Effects of Content and Source Cues of Online Satirical News on Perceived Believability

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This thesis titled

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ABSTRACT

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Satirical news from websites such as onion.com have attracted news consumers into believing these stories as real. Hence, it is imperative to investigate the factors that attract news consumers into believing satirical news as true. This thesis examines content and source cues for levels of satire and source reputability to investigate their effects on perceived believability of satirical news across genres.

In experiment one, 80 participants viewed manipulated news stories measured as high and low on satire, while in experiment two, 64 participants viewed manipulated satirical stories with high-reputable and low-reputable sources from entertainment and science genres. Results show perceived believability is different across news genres. Satire in science stories is not easily perceived as high-satire science news is perceived more believable than high-satire entertainment news. Source reputability did not affect believability of satirical science news. Other findings and implications are discussed.
To my parents, Jayashree and Vilas, who taught me to be independent and honest and
gave me the freedom and opportunity to choose my path.
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‘Gallup polls finds an overwhelming majority of rural white Americans prefer President Ahmadinejad to President Obama,’ ‘Facebook to charge a monthly fee of $2.99’, ‘New Bond Film: “Sphinctre” to be out in October!’ Is there anything about these headlines that strikes as implausible? Maybe not, because news items such as those listed here from websites like the onion.com and the Borowitz Report mimic news so well that the stories seem real. In fact, a few examples of satirical news—defined as deliberate exposure of real-world individuals, organizations and events in order to ridicule them (Burfoot & Baldwin, 2009)— were believed to such an extent that many respected media outlets mistakenly published news from these websites as real (Koziol, 2014; Simon, 2012). For instance, Fox Nation published The Onion’s article ‘Frustrated Obama Sends Nation Rambling 75,000-Word E-Mail’, as a real news report; The People’s Daily, an online newspaper of the Chinese Communist Party credited the article ‘Kim Jong-Un Named The Onion’s Sexiest Man Alive For 2012’ as credible (Manker, 2012; Simon, 2012). Such incidents reflect upon the need to investigate what makes satirical news appear as believable.

Among the various factors affecting news believability are message content and outlets from which the stories are sourced (Metzger, Flanagin, Eyal, Lemus & McCann, 2003). As a result, this study investigates content and sources of satirical news manipulating the level of satire and reputability of sources to examine news believability. However, content of stories differs across news genres. Street (2011) suggests that believability depends on the conventions of a genre. Likewise, Bednarek & Caple (2012) and Gruber & Redkar (2014) state the form, content and purpose of the news is different
across genres. These differences might have an influence on news believability. Hence, the purpose of this thesis is to examine the effects of content and source cues of satirical news stories on perceived believability of such stories across the entertainment and science news genres. This research protocol, using other variables, has been tested in previous studies (Pew Research, 2012).

According to Metzger, Flanagan, and Medders (2010), Web users learn that news from a particular source is believable or credible because it has been subject to objective standards of reporting and fact-checking. Thus, they trust a news source as they experience it to provide credible news. They develop mental shortcuts or judgmental standards —defined as heuristics— to evaluate news (Chaiken, Liberman & Eagly, 1989). Based on this cognitive mechanism, this study draws on heuristic-systematic model of information processing to examine whether source and content cues make satirical news stories seem believable to online news consumers.

Heuristic processing depends on information cues (Chaiken, et. al, 1989), such as content and source cues, to make judgments. When there is an information overload, such as in an online environment, news consumers are less involved in the information and limit their information processing capacity (Gigerenzer & Todd, 1999; Pirolli, 2005; Sundar, 2008; Taraborelli, 2008; Wirth, Bocking, Karnowski, & von Pape, 2007). As a result of the constrained cognitive capacity, individuals depend on cues such as length of the article or experts’ opinion, defined as heuristic processing, to make judgments (Chen & Chaiken, 1999; Petty & Cacioppo, 1986; Xu, 2013). In this thesis, heuristic processing
is participants attending to cues of levels of satire and source reputation to judge the news believability.

Given that, due to information overload, online news consumers will resort to a heuristic processing mechanism to make judgments, especially about believability of satirical news articles. In a controlled experimental laboratory, college students from a Midwestern university will be exposed to satirical news articles across the entertainment and science genres to understand if satire and source reputation affect perceived news believability.

For the two types of experimental studies, student subjects will be randomly assigned to between-subject design to examine content cues (high on satire vs. low on satire), in one experiment and in another, source cues (high reputable source vs. low reputable source). Between-subject designs allows different subjects to be observed in different treatment conditions. As this thesis examines effects of two variables, content cues and source cues, under two conditions of high and low-satire levels and high and low-source reputability respectively, two separate experiments were conducted. To examine differences in news believability across news genre, a within-subject treatment was considered as the same group of participants read news stories of both entertainment and science genre. This was done to reduce effects on news believability due to individual differences. Also, because the content of the two news stories was different, it ensured that there were no carry-over effects due to familiarity in content.

An inquiry into the factors that make satirical news appear as believable will be of interest to news reporters, editors, online news consumers, politicians and policy makers
to differentiate satirical news from real news. This study provides users a better understanding of how to judge believability of information shared on social media such as Facebook, Twitter, and to keep a check on their news-sharing behavior on these sites.
CHAPTER 2: LITERATURE REVIEW

Heuristic-Systematic Information Processing

At sometimes, individuals make judgments based on the information they have learned or stored in their memory. Such judgment does not involve analytical thinking but makes use of minimum cognitive capacity (Chaiken, Liberman, & Eagly, 1989). Thus, believing a message because it is an expert opinion, or it is lengthy, without fully processing the semantic content of the message is defined as heuristic information processing (Eagly & Chaiken, 1993). On the contrary, in systematic processing, individuals comprehend and analyze the message to an extent that they exert maximum cognitive effort to evaluate the message before believing it (Eagly & Chaiken, 1993). This thesis extends this framework to processing of satirical news to judge their believability.

When individuals resort to heuristic processing, they rely on accessible context information, such as the identity of the source or other non-content cues, which they perceive to be believable than the characteristics of the message (Chaiken, 1980). However, during systematic processing, individuals attend to the reliability of the source, rather than its identity, and the validity of the message. This framework seems to underlie information processing in an online environment when individuals resort to reading through skimming and scanning—heuristic processing—which interferes with in-depth reading (Rosenwald, 2014).

When individuals read online, they browse and scan, look for keywords, read only one-time and more selectively, while less time is spent on in-depth and concentrated
reading (Liu, 2005). These online reading techniques can be argued to be cues to processing information online. Moreover, Liu (2005) suggested online reading is characterized by decreased sustained attention, or low-level cognitive involvement. Given the nature of digital reading, we expect that online news consumers make minimum efforts to scrutinize information online and are involved in heuristic processing of information. Thus, it can be assumed that online news consumers rely on content cues or mental shortcuts, such as keywords, while making judgments about the believability of online satirical news.

Both heuristic and systematic information processing mechanisms work together and independently (Chen, Duckworth & Chaiken, 1999). Whether the individual resorts to heuristic or systematic processing depends on factors of motivation and cognition. Motivational involvement increases the likelihood of processing information systematically (Chaiken, Liberman & Eagly, 1989). However, individuals resort to heuristic processing while reading information online due to constraints such as a lack of time or cognitive constraints such as lack of motivation, involvement or attention. The argument here is that the underlying mechanisms of the heuristic-systematic information processing model come into play while reading satirical news online, which affect the way individuals perceive online satirical news.

Online News Believability

News believability, or the extent to which audiences trust the news, has been looked at through the domains of source credibility and medium credibility. Source credibility is trust in the communicator’s characteristics while medium credibility is the
trust in the channel through which the message is delivered (Kiousis, 2001). This study extends news believability to the content of the message, defining it as the extent of trust audiences have in the news content. Thus, the goal is to investigate whether content cues in the form of high and low satire levels affect news believability.

Previous studies (Austin & Dong, 1944; Gunther, 1988; Hovland and Weiss, 1951; Sternadori & Thorson, 2009) have investigated factors that make news stories believable, but there is still insufficient knowledge in the popular genre of news satire. In the online news environment, news believability has been examined as a result of source expertise (Eun, Eun Hwa, & Mu, 2014; Greer, 2003; Go, Jung & Wu 2014), communication channels (Johnson & Kaye, 1998 & 2000) and context (Thorson, Vraga & Ekdale, 2010). However, there are no known studies on how online news consumers perceive satirical news as believable.

Over the past two decades, perceived web believability has been examined in comparison with believability of traditional communication channels of television, newspapers and magazines (Abdulla, Garrison, Salwen, Driscoll, Casey, 2005; Flanagin & Metzger, 2000; Johnson & Kaye, 1998; Kiousis, 2001) and on aspects of website types and features (Flanagin & Metzger, 2007), Web platforms such as blogs, political candidates’ websites and bulletin boards (Johnson & Kaye, 2009).

An examination of believability across communication channels suggests that online information is not as believable as news (Johnson & Kaye, 1998 & 2000). The type and perceptions of information along with experience in using the Internet predicted whether users will verify the information they encounter online (Flanagin & Metzger,
Additionally, the website types and sponsors also affect perceived believability. Users evaluate online information on the basis of website attributes such as design features, depth of content and site complexity. Although, information from the web is equally believed as information from television, radio and magazine, believability for news is not the same.

In a study, Flanagin & Metzger (2007) suggested that perceived believability was the highest for news websites followed by e-commerce and special interest sites; personal websites were rated the lowest. In the same vein, Johnson & Kaye (2009) found that blogs and issue-oriented websites were perceived most believable after the 2004 presidential elections in the United States. Moreover, when information was ranked high on a search engine, it led to an increase in website sponsor believability, which in turn increased perceived believability (Knobloch-Westerwick, 2013). However, an appealing website design had no effects on website sponsor believability, and thereby no effect on perceived believability. Even though these studies define believability on the internet, they do not specifically look at news believability of satirical news in the online environment.

News sources (Sundar & Nass, 2001), news viewing and ratings (Knobloch-Westerwick, Sharma, Hansen, Alter, 2005; Wu, 2013) and multimedia features such as presence of audio, video and photographs (Sundar, 2000) were examined to understand news believability in the digital environment. To study the effect of recommendations on online news believability, Xu (2013) studied the social bookmarking site digg.com and found that news stories with more ‘diggs’ were perceived to be more believable, worthy
to read, were clicked, read and shared more number of times than stories with a few ‘diggs’. Likewise, Knobloch-Westerwick and colleagues (2005) examined the effects of news recommendations in terms of ratings and number of views and found that ratings rather than number of views increased perceived news believability. In addition, highly rated stories were also viewed for a longer time (Knobloch-Westerwick et. al, 2005).

Among the various aspects that affect online news believability, content and context have also been examined. Opinion pieces, comments and blogs that surround a news story on a website act as judgmental standards for evaluating news believability. Thorson, Vraga and Ekdale (2010) placed news stories in the context of uncivil blog posts and in personal emails and found that blogger's incivility led to increase in perceived news believability such that stronger the incivility, the higher was the perceived believability. In terms of content, the presence of hyperlinks in news stories also increased news believability (Borah, 2014; Johnson and Wiedenback, 2009).

Through an examination of citizen journalism website Ohmynews.com, across story types — hard news, features and sports—Johnson and Wiedenback (2009) found that perceived news believability increased across all the three story types when hyperlinks were present along with information about the source. Although, Johnson and Wiedenback (2009) examine news believability across story types, they failed to examine how believability differs across the entertainment and science news.

A recent study on false information found that online users were more likely to believe and share false information from non-believable sources if they were highly involved in the information (Mocanu, et. al, 2014). Facebook activity of 2.3 million users
and interactions of 1,279 users was examined to investigate how users reacted to 2,788 false information post uploaded through trolls during the 2013 Italian elections. Through an analysis of ‘likes’ and ‘comments’ on these news posts sourced from news organizations and political debate pages, the researchers suggested users may be attracted to false information from non-believable sources because of the biasness in information. Although, Mocanu and colleagues examined the significance of sources in false information, they did not account for believability as a result of content cue, such as satire.
CHAPTER 3: NEWS SATIRE

Satire has been defined in a variety of ways with most scholars agreeing that the literary form aims to attack or ridicule something or someone with wit (Buchholz, 2013; Griffin, 1994). Through ridicule, parody, hyperbole and insult (Buchholz, 2013), satire seeks to persuade the audience to perceive the flaws of the object being ridiculed (Griffin, 1994). Satire targets those from the real world pointing out wrong in the social world in a humorous manner (Griffin, 1994). Thus, with an aim to persuade, satire tries to both educate and entertain (Holbert, Hmielowski, Jain, Lather & Morey, 2011). As a result, satire has been examined from its function of persuasiveness but its relationship with news believability has been ignored.

News satire consists of many textual forms, from faux news anchors who posture authoritatively at pretend news desks, to puppet shows, sketch comedies, and panel discussions (Baym & Jones, 2012). News satire, sometimes labeled as fake news (Baym & Jones, 2012), is defined as deliberate exposure of real-world individuals, organizations and events in order to ridicule them (Burfoot & Baldwin, 2009). The news is modeled on current issues and future events (Borowitz, 2013; fakingnews.com) and seem “credible to a casual and unsuspecting audience” (Koziol, 2014). Because of the nature of satirical news, this study explores factors which make satirical news appear believable.

Popular news satire websites in the United States such as onion.com and The New Yorker’s Borowitz Report, from which this thesis draws its experimental stimuli, are growing in number making it difficult for the news audience to decipher which sources are real (Barron, 2015). These websites mimic real news stories to such precision that
their satirical versions are believed as real news. Moreover, Jenkins (n.d) states satirical stories are written in a convincing manner that makes it difficult for news consumers to decipher that their content is completely fabricated for entertainment. Novak (2015) suggests sensational content of these websites has deluded reputable news sources such as *The New York Times* (Novak, 2015), *The Washington Post*, *Fox News* and *USA Today* into believing their stories as true (Barron, 2015). On the contrary, Novak (2015) and Rensin (2014) observe that stories on satirical news websites lack parody and humor, which makes them appear factual.

The nature of the Internet and social media makes it easier to disseminate satirical news stories. Additionally, the Internet has created a need to deliver stories speedily. As a result, Barron (2015) observes journalists are under constant pressure to get more news in limited time, which draws them to satirical news. Furthermore, satirical websites deliberately post and share their stories on social media (Barron, 2015) to increase their clicks and likes and get more visibility for the websites (Rensin, 2014). Sharing this news on social networks takes them away from the original source, thereby making it difficult to decipher authenticity (Barron, 2015).

In the same vein, the Web has made it easier for individuals to develop their own hoax news websites or generate hoax news stories (Novak, 2015). For instance, *Global Associated News* allows users to choose the name of a celebrity or a sportsperson and generates multiple hoax stories about them. The news appears to be sourced from a website called *Global Associated News*, which also allows readers to share the news on Facebook and Twitter.
Content generators are providing guidelines to help online news consumers detect and limit the spread of hoaxes in the form of satirical news (Barron, 2015). For instance, Facebook introduced a new tool that allows users to flag a post as “a false news story” (O’Donovan, 2015). A website, Literally Unbelievable, catalogues incidents where satirical articles have been misunderstood (Novak, 2015).

Onion.com

Headquartered in Chicago, Illinois, The Onion has about 80 employees. Onion.com calls itself America's finest news source, an award-winning publication covering world, national, and local issues (onion.com). In 2009, it was awarded a Peabody Award that noted “the satirical tabloid’s online send-up of 24-hour cable-TV news was hilarious, trenchant and not infrequently hard to distinguish from the real thing”. The Onion also runs a non-satirical entertainment section called The A.V. Club (onion.com).

Like a reputable newspaper website, onion.com is updated daily, has sections on politics, sports, science/tech, local, entertainment and parenting. The stories match journalistic standards, are written in inverted pyramid style, have a dateline, quotes and photographs. They are shared on Facebook, Twitter, Google Plus and the videos are watched on YouTube. According to Wikipedia, onion.com parodies traditional news websites with stories, editorials, op-ed pieces, and man-in-the-street interviews, using a traditional news website layout and an editorial voice modeled after that of the Associated Press. Its humor often depends on presenting mundane, everyday events as newsworthy, surreal or alarming.
Two students of University of Wisconsin-Madison, Tim Keck and Chris Johnson founded The Onion in 1988 with the intention of selling pizza coupons (npr.org). Initially, the publishers’ focused on the parody of local events (npr.org). The publication launched its website in 1996. However, the print edition, which was in business for 25 years ceased publication on December 12, 2013 (Yu, 2013) because of dwindling revenues from print advertisements. Additionally, the owners wanted to focus on their digital publication (npr.org).

Fallon (2012) lists a number of news stories from onion.com which reputable news sources have believed as real. For instance, ScienceNews, a respected source for scientific news from the Society For Science and The Public, linked its article “Schadenfreude starts young,” to The Onion’s article, “New Study Reveals Most Children Unrepentant Sociopaths”, which talked about a study showing that children as young as two can enjoy others’ pain. The Onion’s article had mentioned authentic sources such as The Journal of Child Psychology and Psychiatry and Hare Psychopathy Checklist, but neither the study not its supposed author was real (Strauss, 2014). ScienceNews carried an apology in which it noted that it found the parody article pretty funny (Strauss, 2014).

Borowitz Report

Humorist Andy Borowitz produces The Borowitz Report, where he parodies current events. Borowitz, called ‘America's satire king’ (thedailybeast.com), is a New York Times’ best-selling author and a comedian. He has been writing for The New Yorker since 1998 (the newyorker.com). In the late 1990s, Borowitz began e-mailing satirical
stories to friends and about 10 years later, he started adding a 250-word news satire article to this blog every weekday, which he called *The Borowitz Report*. *The New Yorker* purchased *The Borowitz Report* in 2012. It now appears as Andy Borowitz’s satirical column where he posts brief news everyday with his signature biting satirical style (Novak, 2015). These brief satirical news reports can be shared on Facebook, Twitter and Google Plus. In 2009, *The Borowitz Report* began a Twitter feed, which was voted the No. 1 Twitter account in the world in a *Time* magazine poll in 2011 (the newyorker.com).

Italian media outlet, *Panorama*, a weekly news magazine that former prime minister of Italy Silvio Berlusconi controls, falsely published, *The Borowitz Report*’s news that Berlusconi was planning to run for New York’s mayor (Lyman, 2013).

The New York Times

*The New York Times (NYT)* is widely regarded as a high-quality newspaper in the United States. According to statistics provided by the Audit Bureau of Circulations in May 2014, it has one of the highest circulations among national newspapers in the United States. The newspaper receives the largest number of unique visitors on its website. Its record of 114 Pulitzer Prizes, the highest among all news outlets in the United States, defines its quality.

In spite of this, the *NYT* has believed satirical work on the Internet as real. It published The Onion’s mock *Tiger Beat* cover which portrayed Obama saying “I sing in the shower,” alongside Jonas Brothers and Vanessa Hudgens as real. The *NYT* article, which profiled *Tiger Beat* magazine, included a detail about how the cover helped Obama’s popularity surge with the youth (Fallon, 2012).
British Broadcasting Corporation (BBC)

Headquartered at Broadcasting House in London, The British Broadcasting Corporation (BBC) is the UK's public-service broadcaster. It is the world's oldest national broadcasting organization and the largest broadcaster in the world with over 20,000 employees.

*BBC News* is the largest broadcast news gathering operation in the world, providing services to BBC domestic radio as well as television networks such as the BBC News, BBC Parliament and BBC World News. In the online environment, the BBC has a comprehensive news website and archive called BBC Online. According to Alexa.com, BBC UK is the most visited 11th English language website in the world.

**Content Cues**

Recent empirical research has focused on the effects of satire on political trust (Becker, 2011), political participation (Hoffman & Young, 2011) and political discourse (Landreville, Holbert, & LaMarre, 2010), agenda setting (Kowalewski, 2012), news consumption (Young & Hoffman, 2012; Young & Tisinger, 2006), civic engagement and media accountability (Cosentino, 2012). However, apart from a few studies in the advertising field, there are no known studies in the news environment on how satire affects news believability, especially perceived believability of satirical news.

In the advertising field, there is little evidence on how satire affects believability with studies focusing on the persuasiveness of satirical messages. About three decades ago, Suntherland (1982) and Madden (1982) concluded that satire led to a decrease in believability. Through manipulation of radio announcements, Suntherland (1982) found
that when messages were satirical, they were perceived to be less authoritative and less believable compared to serious messages. In addition, satire produced a negative affect and did not induce liking towards the message. Likewise, Madden (1982) examined satirical and non-satirical radio commercials and found that satirical commercials were less trustworthy than non-satirical commercials. Although, satire did not lead to an increase in the perceived believability of the advertisements, studies in the field of politics have found some positive correlation between satire and political factors.

The popularity of political comedy shows such as *The Colbert Report* and *The Daily Show with Jon Stewart* have shifted scholars’ attention to understand how political humor affects audience. According to Brewer and Marquardt (2007), *The Daily Show with Jon Stewart* is a satirical news program, full of content that mocks traditional news stories. Because this definition is in consonance with content generated by *The Onion* or The *Borowitz Report*, it becomes imperative to review how the political comedy programs affect audience.

Examining the effects of satire on message processing through exposure of participants to animated cartoons and satirical late-night political shows such as *The Daily Show with Jon Stewart* and *The Colbert Report*, LaMarre, Landreville, Young, and Gilkerson (2014) concluded that satire led to effective processing of political messages. Likewise, Brewer and Marquardt (2007) found *The Daily Show with Jon Stewart* “educates citizens about politics (including policy issues), draws their attention to events in world affairs, and encourages them to think critically—or perhaps cynically—about traditional news coverage” (p. 249).
A few studies have concluded that viewing politically satirical programs encouraged political discussions (LaMarre, 2013; Warner, 2007). For example, Warner (2007) argued that through satirical images *The Daily Show with Jon Stewart* pointed out politicians’ wrongdoings and prevented them from promoting their false political identities. However, these studies did not look at how satire affected believability of information. As a result, this thesis examines the effect of content cues such as level of satire on perceived believability of news stories.

A review of literature on satirical effects, both in the fields of advertising and politics, revealed contradictory findings. Also, these findings reflected upon the gap in effects of satire on news believability, especially across entertainment and science genres. To address this dearth, this thesis extends the examination of satire effects on news believability across genres.

**Source Cues**

Studies related to heuristic cues have examined effects of source likeability (Chaiken, 1980) and source expertise and attractiveness (DeBono & Harnish, 1988) on information processing. News communicators such as media organizations and news reporters, who individuals trust, serve as source cues to evaluate believability (Hovland & Weiss, 1951). Source believability is the degree to which an individual perceives a news source to represent the real world and believes that it has an expertise in covering the event accurately (Austin & Dong, 1944; Gunther, 1988). It influences readers’ perception about evaluating information, such as satirical news (Berlo, Lemert, & Mertz, 1969; Gunther, 1988; Hovland & Weiss, 1951; Sternadori & Thorson, 2009). Elaborate
Likelihood Model assumes that source believability may serve as a peripheral cue ("simple acceptance or rejection") to effect the persuasiveness of the message (Petty & Cacioppo, 1986, p.669). As a result, information from high-expertise source can result in the greatest change in judgment while information from a low-expertise source does not have any effect (Milburn, 1991). Similarly, Go and colleagues (2014) concluded that news stories with a high-expertise source and high recommendations were perceived to be more believable through an examination of the effects of three types of heuristic cues—expertise, identity and bandwagon—on perceived believability, liking, quality, and representativeness.

In the online environment, believability of information is not limited to the reputation of sources. Other intervening factors such as sex of the source (Flanagin & Metzger, 2003), website design and structure (Warnick, 2004) and multimedia features such as presence of audio, video and photographs (Sundar, 2000) also affect believability. For example, Warnick (2004) argued that users relied on a combination of factors such as design look, site structure, and usefulness of information when they judged websites.

Another study investigated the combined effect of source reputation and presence of advertisements on believability. Greer (2003) exposed college students to an online news story from either a high (nytimes.com) or low-believability web source (a personal home page) that was surrounded by high or low-believability advertising. The results showed that high or low-believability advertisements had no effect on the evaluation of the online news. However, source expertise was found to effect believability. Participants
rated the news high on believability when it was sourced from a big brand name and low on believability when the news was from an unknown brand.

Based on the heuristic-systematic model, Chaiken & Maheshwaran, (1994) tested the effects of source believability of ambiguous and unambiguous messages in conditions of high and low involvement. Source believability was rated high when individuals were not highly motivated to fully process the message or were less involved with the topic. Individuals rated news high on believability because they processed information heuristically (Chaiken & Maheshwaran, 1994). Thus, high motivation is a factor that can affect news believability. However, as discussed earlier, Liu (2005) suggested online news consumers are less involved in the information they read because they are engaged in scanning information. As a result, in an online environment, like satirical news websites, an examination of the effect of satire on perceived news believability becomes important. Based on the above discussion, this thesis asks the following questions:

**RQ 1:** What is the difference in the effect of high-level satire and low-level satire on perceived news believability?

**RQ 2:** What is the difference in the effect of a high-reputable source and a low-reputable source on perceived news believability of satirical news stories?

**News Genre**

The different sections of a newspaper or the specific areas or beats which a journalist covers and becomes an expert in overtime are called newspaper genres. Politics, sports, science and technology, business, entertainment, culture are various genres that newspapers cover. Genre is defined as a type, class or category of presentation that shares distinctive and easily identifiable features (Silverblatt, 2015).
The linguistic characteristics of news genres differ (Bednarek & Caple, 2012) and are largely determined by the audience they aim to target (Gruber & Redekar, 2014). In fact, as genre changes, the form, content and purpose of the news also changes and can affect audiences’ expectations from the textual content (Gruber & Redekar, 2014). As a result, the thesis argues that these differences might impact the perceived news believability of the online news audience. This makes it necessary to examine whether perceived news believability differs across different news genres, especially across entertainment and science.

**Entertainment Genre**

Entertainment news is a popular genre, dominates content on most media and is produced to entice the viewers. It includes soft news stories about the life of celebrities, gossip, scandals, movies, music and television soaps among others. Han (2013) states entertainment news, along with qualities of personal and non-objectivity characterize news, reviews and advertisements. Although the content is light-hearted, it is sensational and attempts to appeal to the emotions of audiences. Sickels (2009) states, “When audiences watch and interpret entertainment news, everyone is a critic” (p.229). Entertainment news is also an important motivation for users to access news on the web (Chung & Woo, 2008). In spite of this audiences do not rank entertainment news more important than national and local news (Franklin & Carlson, 2011). As there are no known studies on how satire affects perceived news believability of entertainment news, the following research question emerges:

**RQ3:** What is the difference in the effect of a high level of satire and a low level of satire on perceived news believability of an entertainment news?
Additionally, there are no known studies on how source reputability affects perceived news believability of entertainment news. However, source reputability and attractiveness is known to affect news believability (DeBono & Harnish, 1988; Eun, et al, 2014; Hovland and Weiss, 1951; Metzger et. al, 2003). Thus,

**H1:** Satirical news in the entertainment genre with a high-reputable source (photographs, dateline, and website) will be rated higher on news believability than satirical news stories with low-reputable news source.

Science Genre

Science news, which refers to the reporting of scientific information by science journalists, is produced to bridge the communication gap between the scientific community and the public (Suhardja, n.d.). It includes news related to health, medicine, weather, environment and discoveries among others. According to Hin and Subramaniam (2014), science news is not given enough prominence in media.

Science news is often tentative and is based on limited evidence because scientific studies are reported when they are still in their early stages (Hin & Subramaniam, 2014). As a result, they are contested and liable to change. Moreover, Hin and Subramaniam (2014) observe that science news stories, like any genre, are written to attract and entertain the audience which can induce sensationalism and unwarranted certainty in these reports. In the same vein, Hin and Subramaniam (2014) suggest that to understand the implications and impact of scientific findings, individuals need to acquire knowledge and skills. These researchers notice that usually a layman is not be able to critically analyze these reports because his knowledge of science is limited to what he learns in school. Moreover, audiences assume that experts and specialists write science stories and
fail to critically review them (Hin & Subramaniam, 2014). As a result, online news audiences are likely to take these reports at their face value and believe them as true, which leads to the following hypothesis:

**H2:** Source reputability will have no effect on perceived news believability of science news.

**H3:** Entertainment news with high-reputable news source will be rated higher on perceived news believability than science news with high-reputable sources.

Science satire explains bogus phenomena but is based on real scientific theories. Bad Ad hoc Hypotheses or BAH fest, a satirical science conference has researchers postulate fake theories using real scientific evidence. For instance, a participant named Tomer Ullman proposed the theory titled, “The Crying Game: Infant distress vocalization as a competitive advantage during violent conflict,” which stated:

> In ancient times, screaming babies were used to motivate armies to fight. Howling infants were attached in baby carriers to the backs of warriors to give the combatants a natural adrenalin boost as they surged into battle. In this way, infant stress vocalizations became a weapon of war” (Krulwich, 2014).

In spite of this, the effect of satire on perceived news believability of a science story has not been examined. Thus, based on the above discussion, the study examines the following questions:

**RQ 4:** What is the difference in the effect of a high level of satire and a low level of satire on perceived news believability of science news?

**RQ 5:** What is the difference between the effect of high level of satire on perceived news believability of entertainment and science news?
CHAPTER 4: METHODOLOGY

Pre-Test

News stories were chosen from satirical news websites such as onion.com, and The New Yorker’s satirical column The Borowitz Report and their low-satirical versions were constructed by eliminating or replacing words and phrases that made the content satirical. The tone of some sentences was changed to a serious one. Additionally, a few parts of the content were rewritten in less convoluted manner by using short and simple sentences (see appendix).

Likewise, a few stories in this set were selected from news websites like BBC.com and nytimes.com and their high-satirical versions were constructed. This was done by adding exaggerations and exclamatory sentences. The tone of the content was changed from serious to satirical (see appendix). In this way, there were pairs of high and low-satirical news stories of similar length with a photograph, from each entertainment and science genres. Elements such as length of stories, photographs and presentation styles were kept constant because these factors are likely to affect news believability (Chen & Chaiken, 1999; Petty & Cacioppo, 1986; Sundar, 2000).

These stories were pretested for their perceived level of satire on a 7-point semantic differential scale (0 = not at all humorous and 6 = extremely humorous) to be drawn as experimental stimuli and to ensure that participants agree on the satire level of the news. A semantic differential scale was used to avoid any pre-judgments about the news stories. Moreover, the scale enables the researcher to add scores on various factors
to give an overview of the participants’ attitudes towards the object/person and compare it with others.

The pre-tested stories were randomly presented to a convenience sample of undergraduate students. Undergraduate students were recruited for pre-testing because their characteristics are similar to participants recruited for the main experiment. Moreover, this pre-tested group was not included in the main experiment to restrict it from getting familiar with the content and pre-develop attitudes towards the stimuli, thereby affecting the results. The pairs of stories were separated into two different groups and were presented on Qualtrics, a web-based survey software tool that does not limit the number of questions included in the survey. The two links of the survey were separately shared through an announcement via the university’s Blackboard Learning service, a valued source of communicating with students. Each link was separately shared with two classes of 40 students each.

The pairs of stories with the maximum mean difference on satire score were implemented as experimental stimuli in the ‘high on satire’ and ‘low on satire’ conditions. Thus, for the entertainment genre, a news article about James Bond’s movie releasing in October 2015 while for the science genre a story about scientists discovering a Russian princess’ cause of death, were selected as experimental stimuli (see appendix).

Dependent Variables

Believability scale (see appendix) consisted of relevant measures, such as accuracy, fairness, unbiasedness, trustworthiness, completeness and factualness taken from Meyer’s Believability Index (1988) and Gaziano and McGrath (1986), and realness
Believability index include the following:

Accuracy is test of facts such as spellings, dates, locations and other such details. Accuracy was measured on an 8-point semantic scale and asked the question, “How accurate do you find the story?” with responses ranging from “not at all accurate” to “extremely accurate”.

Factualness is a distinction between facts and opinions. Factualness was measured on an 8-point scale and asked the question, “How factual do you find the story?” with responses ranging from “not at all factual” to “extremely factual”.

Fairness is the process through which information is collected and presented in a balanced manner. Fairness was measured on an 8-point semantic scale and asked the question, “How fair do you find the story?” with responses ranging from “not at all fair” to “extremely fair”.

Unbiasness refers to open-mindedness and neutrality in the news report. Unbiasness was measured on an 8-point semantic scale and asked the question, “How biased do you find the story?” with responses ranging from “not at all biased” to “extremely biased”. The factor was measured as biasness and was reverse coded and renamed as “unbiasness”.

Trustworthiness is the extent of reliability and truthfulness of information. Trustworthiness was measured on an 8-point semantic scale and asked the question, “How trustworthy do you find the story?” with responses ranging from “not at all trustworthy” to “extremely trustworthy”.

(Austin & Dong, 1994). These scales were chosen because of their high reliability.
Completeness is the process of providing comprehensive coverage and updated information of an event. Completeness was measured on an 8-point semantic scale and asked the question, “How complete do you find the story?” with responses ranging from “not at all complete” to “extremely complete”.

Realness: It is extent to which the news represents real events. Realness was measured on an 8-point semantic scale and asked the question, “How real do you find the story?” with responses ranging from “not at all real” to “extremely real”.

Factors such as funny, sensational and satirical were measured asking participants to rate the stories on these factors on a scale of 0-8. Questions such as “Have you read the story previously?” to avoid prior knowledge effects and experience on believability score (see Cozzens, & Contractor, 1987) were included.

Procedure

Before entering the lab, participants were briefed about the study and allowed to ask questions. ID numbers were picked from a bowl to ensure random assignment to each condition. Participants in all conditions first viewed entertainment news stories followed by science news. Stories were then presented on a computer screen through the MediaLab software. This software allows administration of different stimuli and different dependent measures and in different orders depending on the experimental condition. After viewing each story, participants answered the believability questionnaire. At the end of the experiment, participants were asked to answer demographic questions. Participants took part in the study in a group of five.
Participants

For experiment one, participants recruited were students from Ohio University. They were randomly assigned to between-subjects high and low-satire conditions to examine effects of content cues on perceived news believability. Participants were given extra credit for their participation. Content cues were examined in the context of entertainment and science genres.

For experiment two, participants recruited were students from Ohio University. They were randomly assigned to between-subjects high-reputable and low-reputable conditions to examine effects of source cues on perceived news believability. Participants were given extra credit for their participation. Source cues were examined in the context of entertainment and science genres.

Design

For experiment one, the high-satire group read an entertainment news story that was high on satire and then rated the news on the believability index. The group then read a science news story that was high on satire and again rated it on the believability index.

Likewise, the low-satire group read an entertainment news that was low on satire and rated it on the believability index. The group then read a science genre news story that was low on satire and rated it on believability index. Both the groups read stories that were equivalent in length, photographs, dateline, place and topic, except for the level of satire because these factors have been found to affect news believability.

For experiment two, the high-reputable source group read the same entertainment news story that was read by the high-satire group in experiment one. It then rated the
story on the believability index. This was followed by asking the participants in this group to read the same science news story read by high-satire group in experiment and rate it on the believability scale.

Likewise, the low-reputable source group read the same entertainment news story read by the high-satire group in experiment one and rated it on the believability index. This was followed by reading the same science news story read by the high-satire group in experiment one and rating it on the believability index. The content of the stories read by the high-satire group and high and low reputable source groups was the same except that the source of the stories was manipulated. Both the groups read stories that were equivalent in length, photographs, dateline, place, topic and level of satire. The factors of length, photograph, dateline and place were kept constant because these can effect news believability.

Participants rated the news stories on seven believability measures (Meyer’s Believability Index, 1988; Gaziano & McGrath, 1986; Austin & Dong, 1994) on an eight-point semantic differential scale, with scores ranging from 0 to 7. The scores on these measures were summed to form the news believability index, with a highest score of 56.

For the conditions of high and low-level satire and high and low-reputable sources, a between-subjects design was used and independent t-tests were run. However, when believability was examined across news genre, a within-subject design was used and paired-sample t-tests were run.
CHAPTER 5: RESULTS

Experiment 1

Eighty participants completed the experiment with 39 in the high-level satire and 41 in low-level satire conditions. One outlier in the high-satire condition was removed from the analysis as all the measures on the believability scale were rated as 1 and the age was reported to be 96 years. There were 23 men and 57 women with an average age of 19.9 years.

Entertainment Genre

Table 1

<table>
<thead>
<tr>
<th>Believability Index</th>
<th>Levene’s test for equality of variances</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Believability Index</td>
<td>Equal variances assumed</td>
<td>9.403</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>-19.66</td>
</tr>
</tbody>
</table>

Note: Magnitude of differences in means = -10.331, 95% CI: -11.36 to -9.29); $\eta^2 = .83$

Genre specific believability was explored in RQ 3 testing the effect of high and low level of satire on perceived news believability of entertainment news. An independent t-test was run to examine the differences in means between the two conditions. Additionally, believability scores were collected independently in each
condition and are unrelated to each other. Analysis shows that satire affects believability of entertainment stories because high-level satire entertainment news was rated low on believability (M=25.21, SD=2.73) compared to low-level satire entertainment news was rated high on believability (M=35.54, SD=1.85). The significant differences in the means of high-level satire and low-level satire entertainment stories, $t(78) = -19.84, p<.05$, suggests that participants perceive satire in entertainment news and do not believe high-satire news as real.

Science Genre

Table 2

*Independent t-tests for effects of satire on believability of science news*

<table>
<thead>
<tr>
<th>Believability Index</th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td>.489</td>
<td>.486</td>
</tr>
</tbody>
</table>

Note: Magnitude of differences in means = -.471, 95% CI: -3.397 to 2.45; $\eta^2 = .02$

Similar to entertainment news, effects of levels of satire on believability was examined for science news. RQ 4 examined high-level satire science news and low-level satire science news in relation to their effects on perceived believability. Results reveal that participants rated high-level satire science news low on believability (M=30.85, SD=6.85) whereas low-level satire science stories were rated high on believability (M=31.32,
Though there were differences in the mean, these differences were not significant, \( p > .05 \) (two-tailed) and \( t(78) = -1.30 \). This suggests that participants do not perceive satire in science news and believe high-satire science news equally as low-satire science news.

**Entertainment Genre vs Science Genre**

RQ 5 examined the relationship between effects of satire levels on perceived news believability across entertainment and science news. Paired samples t-tests were run between the high-level satire entertainment and high-level satire science genre stories and their believability index scores. This analysis was run because the same dependent variable of high-level of satire was examined under two different conditions of entertainment and science satire news. Additionally, the same participants were exposed to the two conditions of high-level satire entertainment and high-level satire science news.

Results show that participants perceived believability across the two genres significantly different, \( t(38) = 4.77, p = .05 \) (two-tailed). Entertainment high-level satire was rated low on believability \((M = 25.21, SD = 2.73)\) as compared to science high-level satire news that was rated high on believability \((M = 31.28, SD = 9.09)\). This means that participants perceived satire in entertainment news but not in science news and believe science satirical news to be true. The magnitude of differences in the means = 5.64, 95% CI: 3.25 to 8.03 and eta squared was .37, which means that 37% of variability in news believability was accounted for by satire.
Finally, RQ 1 investigated the difference in the effect of high-level satire and low-level satire on perceived news believability. Independent t-test shows that news low on satire was rated high on believability (M = 35.02, SD = 4.09) as compared to news high on satire which was rated low on believability (M = 28.03, SD = 5.90). This suggests that participants perceive satire in news stories and do not find them believable, $t(158) = -8.74, p < .05$ (two-tailed), 95% CI = -8.57 to -5.41.

Experiment 2

The experiment was run on 64 participants, 32 participants in each of the high-reputable source and low-reputable source conditions. There were 23 men and 57 women with the mean age of 19.9 years.

Entertainment Genre

Table 3

*Independent t-tests for effects of source reputability on believability of entertainment news*

<table>
<thead>
<tr>
<th>Believability Index</th>
<th>Levene’s test for equality of variances</th>
<th>t-test for equality of means</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>T</td>
<td>Df</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>2.731</td>
<td>.129</td>
<td>6.572</td>
<td>62</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>6.572</td>
<td>58.65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Magnitude of differences in means = 7.71, 95% CI: -5.37 to 10.06; $\eta^2 = .45$
The effects of source reputability on believability of satirical entertainment news was examined. Results reveal that reputability of sources had an effect on believability, \( p < .05 \) (two-tailed). When entertainment satirical news was perceived to come from high-reputable source it was rated high on believability (\( M = 29.44, SD = 5.23 \)), than when the same story was perceived to come from a low-reputable source and was rate low on believability (\( M = 21.72, SD = 4.09 \)). Thus, participants perceived significant differences in satire in the entertainment news and these differences were significant, \( t(62) = 6.67, p < .05 \) (two-tailed). As a result, differences in believability of satirical news can be attributed to source reputability. The magnitude of differences in the means (mean difference = 7.71, 95% CI: 5.37 to 10.06) with 45% (eta squared = .45) of the variance in believability was explained by source reputability. As a result, \( H1 \) was supported that participants find high-reputable source satirical story in an entertainment genre more believable than low-reputable satirical entertainment story.

**Science Genre**

In line with the entertainment genre, independent t-tests were run to examine the effect of source reputability on science satirical news. An independent t-test was used to examine the differences in means between the two conditions of high-reputable source and low-reputable source. Additionally, believability scores were collected independently in each condition and are unrelated to each other.

\( H2 \) explored the effect of source reputability of satirical science news on believability. Science news with high-reputable source were rated low on believability (\( M = 27.75, SD = 7.45 \)) than science stories with low-reputable source which were rate
high on believability (M=29.41, SD=5.48). However, there were no statistically significant differences, \( t(62) = -1.01, p>.05 \), between science satirical news with high-reputable source and low-reputable source. As a result H2 was partially supported that source reputability does not affect the believability of satirical science news. The magnitude of differences (mean difference = 1.63, 95% CI: -4.92 to 1.61, eta squared = .01) which suggests that only 1% of the variability in believability of science satirical news is explained by source reputability.

Table 4

*Independent t-tests for effects of source reputability on believability of science news*

<table>
<thead>
<tr>
<th>Believability Index</th>
<th>Levene’s test for equality of variances</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Sig.</td>
</tr>
<tr>
<td>Equal variances</td>
<td>2.027</td>
<td>.160</td>
</tr>
<tr>
<td>assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not assumed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Magnitude of differences in means = 1.63, 95% CI: -4.92 to 1.61; and \( \eta^2 = .01 \)

Entertainment Genre vs Science Genre

H3 examined the differences in believability of satirical news across entertainment and science genres manipulating source reputability. A paired sample t-test analysis was run between entertainment news with high-reputable source and science news with high-reputable source to examine its effect on believability. This analysis was
run because the same dependent variable of high-source reputability was examined under two different conditions of entertainment and science satire news. Results show that an entertainment satirical news with a high-reputable source is perceived to be more believable (M=29.44, SD=5.23) than science genre satirical news from a high-reputable source which is perceived low on reputability (M=27.75, SD=7.45). However, these differences were not significant, t(31) = .995, p > .05. Hence, H3 which stated that entertainment news with high-reputable news source will be rated high on perceived news believability compared to science news with high-reputable source was partially supported.

Table 5

<table>
<thead>
<tr>
<th></th>
<th>Entertainment</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High reputable source</td>
<td>Low reputable source</td>
</tr>
<tr>
<td>Mean</td>
<td>29.44</td>
<td>21.72</td>
</tr>
<tr>
<td>SD</td>
<td>5.23</td>
<td>4.09</td>
</tr>
<tr>
<td>N</td>
<td>32</td>
<td>32</td>
</tr>
</tbody>
</table>

Note: Magnitude of differences in means = 1.68, 95% CI: -1.77 to 5.74; η² = .02

The magnitude of differences in the means (mean difference = 1.68, 95% CI: -1.77 to 5.74) with eta squared = .02. However, when the source was low in reputation, a science satirical news was rated high on believability (M = 29.41, SD = 5.48) than an
entertainment satirical news low in source reputation that was rated low on believability (M= 21.72, SD = 4.09). The differences were significant with $t(31) = -8.005$, $p<.01$. 

Finally, an examination of source reputability on believability of satirical news investigated whether online news consumers gave importance to news sources while evaluating the believability of a satirical news. Results show that source reputability has a significant effect on news believability as high-reputable source stories were rated high on believability (M=28.59, SD = 6.44) compared to low-reputable source satirical stories that were rated low on believability (M= 26.56, SD= 6.16). There were significant differences between high-reputable source news and low-reputable source news, $t(126) = 2.71$, $p <.01$ (two-tailed). This suggests that if a satirical news is perceived to be sourced from a reputable source, participants believe it to be true. However, the magnitude of differences is very small with only 5% of variability in believability of satirical news was explained by source reputability (95% C.I=.8.25 to 5.23, eta squared =0.05). The implications and limitations of the findings are discussed in the following chapters.
CHAPTER 6: DISCUSSION

The thesis examined the influence of satire and source reputability on perceived believability of satirical news in an online environment. On the framework of heuristic systematic information processing model, content cues were manipulated for levels of satire and source cues for their reputability to investigate their effects on perceived news believability across entertainment and science genres. Results indicate that levels of satire and source reputability in satirical news affects perceived news believability. This perception differs across news genres among student participants representing online news consumers.

The following are some of the key findings of experiment one:

- Overall, high-level satire news was perceived as less believable compared to low-level satire news.

- In the entertainment genre, news stories high on satire were perceived as less believable compared to low-level satire entertainment news.

- High-level science satire news was perceived to be equally believable as low-satire science news.

- Across the genres of entertainment and science, entertainment high-level satire news was perceived as less believable compared to high-level satire science news. Thus, participants perceived satire in entertainment news than satire in science news.
Some key findings of experiment two, which examined effects of source reputability on believability, are as follows:

- Source reputability has a significant effect on news believability. Satirical news perceived to be sourced from a reputable source is believed more than satirical news from a low-reputable source.

- In the entertainment genre, a satirical news from a high-reputable source is believed more than a satirical entertainment news from a low-reputable source.

- In the science genre, source reputability did not affect the believability of satirical science news as there were no significant differences in science stories sourced from high and low-reputable sources.

- Source reputability did not significantly affect news believability between genres of entertainment and science.

The findings of this thesis are in line with previous studies (Borah, 2014; Johnson & Wiedenback, 2009; Thorson, Vraga & Ekdale, 2010) which suggest that content and source cues affect perceived news believability. In the context of content cues, this study extends the examination of content from presence and absence of hyperlinks (Borah, 2014), news type: hard, soft and features (Johnson & Wiedenback, 2009) to high and low-level of satire to investigate how satire affects believability.

A study of effects of satire on news believability helps understand whether participants pay attention to the news content, including the news style, words, phrases and intended meaning when they read news. Moreover, if the news is not perceived as
Satirical, then it can be believed as real. The ability to perceive satire in news is important in an online environment where users are constantly bombarded and overloaded with information.

From the perspective of source reputability effecting believability, the study supports existing studies (Sundar & Nass, 2001; Knobloch-Westerwick, Sharma, Hansen, Alter, 2005; Wu, 2013), which also concluded that source reputability is an important factor affecting believability of news. However, the thesis takes source reputability beyond the scope of serious news and expands the literature to satirical news to understand how satirical news believability is a result of perceiving news from a low and high-reputable source.

Satire has gained salience in the study of mass communication because of popularity of satirical late-night shows such as *The Daily Show With Jon Stewart* and *The Colbert Report*. Although, these studies examine audiences’ perception about satirical news, their investigation is limited to television. They do not analyze the effects of satire in the online medium. Hence, this thesis is important because it explores perceptions about news satire in the textual form. It extends it to audience in the online environment examining perceptions about believability of stories published on websites such as *onion.com* and the *New Yorker’s The Borowitz Report*.

In the light of growing number of satirical news websites and news from these sites being perceived as real, it becomes salient to identify the factors that persuade online readers into believing satirical news as real. Satirical news websites have names that make them sound like authentic news websites. For instance, News Examiner, Daily
Buzz Live, National Report and World News Daily Report are all names of satirical news websites which do not provide any hint of them producing satirical news. Many carry the taglines of providing real news. For instance, onion.com calls itself America’s finest news source. Also, these websites resemble reputable news websites in their appearance, interactivity and updatedness. The news they publish seems believable because it imitates real news stories in content, style and presentation. Moreover, some satirical websites are weak in their satire content, which makes it necessary to question whether level of satire effects perceived news believability.

Examining the content of satirical news is also from the point of view of references made to politicians, celebrities and sportspersons. These personalities can be perceived as authentic sources, which persuade online news consumers to believe satirical news as real. For instance, in the news, ‘First lady Michelle Obama to propose national hug a Muslim day,’ Michelle Obama was perceived as a news source instead of the satirical news website, National Report, which made online news audience believe the satirical news as real.

On the Web, there are multiple news websites and information sources that individuals encounter. These sources reach the audiences through search engines, hyperlinks and through shares, retweets and likes on Facebook, Twitter and other social media. Many times, because the news gets shared multiple times, it comes way far from its original source. As a result, tracking down the original source can be difficult. Moreover, for the lack of time or motivation, online news consumers do not verify the
news source and take the information at its face value. These factors necessitates an understanding about the effects of source reputability on believability of satirical news.

This thesis encompasses satire in genres of entertainment and science adding a new perspective to news believability studies. News genres of entertainment and science serve different purposes for the audience. Entertainment news, which is about celebrity gossip and films, is less serious than science news which mainly focuses on developments in medicine, health, science and technology. Additionally, compared to science genre which has a niche audience, entertainment news is popular genre, which is written in simple language. Comparatively, science news may require student participants to have basic knowledge of the specific field to understand the content and jargons in the news. These genre-specific characteristics make it imperative to understand how believability can differ across entertainment and science genres. This thesis has addressed this aspect.

The subjects in this study believed news stories low on satire than news stories that were high on satire. This finding contradicts Jenkins (n.d) and Novak’s (2015) suggestion that satirical news are convincing in their content and make it difficult for news consumers to decipher their falsity and believe them to be true. However, an argument against this is that while processing satire in news, participants attended to the content’s characteristics and analyze it with their maximum cognitive capacity. Such systematic processing of the content enables participants to perceive satire in the news and not believe it as real (Eagly & Chaiken, 1993).
With respect to genre-specific believability, level of satire and source reputability affected believability differently across entertainment and science genres. High-satirical science news was perceived more believable than high satirical entertainment news. This implies that perception of satire in entertainment news is easier than science news. One explanation for this is evidenced in Sickels’ (2009) suggestion that science stories are of interest to niche audience, whereas entertainment stories are widely read and are considered to be of general interest.

Source reputability did not affect the believability of satirical science news as there were no significant differences in believability of satirical science news from a high-reputable source and low-reputable source. A few explanations for this findings are evidenced in Hin and Subramaniam (2014) and Wilkes’ (2002) suggestions that journalists lack the ability to explain scientific developments in simple language. The researchers also state that science stories are assumed to be written by reputable sources (Hin & Subramaniam, 2014). Plus, science news is expected to have a niche audience because of which they get limited coverage in most news media (Wilkes, 2002). From such outcomes, it could imply that when college students consume science news they cannot ascertain its credibility. Hence, there is a high possibility that they could even believe a story such as “New Evidence Suggests Last Ice Age Caused By Earth Floating Into Extremely Chilly Part Of Galaxy” as true. The detriment with such outcome is that it becomes very difficult to educate college-age societies on matters of science.

Apart from the popularity of entertainment news, another explanation for participants’ familiarity with entertainment news is they are motivated to actively seek
entertainment news on the Web. Personal lives of celebrities, gossip and scandals appeal to the emotions and para-social associations that student participants have with their favorite celebs. Such factors motivate individuals to seek entertainment news online (Han, 2013) make satirical news believable.

The finding that source reputability affects the believability of satire entertainment news is expected given the popularity of entertainment news. Individuals are aware of their sources because the more they seek information from the same source, the more trustworthy they perceive it to be provide real news (Chaiken, Liberman & Eagly, 1989). Another argument is that while processing satirical entertainment news, participants attended to the content’s characteristics and put in maximum cognitive efforts while analyzing it. Sickels (2009) suggestion supports this implication that when audience watch and interpret entertainment news, they are critically analyze it.

The findings of the thesis are limited to the college students. The experiment was conducted in a laboratory setting which restricted participation to graduate students. As a result, generalizing findings to the entire population would not be appropriate. It is expected that participants representing all age-groups could bring a variability in results.

Likewise, reading news in a laboratory setting can be different from perceiving news online because a laboratory setting lacks aspects of interactivity and connectedness that define the online environment. Knowledge about the liberty to move from one web page to another can distract individuals from the task they are involved in and make them scan the news influencing their perceptions about the news.
Another element limiting the findings was the length of the news stories. The entertainment and science news were concise and did not overwhelm the participants with facts, names and complex ideas. Under each genre, participants had to read only one story. As a result, participants did not experience information overload which they do in the online environment.

In addition, online news consumers’ interest and prior knowledge about a news source can help perceive satire in the news and influence believability. For instance, if participants were scientists, then they would have perceived satire in the science genre news and not believe the news as real.

Satire does not serve its purpose of entertainment if audiences fail to perceive satire. In fact, satire is a thread and is perceived as fake news or a rumor. For instance, in 2014, satirical website National Report spread a popular satirical Ebola story—claiming an entire town in Texas had been quarantined—at a time when a fearful public was willing to believe and share just about anything Ebola-related.

In the event of breaking news, journalists are in hurry to get information and, at times, fail to verify their information sources. The nature of the Web, which is to provide news speedily, increases the probability journalists believing and disseminating satirical news as real. Moreover, an increasing number of journalists are using Twitter as their news source. Twitter is a platform where the news drifts quickly away from its original source making it difficult to verify it, but yet easy to disseminate such fake news.

Future studies should investigate how “shares”, “likes” or “comments” on satirical news stories increase the likelihood of satirical stories being perceived as true.
When satirical news gets “shared” “liked” “retweeted”, it is seen as coming from an authentic source and is easily believed as true (Bennett-Smith, Meredith, 2012). Moreover, Facebook and Twitter and even Google search do not mark these stories as satirical, thereby increasing the probability of news consumers believing them as true.

To further the findings, satire and believability should be examined beyond the genres of entertainment and science. An examination of political and editorial satire will add value to the results and add a dimension of whether the implicit authority associated with these genres impacts the believability of satirical news of these genres.
CHAPTER 7: CONCLUSION

The growing number of satirical websites and their popularity bring up the concerns that reputable news sources that allow user-generated content to be posted on their websites need to be cautious because some of the satire news websites appear to be exactly like real news websites. Their picture-perfect imitation adds to the possibility of news consumers believing satirical news as true.

This study, through an examination of factors that make satirical news believable, fills the gap in the area of perceived news believability of satirical news. It investigates content cues in the form of high and low levels of satire and source cues in the form of source reputability that influence news consumers’ perceived believability about a news story. Additionally, it looks at effects of satire and source reputability across entertainment and science news genres.

This study suggests when satire level is high, participants perceive the story to be satirical and do not believe it to be true. However, perceived believability differs across news genres of entertainment and science. Participants perceive satire in entertainment news easily as compared to satire in a science genre news. As a result of perceiving satire in the story, participants do not believe entertainment news as true but believe science satirical news as true.

Source reputability is also a factor that contributes towards influencing satirical news believability. Satirical news stories sourced from reputable news media are believed more than satirical news sourced from low-reputable news media organizations. Again, effects of source reputability on believability of entertainment and science satirical news
differs. Source reputability does not affect the believability of science news as much as it affects the believability of entertainment news.

Instances of satirical news being taken seriously brings to light the need to further explore factors other than the level of satire and source reputability, that can influence online news consumers into believing these stories as real. A number of new avenues seem to emerge that help audience perceive satire in news as journalists and media researchers start to take seriously the issue of satire news. Poynter has come up with guidelines on how to survive satire news hoaxes. Facebook now allows users to tag satire stories as fake. However, it still depends on users’ judgments to find out which stories are satirical and therefore not true. Google, too, has started to mention a news item as satirical in Google News section. However, this feature is not available when one searches for news through Google search engine. For judgments about believability of such news, Google, like Facebook, leaves it on individuals’ perception and awareness about satirical news. As more journalists and media researchers express concerns about satire translating to fake news on the Web and explore satire on the web, more ways would emerge that will help to understand why online consumers believe satire news as true.
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LaMarre, H. L., Landreville, K. D., Young, D., & Gilkerson, N. (2014). Humor Works in


APPENDIX: BELIEVABILITY QUESTIONNAIRE


Questions about the satirical news story:

(1) I have read the above story before:

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<th>Yes</th>
<th>No</th>
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Believability index:

(2) I find this story:

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Other variables measured:

What is your gender? Female Male

Please mention your age in years: ........
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<td>Extremely Sarcastic</td>
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New Bond Film: The Sphinx Out in October, will be a classic!

LONDON: This new 007 movie is going to be far from the clichéd Bond movies because this one is going to have more beautiful female clones, fast cars, electronic gadgets, and bad puns; large enormous man-eating octopusses; submarines; street roaming circular saw blades; introductory songs composed by a fading unknown rock star (The Electric Pineapple); while naked women hold your attention for next 90 minutes.

Titled The Sphinx, the film will feature a new Mr. Bond, not as a new actor but in the new character of a double agent. After playing secret agents in 2006’s Casino Royale, then in 2008’s Quantum of Solace and 2012’s Skyfall, actor Daniel Craig, young at 46, plays agent 007 for the fourth time.

This time, Bond is pitted against a new arch villain, the editor of a lowly spoof news rag called The Sphinx. The editor, known only as “Mark” suspects a double agent in his magazine, James Bond, who replaces one of the regular writers, nicknamed “Gasser”.

Yes, this is not going to be another classic Bond films because the spy will be tussling again in the snow at new exotic locations. Go watch it in theaters this October.

Illustration by author
New Bond Film: *Spectre* to be out in Oct, will be a classic!

LONDON: This new Bond movie is going to be a classic with lot of action, automatic cars and electronic gadgets, and new Bond girls.

Titled *Spectre*, the film’s plot sends Bond on a trail to uncover a sinister organization as M battles political forces to keep the secret service alive. Bond peels back the layers of deceit to reveal the terrible truth behind Spectre.

After playing secret agents in 2006’s *Casino Royale*, then in 2008’s *Quantum of Solace* and 2012’s *Skyfall*, actor Daniel Craig will play 007 for the fourth time in the film.

The 007 production will be based at Pinewood Studios and on location in London, Mexico City, Rome and Tangier and Er-foad, in Morocco. Bond will return to the snow once again, this time in Sölden, along with other Austrian locations, Oberstulach, and Lake Altaussee. The film releases in October this year.
Scan reveals 2,500-yr-old Siberian princess died of cannabis deficiency

RUSSIA: An ancient Siberian mummy has tested positive for a rare cannabis deficiency. MRI scans reveal it 'dissipated her joints' and blew her skull open high up in the Altai Mountains circa B.C. 500.

The remains were discovered preserved in a sophisticated Northern Siberian permafrost grave close to a geologically significant area scheduled for Gazprom fracking.

Scientists examining the tomb said that she was buried with a large canopic jar full of high grade cannabis indicating a probable medicinal marijuana handout - maybe the first of its kind ever-recorded.

They speculate the royal-born woman may have had a congenital condition typical of early Siberians, who suffered cannabis deprivation symptoms on account of terrible freezing weather and lack of proper hydroponic equipment.
This Is How The ‘Ice Princess,’ Died And Why She Had That Marijuana

RUSIA: Did a dying Siberian maiden who lived 2,500 years ago self-medicate with marijuana? New research by Russian scientists shows that’s a likely possibility.

The mumified body of the Siberian “ice princess” — so well preserved that tattoos on her skin were still visible when she was found — was unearthed in an icy plateau in eastern Russia’s Altai Mountains back in 1993. Since then, scientists have gained a good understanding of who the ice princess was, and how she and her people lived.

But no one knew for sure how the woman, who is believed to have been in her 20s when she died back in the 5th Century B.C., met her end.

Until now. To solve the mystery, a team of Russian scientists using MRI scans determined that the ice princess was likely suffering from breast cancer. “We are dealing with a primary tumor in the right breast and right axillary lymph nodes with metastasis,” team member Andrei Letyagin told the Siberian Times. “I am quite sure of the diagnosis — she had cancer.”

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Illustration by author
Illustration by author
Scans reveal 2,500-yr-old Siberian princess died of acute cannabis deficiency

RUSSIA: An ancient Siberian mummy has tested positive for a rare cannabis deficiency. MRI scans reveal it ‘dislocated her joints’ and blew her skull wide open high up in the Altai Mountains circa B.C. 500.

The remains were discovered preserved in a sophisticated Northern Siberian permafrost grave close to a geologicaly significant area scheduled for GazProm fracking.

Scientists examining the tomb said that she was buried with a large canopic jar full of high grade cannabis indicating a probable medicinal marijuana handout - maybe the first of its kind ever-recorded.

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Illustration by author