this article is trying to say. (reverse-coded)
3. I am confident that I am interpreting the information and arguments in the article correctly. (reverse-coded)
4. I am certain I understand the implications of the information and arguments in the article. (reverse-coded)
5. I don’t really understand the implications of this.
6. The message this article is trying to send is clear. (reverse-coded)

**Self-Uncertainty Items (1 strongly disagree and 9 strongly agree)**
Now think about your reaction to the article you just read. The article was…

**Funny Parcel (Parcel 1)**
1. Funny
2. Entertaining
3. Witty

**Interesting Parcel (Parcel 2)**
1. Interesting
2. Boring (reverse-coded)
3. Engaging

**Balanced Parcel (Parcel 3)**
1. Balanced
2. Biased (reverse-coded)
3. One-sided (reverse-coded)
Now think about your reaction to the article’s arguments and information. The article was…

Believable Parcel (Parcel 4)
1. Believable
2. Plausible
3. Questionable (reverse-coded)
4. Realistic

Balanced Parcel (Parcel 5)
1. Good
2. Wise
3. Logical
4. Strong
5. Appropriate

Other-Uncertainty Items (1 strongly disagree and 9 strongly agree)
1. I can see how other people may think differently than me about this article. (reverse-coded)
2. This article can have many different interpretations to people. (reverse-coded)
3. People can take away different messages from this. (reverse-coded)
4. I know what other people will think about this article. (reverse-coded)
5. People can have a different understanding of this article. (reverse-coded)
Appendix I: Codebook

**Code for the following:**
Condition Type: Choose One.
1. Horatian
2. Juvenalian
3. News
4. Editorial

Group Number: Choose One.
9. Group 9 – Horatian Session 1 – 4.8.10 @ 10:30 a.m.
10. Group 10 – Editorial Session 1 – 4.8.10 @ 3:30 p.m.
11. Group 11 – News Session 1 – 4.9.10 @ 10:30 a.m.
12. Group 12 – Juvenalian Session 1 – 4.9.10 @ 1 p.m.
13. Group 13 – Editorial Session 2 – 4.9.10 @ 3:30 p.m.
14. Group 14 – Juvenalian Session 2 – 4.12.10 @ 10:30 a.m.
15. Group 15 – News Session 2 – 4.12.10 @ 3:30 p.m.
16. Group 16 – Horatian Session 2 – 4.13.10 @ 10:30 a.m.
17. Group 17 – Juvenalian Session 3 – 4.13.10 @ 3:30 p.m.
18. Group 18 – News Session 3 – 4.14.10 @ 10:30 a.m.
19. Group 19 – Editorial Session 3 – 4.14.10 @ 3:30 p.m.
20. Group 20 – Horatian Session 3 – 4.22.10 @ 10:30 a.m.
21. Group 21 – Juvenalian Session 4 – 4.22.10 @ 1 p.m.
22. Group 22 – Horatian Session 4 – 4.22.10 @ 3:30 p.m.
23. Group 23 – Editorial Session 4 – 4.23.10 @ 10:30 a.m.
24. Group 24 – News Session 4 – 4.23.10 @ 1 p.m.
25. Group 25 – News Session 5 – 4.23.10 @ 3:30 p.m.
26. Group 26 – Horatian Session 5 – 4.26.10 @ 10:30 a.m.
27. Group 27 – Editorial Session 5 – 4.26.10 @ 1 p.m.
28. Group 28 – Juvenalian Session 5 – 4.26.10 @ 3:30 p.m.

Individual: Provide the details that are requested below.
CaseID number: 150
Screen name: student.subject.3
Name Used in Discussion: Kristen

**Instructions:**
Find the point in the online discussion where moderator asks the question, “People can have a host of reactions to the article you just read. What thoughts and feelings do you have about the article?”

Note: The moderator is labeled “me” in the transcripts.

Now begin searching for questions and uncertainty expressions.

Do not code questions or uncertainty expressions by the moderator.

Ensure you have a copy of the article in front of you while coding. This will help understand any references to the message.

When a student says “I agree” with another student’s uncertainty expression, then use the exact same codes for that student.

**Language of Uncertainty: Choose One.**

1. Questions with punctuation
   - Questions with punctuation are defined as statements that end with “?”
   - Any statement that ends with “?” will be coded.
   - Examples:
     i. The opinion page of a local newspaper?
     ii. Do you guys all regularly read UWeekly?
     iii. Will this happen to us?
     iv. I found it funny as in why the hell would he even bring up killing people?

2. Questions without punctuation
   - Questions that begin with typical question-asking words, but do not actually use a “?”
   - Examples:
     i. Who thinks Obama is a good president
     ii. What do you think
     iii. Where is the article from
     iv. When was the article written
     v. Why did the author write this
     vi. How can you think that
     vii. Can you elaborate

3. Non-Question Uncertainty expression
Uncertainty expression is defined as statements that express uncertainty, confusion, misunderstanding, or lack of understanding, lack of knowledge, lack of clarity, hesitation, ambiguity, and indecision.

Some example words and phrases to look for:

i. Uncertainty
   - It is troubling and scary because there is so much uncertainty of what is going to happen in the future.

ii. I don’t know.
   - I don't know I've met people who didn't understand that American Pyscho was a joke or more similarly to this that Swift wasn't kidding.
   - That sounds lazy, but I wouldn't/ don't know what to do.

iii. I’m not sure
   - I'm not sure what type of article it is.

iv. I wonder
   - I wonder who his target audience was…

v. Having no idea, having no clue
   - Especially since I have no idea who the author is or if he's credible at all

vi. Not understanding or not getting it
   - There have been times when I didn't get what an ad was trying to get across.
   - Sometimes you don't fully understand the topic or they use words you are unfamiliar with.
   - Most of time hard to understand why

vii. Doesn’t make sense.
   - The economy is important but I think the way to do it doesn't make sense.

viii. Confusion
   - I am usually confused during political campaigning season.
   - Also, for example, with this new health care bill, there are so many confusing reports the best way for me to understand is just to read the bill, which I have started doing.
   - For me, not listening to it or watching it can confuse me with the type of message they are trying to get out

ix. I guess
   - I guess it's just another representation of selection.
   - I guess to pick on the economy!

x. Sort of
   - I would say sort of yes

xi. Kind of
• I usually hear her talking about one thing or another and we kind of look stuff up together when we have the chance.

dii. Somewhat
• I feel that this article is somewhat optimistic in quite a few of the things it said.

diii. Maybe
• Maybe the author was trying to convey an underlying message to motivate young people to work hard.
• Maybe to make us realize that jobs are hard to get.

dxiv. May or may not
• Hard work may or may not pay off.

dxv. Getting lost or being lost
• The article was biased and in which case I lost the purpose of this article.

dxvi. Might
• Someone might be horrified to think that someone wants to kill everyone over 65.
• You might not have full knowledge of what the article is about.

dxvii. Perhaps
• Perhaps it meant that old people aren’t good with technology.

dxviii. Possibly or possibility
• There’s a possibility that old people may not like this article.

– Code a participant’s seemingly contradictory statements about being uncertain as uncertainty expressions.
– Examples:
  i. The news is confusing... for sure. But that’s a given. It’s a big world.
  ii. It’s not the information that’s confusing, it’s understanding what channel or source to believe over another [that’s confusing].
  iii. Not confusing, if anything was confusing it was the idea of why they would want to kill older people.
  iv. If I learned anything it would be wondering why people would have thought about this solution

– Code a participant’s confirmatory statements of others’ uncertainty as uncertainty expressions. And ensure you thoroughly read the transcripts in order to understand if uncertainty was expressed. Sometimes, it evolves after several lines of text and refers to previous statements.
– Example: All of the following statements would be coded as an uncertainty expression.
  i. Jessica: I was confused about the sea cow thing.
  ii. George: I agree.

– Again, ensure you thoroughly read the transcripts in order to understand if uncertainty was expressed. Sometimes, it evolves after several lines of text and refers to previous statements.
– Example: All of the following statements would be coded as an uncertainty expression.
  i. Me: James mentioned that there is uncertainty about the future, was there anything uncertain, confusing, subtle, or ambiguous about the article or its implications?
  ii. Chellie: I think the fact that they said that there was a loss of 20,000 net jobs from one survey and the other said that it was a slight decline.

4. Multiple Language Usage
– When more than one type of language expression is used in the same statement, then code as multiple language usage.
– Example:
  i. Jason: I don’t know if I learned anything; I guess maybe I learned about Corey Larson?

**Type of Uncertainty: Choose One.**

1. Source
– Conceptually, source-uncertainty is defined as the message’s intentions—both the message creator’s intentions (i.e., the individual who constructed the message) and the message’s sources’ intentions (i.e., the individuals present within the message who deliver the message).
– Operationally, source-uncertainty is defined as any questions or uncertainty expressions directed toward the author (i.e., Corey Larson), the purpose of the article (i.e., why the author wrote it), or the categorization of the article (i.e., what type of article the author wrote).
– **Note:** These are author-related, purpose-related, and categorization-related only. Any general questions about the article or uncertainty expression do NOT get coded here.
– **Note:** Students may have used “they”, “he”, “she”, or “you” for referencing the author. Ensure the student is referring to the author and not another student or other people in general. Use context and previous statements by the student in order to help code correctly.
– Examples:
i. *Maybe the author* was trying to convey an underlying message to motivate young people to work hard.

ii. The article was biased and in which case *I lost the purpose of this article*.

iii. I found it funny as in *why the hell would he* even bring up killing people?

iv. Who is *Corey Larson*?

v. Is the *author* trustworthy or credible?

vi. *I’m not sure* what *type of article* it is.

vii. *Was it supposed to be satire?*

viii. *Maybe* the article is an *opinion piece*?

2. Message

   - Conceptually, message-uncertainty is defined as the message’s descriptive or explanatory meaning.
   
   - Operationally, message-uncertainty is defined as any questions or uncertainty expressions directed toward understanding the meaning or interpretation of the message (i.e., either specific parts of the article or the article in general).

   - **Note:** Any confusion about specifics in the article itself or confusion in general (NOT about the author, purpose, or categorization) is message-uncertainty.

   - Examples:

     i. The *part about the anatomy of the sea cow* kind of *confused me I guess*.

     ii. Kristen, *when was this article written*?

     iii. The *phasing out the elderly part* was *confusing*.

     iv. As a whole, the *article* was *confusing*.

3. Self

   - Conceptually, self-uncertainty is defined as the individual’s own meta-thoughts and meta-feelings about the message’s meaning.

   - Operationally, self-uncertainty is defined as any questions or uncertainty expressions directed toward the participant’s personal reaction to the article.

   - **Note:** Self-uncertainty goes beyond confusion about the message. It is NOT confusion about specific parts of the article or about the article in general. It is personal reactions to the article (NOT the author) are questions or uncertainty expressions about:

     i. Humor, how funny/entertaining/humorous/witty/clever the article was.

     ii. Interest, how interesting/engaging/boring the article was.

     iii. Bias, how biased/balanced/one-sided the article was.

     iv. Believability, how realistic/plausible/questionable the article was.
v. Strength of arguments, how good/wise/strong/logical/appropriate the article was.

vi. Positive/negative of the article

− Examples:
  i. *I guess* it was *funny*.
  ii. *I don’t know* what to say about it being *boring*.
  iii. It *sort of* seemed *one-sided* to me.
  iv. *I don’t know* to believe the article or not.
  v. *I’m not sure* if the arguments were *good* or not.
  vi. *I don’t know* if the story was *positive or negative*.

4. Other

− Conceptually, other-uncertainty is defined as the individual’s thoughts and feelings of what another person or group thinks and feels about the message’s meaning.

− Operationally, other-uncertainty is defined as any questions or uncertainty expressions about the article and directed toward any other participant or how other people would interpret the article.

− Other-uncertainty is questions/uncertainty about anticipating other’s reactions.

− Examples:
  i. *People* can take it personally there's no question, *I guess it's just the type of reader you are*.
  ii. If I learned anything it would be *wondering why people would have thought about this solution*.
  iii. I cannot really imagine anyone agreeing with this article, but then again who knows

5. Source, Message, Self, and Other – Beyond the Article

− Any questions or uncertainty expressed beyond the article.

− When a student responds to my question with their own question that attempts to clarify my question…then code this: uncertainty beyond the article. Again, it still may relate to the article, but their question serves to clarify my question.

− Example:
  i. me: What was the purpose of the article?
  ii. Teresa: What do you mean by purpose?

− Source-uncertainty beyond article is confusion about the authors of other messages, the purpose of other messages, or categorization of other messages. Examples:
  i. *I don’t know* why *Sarah Palin* says the things she does.
  ii. Everything *Lady Gaga* does *confuses me*.

− Message-uncertainty beyond article is confusion about the message content of other media messages. Examples:
i. I'm confused about what is going on in the news all the time, but it's obvious that our economy and nation is in a blender.

ii. I get confused about the Geico commercials.

– Self-uncertainty beyond the article is defined as any questions or uncertainty expressions directed toward the participant’s experiences beyond the article. Examples:
  
  i. I don’t know whether I should laugh when I watch South Park.

– Other-uncertainty beyond the article is defined as any questions or uncertainty expressions beyond the article and directed toward any other participant or other people, beyond the article. Examples:
  
  i. If you don’t mind me asking, what country are you from, Tina?
  ii. Did you vote in the last election, Pedro?
Appendix J: Demographic and Psychological Scales Survey

Thank you for your participation.

Instructions
Please indicate the extent to which you agree or disagree with each of the following statements by circling an appropriate number on the scale for each statement.

Please read each statement carefully before responding. Although some statements may appear similar and repetitive, each deals with a unique part of your opinions.

Use your initial reaction, your first impression.

[Note: Scales were labeled from (1) “strongly disagree” to (7) “strongly agree.” For formatting purposes, the numerical scale options were deleted. Also, the subheadings that label each set of psychological questions did not appear on the actual survey that participants completed.]

Willingness to Self-Censor
1. It is difficult for me to express my opinion if I think others won’t agree with what I say.
2. There have been many times when I have thought others around me were wrong but I didn’t let them know.
3. When I disagree with others, I’d rather go along with them than argue about it.
4. It is easy for me to express my opinion around others who I think will disagree with me.
5. I’d feel uncomfortable if someone asked my opinion and I knew that he or she wouldn’t agree with me.
6. I tend speak my opinion only around friends or other people I trust.
7. It is safer to keep quiet than publicly speak an opinion that you know most others don’t share.
8. If I disagree with others, I have no problem letting them know it.

Communication Apprehension (Group Dimension)
1. I dislike participating in group discussions.
2. Engaging in a group discussion with new people makes me tense and nervous.
3. Generally, I am comfortable while participating in group discussions.
4. I am tense and nervous while participating in group discussions.
5. I like to get involved in group discussions.
6. I am calm and relaxed while participating in group discussions.
Need for Levity
1. I am a connoisseur of humor.
2. I prefer situations where people are free to express their senses of humor.
3. I enjoy being with people who tell jokes or funny stories.
4. I often read jokes and funny stories.
5. I enjoy being around quick-witted people.
6. I need to be with people who have a sense of humor.
7. I prefer non-humorous to humorous people.

Need for Closure (Ambiguity Dimension)
1. I don't like situations that are uncertain.
2. I feel uncomfortable when I don't understand the reason why an event occurred in my life.
3. When I am confused about an important issue, I feel very upset.
4. I like to know what people are thinking all the time.
5. In most social conflicts, I can easily see which side is right and which is wrong.
6. I dislike it when a person's statement could mean many different things.
7. It's annoying to listen to someone who cannot seem to make up his or her mind.
8. I feel uncomfortable when someone's meaning or intention is unclear to me.
9. I'd rather know bad news than stay in a state of uncertainty.

Need for Closure (Closed-mindedness Dimension)
1. Even after I've made up my mind about something, I am always eager to consider a different opinion.
2. I dislike questions which could be answered in many different ways.
3. I feel irritated when one person disagrees with what everyone else in a group believes.
4. When considering most conflict situations, I can usually see how both sides could be right.
5. When thinking about a problem, I consider as many different opinions on the issue as possible.
6. I prefer interacting with people whose opinions are very different from my own.
7. I always see many possible solutions to problems I face.
8. I do not usually consult many different options before forming my own view.

Affinity for Political Humor
1. I appreciate political humor because it can reveal the weaknesses of our political leaders and institutions.
2. I appreciate political humor because it can make me feel more knowledgeable about politics.
3. I appreciate political humor because it can aid me in reinforcing my political beliefs.
4. I appreciate political humor when it makes me aware that our political system is dysfunctional.
5. I appreciate political humor because it can help me express my political opinions.
6. I appreciate political humor because it can reduce the anxiety I feel toward politics.
7. I appreciate political humor when it helps me make better sense of why our political system is dysfunctional.
8. I appreciate political humor because it can help me better cope with awkward situations.
9. I appreciate political humor because it can help me effectively criticize politics and politicians.
10. I appreciate political humor because it allows me to be friendly with people who hold political views that are different from my own.
11. I appreciate political humor because it allows me to form stronger bonds with people who hold similar political views as my own.

Locus of Control
1. Many of the unhappy things in people's lives are partly due to bad luck.
2. People's misfortunes result from the mistakes they make.
3. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
4. Getting a good job depends mainly on being in the right place at the right time.
5. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
6. Most people don't realize the extent to which their lives are controlled by accidental happenings
7. By taking an active part in political and social affairs the people can control world events.
8. There really is no such thing as "luck."

People can have different goals for a nation. There are 4 goals listed below. Please choose your top two goals. Use a ‘1’ to indicate what you feel should be the most important goal for the country among those listed below. Use a ‘2’ to indicate what you feel should be the second-most important goal.

______To maintain order in the nation.
______To have the freedom to express your ideas.
______To maintain a high rate of economic growth.
______To have more say in the decisions of the government.

The final section covers basic demographic questions.

What is your biological sex?
_____Male
_____Female

What is your age (as of last birthday)? ______
What is your race?
- ______ African-American or Black
- ______ Asian-American
- ______ Caucasian or White
- ______ Hispanic
- ______ Native American
- ______ Other

What is your class rank at Ohio State?
- ______ Freshman
- ______ Sophomore
- ______ Junior
- ______ Senior

What is your major(s)?
_________________________________________________________________

About how much income does your family earn per year?
- ______ less than $25,000 per year
- ______ $25,001-$50,000
- ______ $50,001-$75,000
- ______ $75,001-$100,000
- ______ $100,001-$150,000
- ______ more than $150,000

Do you currently have a paying job or paying internship?
Circle one:    Yes   No

Do you have a paying job or paying internship arranged for the summer?
Circle one:    Yes   No

Do you have a paying job or paying internship arranged after you graduate?
Circle one:    Yes   No

[Note: The following statement had response options from (1) “strongly disagree” to (7) “strongly agree.”]

My friends have been successful at finding jobs after they graduate from college.

[Note: The following statements had response options from (1) “no interest at all” to (7) “extremely interested.”]

What is your level of interest in the economy and economic news?
What is your level of interest in job-related news?

[Note: The following statements had response options from (1) “no attention at all” to (7) “a great deal of attention.”]

How much attention do you pay when you come across economic news?

How much attention do you pay when you come across job-related news?

How many days do you discuss politics during a typical week?

How many days do you discuss the economy and job-related information during a typical week?

[Note: The following questions had response options from (1) “very conservative” to (7) “very liberal.”]

Please rate your political ideology below.

How liberal or conservative do you consider yourself to be on social issues?

How liberal or conservative do you consider yourself to be on economic issues?

What political party do you identify with?

_____ Democrat [go to Q1]  _____ Other [go to Q2]

_____ Republican [go to Q1]  _____ None [go to Q2]

Q1: If you chose “Democrat” or “Republican”, how strongly do you identify with the party you checked above?

<table>
<thead>
<tr>
<th>Very Weak</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
</table>

Q2: If you chose “Other” or “None”, which one of the two major political parties do you consider yourself closer to regardless of issue?

_____ Democrat

_____ Republican

<table>
<thead>
<tr>
<th>Very Weak</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
</table>

How strong is this association? 1 2 3 4 5 6 7

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Appendix K: Moderator’s Script and Discussion Questions

Moderator’s Introduction and Instructions

[Note: For the face-to-face discussion groups, the references to Google Talk and online discussions were absent.]

Hi. Thanks for being here today. Please do not sign-out of the Google Talk account or surf the Internet at any time. Please complete the informed consent form and Survey 1 while we are waiting for everyone to arrive. Remember to print your name and class for extra credit on the sign-in sheet. When you're done with the informed consent and Survey 1, please give them to the research assistant and wait for the discussion to begin. Thank you.

Thanks for your patience if you have finished the survey and informed consent. You may give it to research assistant when you are done. You may work on written homework or reading while waiting to begin. Again, please don’t surf the Internet or sign-out of Google Talk. Thanks again for your patience. We’ll begin in about 10 minutes.

First of all, thanks for being here today. I’m really grateful for your help.

Please do not sign-out of the Google Talk account or surf the Internet at any time.

Please pay close attention to the discussion and do not engage in other activities during our time together. Please do not use your cell phone.

Please do not type anything until I invite participation.

Before we begin, it is important to note that everything that is said today is confidential. Please do not discuss the content of today’s session with anyone.

Let me also suggest some things that will make our discussion more productive. Please feel free to express your comments whenever you like. If you want to respond to others’ comments, you may do so as well. Or, if you want to change the direction of the conversation, in a slightly different direction, but still on the same general topic, you may do so as well.

You may choose to use a false first name in our discussion when you introduce yourself if you’re uncomfortable with revealing your real first name to the group. No matter if you use a false first name or your real first name, your comments made here today will not be associated with your name when we report our findings.
During discussion, please use your chosen name before everything you say. This is because all of the screen names say “Student”. Use the following format: Kristen – I think …

Last, my role here is to ask questions. I won’t be participating in the conversation, but I want you to feel free to talk with one another. I will be guiding the discussion with about a dozen questions and we’ll stop and read an article and fill out a survey during the discussion as well. Let’s begin.

First, I’ll introduce myself.

My name is Kristen Landreville. I’m a PhD candidate in the School of Communication here at OSU. I’m conducting these online focus groups for my dissertation, sort of like my final project for my schooling. I’ll be graduating this quarter and moving to Laramie, Wyoming to start a job as an assistant professor in the Department of Communication and Journalism.

Please all introduce yourselves now with your chosen name, year, and major. You may all type simultaneously, that’s fine.

Thanks for introducing yourselves. Like I said earlier, please type your chosen name before everything you type. Again, you may all type simultaneously, that’s fine.

Pre-Article Reading General Questions
1. OK, let’s get started with the general questions. First, let’s talk about the economy and jobs in general. What do you think about your job prospects when graduating college? Or, if you’re an underclassman (e.g., freshman), what do you think your job prospects are for getting a summer job or internship?

2. What do you see as barriers to getting a job?

   Remember that you can talk to one another, and not just answer the questions only.

3. OK, if you could give the President and Congress advice on how to improve the economy or help you out with finding a job, what are some broad solutions or advice you would give them? Or, if you don’t have advice, what thoughts or feelings would you share with them?

Instructions for Article Reading
Finish your current thoughts. Then we’re going to read a short article and complete a short survey by ourselves. The research assistant will be there soon to give you the packet of information.

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Please take your time reading the article and filling out the survey, there is no rush. We will be discussing the article after we all complete the survey.

Please don't leave the chat room or surf the Internet when you finish the article and survey. Just wait for me start the discussion again and ask the first question. Keep the packet for now.

Post-Article Reading Discussion Questions
OK, everyone is done now. Let’s get started with the discussion again.

4. People can have a host of reactions to the article you just read. What thoughts and feelings do you have about the article?

5. What was the purpose of this article?

6. What type of article do you think this article was? Why? What leads you to think this?

7. Was there anything confusing, subtle, or ambiguous about the article or its implications?

8. Why do you think there are different reactions to the article? OR, can you imagine people reacting differently to this article?

9. Do you feel like you’ve learned anything from this article?

10. Where would you see this article being published?

11. OK, now going beyond this focus group, have any of you ever felt confused with a media message before? For example, can you describe a time when you were confused about news, television, advertisements, or entertainment? It can be a specific example or a general experience.

12. What do you usually do when you feel confused by a media message? Do you talk to anyone about it?

13. Now looping back to our original discussion, do you feel the same about your job prospects after reading this article?

14. Would you give any different advice to government, Obama, or Congress now after reading this article?
**Conclusion of Discussion Group and Post-Discussion Instructions**

Finally, do you have anything else to contribute to the discussion? Any other thoughts, feelings, questions?

OK, please finish up your final comments. Thanks so much for your time again. Now the research assistant will come by your room and pick up your survey packet and distribute the final survey that is about this discussion itself.

Please ensure your same chosen name is on the survey packets.

Do not leave the room yet; just wait for the research assistant to open your door.

Please take your time to provide your honest comments on this last survey. When you are done, just leave the survey in your room and you may leave. Remember to keep this session private and not to discuss it with anyone else. It’s to protect our confidentiality. Thank you so much for your time. If you have any questions about the session today, please let me know via email at landreville.1@osu.edu. Thank you, **sincerely**.
Appendix L: Post-Article/Pre-Discussion Survey

You will discuss the article you just read once everyone is finished reading and completing this survey. Please do not type anything into the online discussion until the moderator of the focus group tells everyone it is OK to begin typing again. Keep your survey and article with you for reference during the discussion. You may look at both while participating.

Please take a few minutes to write your thoughts, feelings, and comments about the content, purpose, and arguments of the article you just read.

Please write any questions or reference any points of confusion you may have had about the article.

Please think about your reaction to the AUTHOR of the article you just read. Circle your answer.

The article’s author was…

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

Friendly
Likeable
Pleasant
Credible
Trustworthy
Please think about your reaction to the ARTICLE you just read. Circle your answer.

*The article was…*

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

Funny
Entertaining
Witty
Interesting
Boring
Engaging
Balanced
Biased
One-sided

Please think about your reaction to ARTICLE’S ARGUMENTS and INFORMATION. Circle your answer.

*The article’s arguments and information were……*

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

Confusing
Unclear
Straightforward
Complicated
Subtle
Clever
Believable
Plausible
Questionable
Realistic
Good
Wise
Logical
Strong
Appropriate
Please think about your understanding and reaction to the text you just read. Circle your answer.

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

1. I am confident I understand the author’s motives for writing this article.
2. I know what the author was trying to say with this.
3. It is obvious to me why the author wrote this article.
4. The author’s motives for writing this article are clear.
5. I understand this article.
6. It is clear to me what this article is trying to say.
7. I am confident that I am interpreting the information and arguments in the article correctly.
8. I am certain I understand the implications of the information and arguments in the article.
9. I don’t really understand the implications of this.
10. The message this article is trying to send is clear.
11. I can see how other people may think differently than me about this article.
12. This article can have many different interpretations to people.
13. People can take away different messages from this.
14. I know what other people will think about this article.
15. People can have a different understanding of this article.

Please think about your thoughts regarding the economy and jobs. Circle your answer.

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

1. I’m confident in my ability to get a job after I graduate.
2. The economy is going to improve in the next year.
3. I’m worried about getting a job when I graduate.
4. I’m worried about the economy.
5. I’m sure I can get a job shortly after graduation.
6. The economy is going to get worse in the next year.

Please mark ONE ‘X’ the category that best represents this article. This article is a…

____Traditional News Story  ____None of the Options Listed to the Left
____News Editorial/Column/Opinion  ____I Don’t Know
____Satire/Humor
Appendix M: Post-Discussion Survey

Please take a few minutes to write your thoughts, feelings, and comments about the discussion you just experienced.

Think about your original questions and thoughts about the article, before you engaged in the discussion. To what extent did the discussion answer your questions and change your original viewpoints. Circle your answer.

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

1. The discussion confirmed my original understanding.
2. The discussion helped me figure out what to think.
3. The discussion challenged my original viewpoints.
4. The discussion made me rethink my initial thoughts and opinions.
5. The discussion helped me understand things better.
6. The discussion supported my initial thoughts and opinions.
7. The discussion made me confused about what to think.
8. The discussion provided me with useful information to help me understand things.

Was there any part of the discussion that made you more confused or uncertain about something?

Yes

No

If Yes, please describe your confusion and how you became confused. What part of the discussion was it?

Did you learn anything from the discussion?

Yes

No
If Yes, what do you think you learned?

Was there anything that you did not express or share with the group that you wish you would have? In other words, did you withhold any information from the group (e.g., feelings, opinions, arguments)?

Yes  No

If Yes, then what didn’t you express? Describe what information you withheld?

Briefly explain why you withheld this information?

After discussing the article with others, you may now think differently about the author of the article and the article itself, or you may think exactly the same as you did before the discussion.

The article’s author was…

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

Friendly
Likeable
Pleasant
Credible
Trustworthy

Please think about your reaction to the ARTICLE you just read. Circle your answer.

The article was…

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

Funny
Entertaining
Witty
Interesting
Boring
Engaging
Balanced
Biased
One-sided

Please think about your reaction to ARTICLE’S ARGUMENTS and INFORMATION. Circle your answer.

The article’s arguments and information were……

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

Confusing
Unclear
Straightforward
Complicated
Subtle
Clever
Believable
Plausible
Questionable
Realistic
Good
Wise
Logical
Strong
Appropriate

Please think about your understanding and reaction to the text you just read. Circle your answer.

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

1. I am confident I understand the author’s motives for writing this article.
2. I know what the author was trying to say with this.
3. It is obvious to me why the author wrote this article.
4. The author’s motives for writing this article are clear.
5. I understand this article.
6. It is clear to me what this article is trying to say.
7. I am confident that I am interpreting the information and arguments in the article correctly.
8. I am certain I understand the implications of the information and arguments in the article.
9. I don’t really understand the implications of this.
10. The message this article is trying to send is clear.
11. I can see how other people may think differently than me about this article.
12. This article can have many different interpretations to people.
13. People can take away different messages from this.
14. I know what other people will think about this article.
15. People can have a different understanding of this article.

Please think about your thoughts regarding the economy and jobs. Circle your answer.

[Note: The following items used a (1) “strongly disagree” to (9) “strongly agree” scale. For formatting purposes, these were deleted.]

1. I’m confident in my ability to get a job after I graduate.
2. The economy is going to improve in the next year.
3. I’m worried about getting a job when I graduate.
4. I’m worried about the economy.
5. I’m sure I can get a job shortly after graduation.
6. The economy is going to get worse in the next year.

Please mark ONE ‘X’ the category that best represents this article. This article is a…

____Traditional News Story       ____None of the Options Listed to the Left
____News Editorial/Column/Opinion   ____I Don’t Know
____Satire/Humor
Appendix N: Screen Shots of Google Talk Interface

Figure 15. The Screen Shot of Online Discussion When Participants First Arrived to Experiment.
me: OK, so there's some differences of opinion. Why do you think there are different reactions to the article? OR, can you imagine people reacting differently to this article?

4:22 PM student.subject.1: Rob- because it's a touchy subject. there will always be controversy.
student.subject.3: Danielle- I think that people will get the same ideas out of this article but of course there will be controversy.
student.subject.4: Daryl- I agree with rob.

4:23 PM student.subject.2: James- yes of course, some can look at this article and say that this isn't a big deal. Others will say it's a huge deal. Some might also not believe the facts brought up. You can shape numbers to prove your point. I am sure you can find a whole bunch of pros signs if you look hard enough.
student.subject.5: Chellie- I agree with James a lot of stuff our based off polls and figures with no source behind it if u want ur side to be proven u will make ur argument sound believable
student.subject.3: Danielle- I agree

4:25 PM student.subject.1: Rob- and controversial "edgy" news is usually more popular for readers. whoever wrote this article probably works for some company and the more controversial he makes it, the more readers will be attracted to it.
student.subject.5: Chellie- of course whatever going to get u to sell that magazine.

4:26 PM me: So what exactly about this article is controversial or could cause controversy? Just trying to be clear here.
student.subject.1: Rob- the relative significance in the unemployment rate over one month and where the best places to work are and anything about old people.

4:27 PM student.subject.4: Daryl- The state of the economy, if its improving or not and where our tax dollars are going.
student.subject.3: Danielle- the issues with the unemployment rate and what's changing.
student.subject.5: Chellie- the fact that healthcare and unemployment

4:28 PM me: OK, thanks, that helps me understand now. What was the purpose of this article?
student.subject.2: James- ya he said that every single penny of 08 tax revenue went to mandatory spending, I find that hard to believe.

Figure 16. Screen Shot of Online Discussion.
Appendix O: Correlation Matrix of Uncertainty Expressions during Discussion

<table>
<thead>
<tr>
<th>Uncertainty Type</th>
<th>Source</th>
<th>Message</th>
<th>Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Message</td>
<td>0.005 ($p = .964$)</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td>0.069 ($p = .509$)</td>
<td>0.237 ($p &lt; .05$)</td>
<td>1.00</td>
</tr>
<tr>
<td>Other</td>
<td>-0.026 ($p = .800$)</td>
<td>-0.057 ($p = .587$)</td>
<td>0.002 ($p = .986$)</td>
</tr>
</tbody>
</table>
Notes

1. This study is in progress with the working title, *Public opinion perception and uncertainty arousal with political cartoons*. Emily Moyer-Gusé and Kristen Landreville collected data during November and December 2009 through an online survey that measured respondents’ reactions and interpretations to two political cartoons (N = 215).

2. The author has a bachelor’s of science degree in journalism from the University of Florida and professional journalism experience.

3. Zero-order correlations among the four types of uncertainty are similar to the AMOS standardized factor loadings: source and message $r = .828$, source and self $r = -.148$, source and other $r = .242$, message and self $r = -.176$, message and other $r = .196$, self and other $r = -.031$.

4. A final post-discussion survey was administered to participants in the exploratory and experimental discussion groups (see Appendix M for the post-discussion survey). This survey asked several open-ended questions about participants’ thoughts about the discussion experience, any lingering confusion, if they learned anything, and if they withheld any information during the discussion. Moreover, the *same receiver-based uncertainty questions* about the article that appeared in the post-article/pre-discussion survey were asked again. The purpose of this phase was to gauge how their personal reactions and uncertainty changed as a result of
the discussion. These data were not analyzed for this dissertation; however, these data will be used for future research. Nonetheless, for the matter of the dissertation, a CFA in AMOS 18 was performed on the post-discussion uncertainty measures to ensure the final measurement model that was established for the post-article/pre-discussion uncertainty measures was applicable. The 129 respondents from the face-to-face discussion groups \((N = 35)\) and online discussion groups \((N = 94)\) were used in the analysis. The measurement model showed a \(\chi^2 (df = 84, N = 129) = 116.7, p < .001\) and model fit statistics of CFI = .976 and RMSEA = .055 (90% confidence interval (CI) = .028 - .078). This model fit was satisfactory, which confirmed that the measurement model from the post-article/pre-discussion uncertainty analysis could also be applied to the post-discussion uncertainty measures. See Figure 6 for the final measurement model.

5. Uncertainty that was unrelated to the article was also coded. This encompassed any questions or uncertainty expressions beyond the scope of the article. Source-, message-, self-, and other-uncertainty that were unrelated to the article were all included in this category. Some examples are (1) “I don’t know why Sarah Palin says the things she does” and (2) “I’m confused about what is going on in the news all the time, but it’s obvious that our economy and nation is in a blender.” The purpose of coding these uncertainty expressions was to gauge how participants were elaborating on the article and making judgments about media confusion outside the article. This data was not analyzed for the dissertation, but it will be analyzed in future research using this dataset.
6. The initial survey requested demographic information and included several psychological and communication measures: willingness to self-censor (Hayes et al., 2005a, 2005b), communication apprehension of small-group discussions (McCroskey, 1982), need for levity (Cline, 1997; Cline, Altsech, & Kellaris, 2003), need for closure (Kruglanski, Webster, & Klem, 1993), affinity for political humor (Hmielowski, Holbert, & Lee, 2010), locus of control (Rotter, 1954, 1966, 1975, 1990), and materialist/post-materialist values (Inglehart 1977, 1990). These items were not used in the analyses of the hypotheses. However, these measures may be used in future research into this dataset.

7. There were no noticeable differences in the nature of these discussions, nor in the length of discussions. The average chat was 191.2 lines of discussion, with a standard deviation of 40.072. The first group with a technological problem (an editorial condition) had 118 lines of discussion, which was not significantly different than the average, $t(\text{df} = 19) = -1.827$. The second group with a technological problem (a horatian satire condition) had 165 lines of discussion, which also was not significantly different than the average, $t(\text{df} = 19) = -.654$.

8. Guetzkow’s $U = (\text{Coder A’s Total of Identified Units} - \text{Coder B’s Total of Identified Units}) / \text{Total Number of Identified Units}$. In this study, Coder A identified 84 unites and Coder A identified 86 units.

9. The equation used for calculating the ICCs is from Hayes, 2006, p. 394. Essentially, the intercept variance is divided by the intercept variance plus the estimated residual variance. In this study, the ICC represents the total variance in
the given dependent variable (e.g., question-asking) when the group is accounted for. The SPSS output used to calculate the variance estimates can be found in the “Estimates of Covariance Parameters” output box when an SPSS mixed model is specified (for details, see Hayes, 2006).

10. Participant comments taken from online discussion group conducted on Thursday, April 22, 2010 at 3:30 p.m. This group had the horatian satire as the stimulus.

11. Participant comments taken from online discussion group conducted on Monday, April 12, 2010 at 3:30 p.m. This group had the news story as the stimulus.