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Quantifying and Typifying Image Use in Television News Coverage of Mass Shootings

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QUANTIFYING AND TYPIFYING IMAGE USE IN TELEVISION NEWS
COVERAGE OF MASS SHOOTINGS

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THESIS
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A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Arts in the
College of Communication and Information
at the University of Kentucky

By
Ellie Catherine Hudd
Lexington, Kentucky
Director: Dr. Jeannette Sutton, Professor of Communication
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2020

ABSTRACT OF THESIS

QUANTIFYING AND TYPIFYING IMAGE USE IN TELEVISION NEWS
COVERAGE OF MASS SHOOTINGS

Increasing research supports the presence of a contagion effect among mass shootings, wherein extensive media coverage of mass shootings may inspire future mass shooters, many of whom view extensive media coverage of these shootings as a form of reward. Furthermore, two awareness campaigns–one from the private sector and one from law enforcement–have advocated against naming and depicting the shooter in media coverage of mass shootings. This study uses second-level agenda-setting as the basis for a content analysis of three days of television news coverage of two mass shootings (one in El Paso, Texas and one in Pittsburgh, Pennsylvania) across six channels. News segments were coded for how often they depicted the shooter, first responders, survivors, deceased victims, and the shooter's manifesto. Segments were also coded for whether they contained graphic imagery and whether they depicted dead bodies. Findings suggest that the shooter was the least frequently depicted of the individuals coded, mentions of the shooter reached a mean of 8 depictions per segment. Findings on graphic image use suggest that in the shooting where use of graphic imagery is high (El Paso), it was significantly higher on the first two days than on the third.

KEYWORDS: mass shootings, media effects, second-level agenda-setting, semiotics.

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QUANTIFYING AND TYPIFYING IMAGE USE IN TELEVISION NEWS
COVERAGE OF MASS SHOOTINGS

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DEDICATION

To my real and chosen families. I could not have done any of this without your constant support.

ACKNOWLEDGMENTS

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CHAPTER 1. INTRODUCTION

The number and frequency of mass shootings in the U.S. in recent years has generated substantial concern in both the public consciousness and the academic literature. Data suggests that the frequency of mass shootings is rising significantly; one scholarly finding suggested that the rate of mass shootings tripled between 2011 and 2014 (Cohen, Azrael, & Miller, 2014), while the FBI says that active shooting events have tripled over the last decade. More anecdotally, of the five mass shootings with the highest fatality rates, four of them (the Las Vegas shooting, the Pulse nightclub shooting in Orlando, the Sandy Hook Elementary School shooting, and the Sutherland Springs church shooting) have occurred within the past decade; three of those (Las Vegas, Orlando, and Sutherland Springs) have taken place within the past five years (Abadi & Pasley, 2019).

Empirical research has long established that suicide can be "contagious" (e.g. Stack, 2002). Put simply, suicides that generate a large amount of media coverage can lead increase the likelihood that audience members with suicidal ideation will follow through on their plans. More recently, scholars have applied this concept to the frequent number of mass shootings, with significant early results.

Studies into possible mass shooting contagion have largely focused on establishing whether or not such contagion exists (Towers, Gomez-Lievano, Khan, Mubayi, & Castillo-Chavez, 2015; Kissner, 2016), with others suggesting that it may be driven by media coverage of the events (Sidhu, 2017; Perrin, 2016; Meindl & Ivy, 2017; Lankford & Madfis, 2018). Further nuancing of this issue has shed light on what aspects of a mass shooting are covered most often (e.g. Dahmen, 2018) and what factors of these

events are likely to garner more media coverage (Silva & Capellan, 2019). In general, most of these studies suggest that shooters seek out media coverage of their actions and find this coverage rewarding (Dahmen, 2018; Langman, 2018; Lankford & Madfis, 2018; Murray, 2014; Murray, 2018).

In light of this research, two awareness campaigns now advocate for minimizing the role of the shooter in news coverage of mass shootings. No Notoriety was founded by families of victims of the 2012 theater shooting in Aurora, CO, and advocates for mass media to refrain from showing the name of the shooter more than once per broadcast unless he is at large (No Notoriety, n.d.) and to focus instead on the victims and human-interest stories. The FBI's Don't Name Them campaign goes a bit further, urging the media not to name the shooter at all (Federal Bureau of Investigation, 2017) to avoid essentially rewarding his actions by giving him press coverage.

Both of these campaigns have acknowledged the role of social scientific constructs in the contagion issue without referring to them by name. In particular, the FBI emphasizes focusing coverage away from the shooter to minimize the reward potential of the coverage, while No Notoriety argues for increased coverage of the victims in order to highlight the losses inherent in their deaths. Both of these campaigns also specifically instruct news outlets not to show the shooter's name and photo more than once per broadcast at most unless he is currently at large (Federal Bureau of Investigation, 2017; No Notoriety, n.d.). These campaigns are essentially advocating for a change in the way that media emphasizes particular attributes of an issue–what the communication literature calls second-level agenda setting. Second-level agenda-setting research has established

that the attributes of an event emphasized in the media are likely to have increased importance attributed to them by the public (e.g. McCombs, 2014).

Given the way that campaigns related to media coverage of mass shootings have implicitly invoked second-level agenda-setting, it is important to produce research on this coverage that is grounded in this theory. The No Notoriety campaign specifically urges news outlets to focus on the victims and their lives *at the expense of the shooter;* in order for research to suggest whether or not media outlets are following this guidance, a grounding in second-level agenda-setting is practically unavoidable.

Some research grounded in second-level agenda-setting has been conducted in the context of mass shootings, but it has been largely limited to print media (e.g. Dahmen, 2018) rather than television. Given that the format of television allows for more in-depth and immersive coverage of these events than does print media (as one simple example, television coverage allows for the use of video), it is important for researchers to analyze television news coverage as well as print. Additionally, images exert a unique impact on audiences. A study of recall of images from 9/11 found that "emotional responses… were significantly greater among those who watched visual news" (Fahmy, Cho, Wanta, & Song, p. 7). In discussing the Christchurch shooter, Baumgartner, Bermejo, Ndulue, Zuckerman, & Donovan note that "the journalistic impetus to show, rather than tell, leads to the trap of amplifying his most viral and sinister ideas [in his manifesto]" (2019).

Another topic related to media depictions of mass shootings is the fact that mass shootings are fatal events, often generating graphic imagery of carnage and even death. A large body of literature suggests that viewing this kind of coverage, particularly in large amounts, increases the likelihood that an individual will develop post-traumatic stress or

even PTSD (Pfefferbaum, Nitiéma, & Newman, 2019). Furthermore, depictions of these events can induce fear among viewers that they could be victim of a similar event (Holody & Daniel, 2017), or violate an individual's core assumptions about the safety of his or her world, which is linked to psychological trauma (Janoff-Bulman, 1992). Media depictions of mass shootings could also cultivate "the perception that a mass shooting could happen anywhere, to anyone, at any time" (Silva & Capellan, 2019, p. 77).

The use of images and particularly television visuals also has the unique capability to spread terroristic messages such as those communicated by mass shooters (Meindl & Ivy, 2017). Scholarship on the semiotics of terror (e.g. Baudrillard, 2002) suggests that mass killers may be able to exploit the news media as a means of further spreading fear, and anecdotal evidence from at least two mass shootings (Perrin, 2016; Dahmen, Abdenour, McIntyre, & Noga-Styron, 2017) shows that mass shooters are keenly aware of their ability to expand the "reach" of their message via mass media. For example, mass shootings essentially came to a halt in the period after the 9/11 attacks; this could reasonably be assumed to be related to the fact that mass shooters would have a hard time breaking into the media landscape after 9/11 (Zarembo, 2016).

The current study employed quantitative content analysis to examine coverage of two mass shootings: the El Paso, Texas Walmart shooting on August 3rd, 2019 and the Tree of Life Synagogue Shooting in Pittsburgh, Pennsylvania on October 27th, 2018. Both of these shootings were selected due to their political motivations; in both cases, the shooter left behind a manifesto outlining his perceived grievances against the group he targeted (immigrants and Jews respectively), which makes them particularly newsworthy as media events. This study analyzed depictions of these shootings by six major national

news channels: ABC, CBS, CNN, FOX News, MSNBC, and NBC. For each shooting, the author coded half an hour of news footage on both the day of the shooting and the two days following, resulting in an analysis of 18 hours of news across two shootings. These segments were timed to align with the timing of the national news broadcasts on ABC, CBS, and NBC and took place at either 6pm EST or 6:30pm EST.

Findings revealed that in both shootings, the media focused on survivors, first responders, and individual victims most often. This suggests that from the standpoint of second-level agenda-setting, the shooter is not the primary attribute in visual depictions of the shootings. Additionally, survivors were significantly likelier to be shown during the El Paso shooting than during the Pittsburgh shooting, and the data suggested that depictions of the shooter were more frequent during the Pittsburgh shooting, though this number only approached statistical significance. However, when the question is framed more broadly to determine whether the depictions of mass shootings align with best practices put forth by the FBI and No Notoriety, it is clear that news organizations are not compliant with these practices. Findings showed that the shooter was depicted an average of approximately eight times per broadcast.

Additionally, the segments were coded for whether or not they included graphic imagery and whether or not they depicted dead bodies, per the discussion on the use of graphic news coverage of mass fatality incidents. Findings showed that the likelihood of graphic imagery being present in the broadcast did not vary by channel, nor did it vary based on the day of coverage of the shooting (i.e. the first, second, or third day). Within the El Paso shooting–which gave way to much more graphic imagery than the Pittsburgh

shooting given the emergence of survivor footage via social media–there was significantly more graphic imagery used on days 1 and 2 than on day 3.

This study attempts to fill several research gaps related to mass shootings. First, it expands agenda-setting analysis of mass shooting coverage into the realm of television, where studies on this topic were previously limited to newspapers. Relatedly, it addresses the role of images in these types of analyses. Additionally, it provides concrete data on the use of graphic images within coverage of mass shootings, particularly with regard to when this imagery is employed. More research is certainly needed in this area, but these findings offer initial insights as to what points in the coverage cycle audiences are likely to encounter these types of images–which, again, can be highly traumatic. Finally, both quantitative analyses and qualitative observations of the coverage analyzed in this research provide more insight into possible best practices for covering mass shootings in television news.

CHAPTER 2. LITERATURE REVIEW

This study represents a synthesis of the three distinct concepts discussed above within the topic of media coverage of mass shootings: second-level agenda-setting, contagion among mass shooters, and the use of graphic imagery. Essentially, second-level agenda-setting provides the framework with which to analyze whether news media is adhering to best practices on covering mass shootings. In order to fully establish the role of this study in theory-building on second-level agenda-setting, it is important to examine how this theory has been developed in empirical literature. The literature on contagion in mass shootings suggests a need for analysis of how frequently the shooter is depicted, both as a data point in itself and in comparison with depictions of other individuals involved in the shooting.

A second branch of inquiry in this study regards the role of mass shootings as mass casualty events; media coverage of such events can often give way to graphic and disturbing imagery. There is significant literature suggesting that graphic images of mass fatality events can result in post-traumatic stress and even PTSD among some viewers (Pfefferbaum, Nitiéma, & Newman, 2019). This highlights a need for data on whether graphic imagery is employed in coverage of mass shootings, such that these events can be included in further analyses in this area. Additionally, research on the semiotic value of imagery of terrorism lends itself to a more critical analysis of how mass shootings are depicted, which justifies this study's focus on visuals generated by television news.

2.1. Second-level agenda-setting

2.1.1. Introduction

While there is a plethora of literature on the potential for coverage of mass shootings to glorify the shooter, as well as what aspects of a shooting will garner more coverage in the general media sphere, there is far less empirical work designed to quantify and typify the images used in this coverage. As Muschert (2007) pointed out, there is a need for empirical analysis on how the news media covers the specific individuals involved in a mass shooting. Second level agenda-setting (McCombs & Evatt, 1995) suggests that the media can increase the perceived salience of particular aspects of an event among audiences. In the context of mass shootings, this means that drawing more attention to the shooter or the victims should direct audience attention toward those individuals.

The original iteration of agenda-setting theory essentially posits that the media's agenda correlates strongly with what issues garner public concern (McCombs & Shaw, 1974); second-level agenda-setting was developed to address how the media highlights the attributes of a specific issue (Entman, 2007). There is a significant body of literature supporting a correlation between the issues the media chooses to cover and the issues that the public deems most important (Wu & Coleman, 2006); this is what scholars refer to as "first-level" agenda-setting. Second-level agenda-setting, meanwhile, "examines the influence of 'attribute' salience, or the properties, qualities, and characteristics that describe objects or people in the news and the tone of those attributes" (Coleman & Banning, 2009, p. 314). In other words, second-level agenda-setting moves away from conceptualizing agenda-setting as the choices media outlets make about what stories to

cover and focuses in on the aspects of each individual issue of concern to which the media devotes more attention.

The effects of both first-level and second-level agenda-setting on audiences have been a concern among researchers for decades. Abang Ahmad, Mohamad Ashari, & Samani (2017) note that "the attributes emphasized over other elements… could consequently influence… perception of the message presented" (p. 4). Sevanans (2017), meanwhile, argues that the media "act[s] as a megaphone, amplifying particular issues or attributes over others" (p. 254). In summarizing seminal work by Lippmann (1922), McCombs (2014) writes "public opinion… responds not to the environment but to the pseudoenvironment constructed by the news media" (p. 2). All of these concerns coalesce around the notion that setting the public agenda is an extraordinarily powerful role for the media to play; this underscores the importance of examining whether the media can exert agenda-setting impacts on issues of high societal consequence such as mass shootings.

2.1.2. Theory-building on second-level agenda-setting

Theory-building research on second-level agenda-setting suggests that the attributes of an issue audiences remember most strongly are similar to those attributes highlighted by the media. Experiments that alter newscasts to emphasize particular attributes have resulted in participants ascribing more salience to the increased attributes (Kiousis, Bantimaroudis, & Ban, 1999). Many studies have found that second-level agenda-setting effects are actually stronger than first-level effects (Wu & Coleman, 2009).

Theory-building on second-level agenda-setting has largely taken place within the context of politics, particularly political elections. The first major empirical study explicitly rooted in the concept of second-level agenda-setting focused on a 1995 election in Navarra, Spain; the study found a significant correlation between the attributes used to describe the candidates in the media and the attributes cited by voters (McCombs, Llamas, Lopez-Escobar, & Rey, 1997). However, significant effects were mostly limited to print news descriptions of the candidates rather than television. A second study focused on the 1996 Spanish general election, finding that the attributes of the candidates emphasized by the media were highly correlated with those viewed as salient by the public (McCombs, Lopez-Escobar, & Llamas, 2000). The first known laboratory study of possible second-level agenda-setting effects came in 1998; findings showed that manipulating the emphasis placed on particular attributes of a fictional politician increased the salience of those attributes among participants (Kiousis, Bantimaroudis & Ban, 1998).

Analyses of more recent U.S. elections have shown similar effects. A study of the 2000 U.S. presidential election found that news showed more negative nonverbals by Bush and more positive nonverbals by Gore; Gore was perceived by audiences as having more positive attributes and Bush was perceived as having more negative attributes. The correlation between attribute depictions and audience assessments was significant in both cases (Coleman & Banning, 2006).

A study of the 2004 U.S. election showed similar results: the traits emphasized by the media as being related to John Kerry were significantly correlated with traits the audience viewed as salient to their image of Kerry (Wu & Coleman, 2009). However, the

same was not true for Bush. The authors made a compelling case that because Bush was running for re-election, audiences already had established schemas (i.e. mental frameworks) around Bush, including traits of his that they perceived to be salient. Audiences' overall lack of information about Kerry going into the 2004 election fits into a concept called need for orientation, which refers to audiences' need to develop a schema about a novel individual or concept (Wu & Coleman, 2009). This suggests that agenda-setting effects on audiences may be higher in cases where the audience is unfamiliar with the concept being covered.

This difference in available information, and the way it may affect second-level agenda-setting, is referred to as "need for orientation" (e.g. Camaj, 2014). While need for orientation has been addressed in empirical reviews related to second-level agenda-setting (e.g. McCombs, Shaw, & Weaver, 2014), there is no established relationship between need for orientation and second-level agenda-setting; some studies have shown a correlation, while others have not (Camaj, 2014). McCombs, Shaw, & Weaver (2014) argue more strongly in favor of the consensus that there is no link, noting that studies "did not find NFO predicting second-level agenda-setting effects" (p. 786).

Not all of the work on second-level agenda-setting has taken place within the political realm. The role of second-level agenda setting has been explored in news coverage of media and terrorism, and disaster. In a study of agenda-setting after 9/11, Craft and Wanta (2004) found that the likelihood of future terrorist attacks–the second most-covered aspect in the news sample post-9/11–was the number one point of concern for participants. Meanwhile, the third most-covered aspect–economic effects of the attacks–were the second most-prioritized aspect among viewers. A study of the 2014

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Malaysia Airlines crash (MH370) examined the relatively frequency of particular

attributes of communications from Malaysia Airline Systems (MAS). Interestingly, the

study found that MAS expressed frequent enough sympathy for the victims and their

loved ones to satisfy the public, but not so much as to draw attention to their failings, a

balance deemed important in the crisis communication literature (Abang Ahmad,

Mohamed Ashari, & Samani, 2017). This study represents a second-level agenda-setting

analysis of whether communication conforms with best practices in topical literature,

similarly to the endeavor of the current study.

2.1.3. Other considerations

Schuefele (2009) notes there is a need for greater exploration of possible third

variables that could explain the connection between media agenda and audience agenda.

However, perhaps the most obvious of these is the relative salience between events in the

real world, and this finds little support in the literature as an explanatory variable

(Schuefele, 2009). He further argues that agenda-setting studies have not adequately

established causation, as they fail to establish whether the media agenda is in place before

the audience agenda (Schuefele, 2009).

Sevenans (2017) makes a similar argument, further nuancing the lack of

established causation: "agenda-setting scholars are divided on what the exact causal role

of the media is in the agenda-setting process" (Sevenans, 2017, p. 260). A recent study

found that agenda-setting can be a reciprocal process: in the 2014 election in India, the

news agenda impacted the way that political campaigns chose to structure themselves

with regard to what attributes they chose to emphasize, but political campaigns were also

able to exert an impact on the attributes of their candidate emphasized by the media (Baumann, Zheng, & McCombs, 2018).

Finally, Wu & Coleman (2006) make the case that most agenda-setting research "sacrifices national generalizability," (784) as it is often conducted on local news outlets. While this is not an overwhelming trend within the current literature review, it is worth pointing out as an issue that does not negatively impact this study.

2.1.4. Agenda-setting in images

There exists some support for the idea that analyzing images in particular may elucidate elements of agenda-setting. Kiousis (1998) found that experiments that altered newscasts (i.e. television images) to emphasize particular attributes resulted in participants ascribing more salience to the increased attributes. In analyzing the role of nonverbal candidate behaviors as covered by television news, Coleman & Banning (2006) set a precedent for using second-level agenda setting to ground a content analysis of visual information. In a study of agenda-setting after 9/11, the authors noted that television news was so saturated with images of the plane hitting the World Trade Center and images of the buildings collapsing that it became difficult for audiences to recall other images nearly as reliably (Fahmy, Cho, Wanta, & Song, 2009). Dahmen (2018) argues that image use–specifically the respective frequency of the use of different images–can comprise a form of agenda-setting, noting that "image salience can be driven by conventional and repetitious imagery in the news media… the same or similar images seen again and again in the news media can dictate which aspects of a news story audiences will consider most important" (Dahmen, 2018, p. 165).

2.1.5. Agenda-setting in mass shootings

Finally, agenda-setting research has been applied or at least invoked in the case of media coverage of mass shootings. A study of the depiction of the Columbine shooting in the *New York Times* found that the paper emphasized different attributes at different points in the coverage period in order to hold reader interest throughout the coverage cycle–for example, increasing emphasis on Columbine's potential future impacts (Chyi & McCombs, 2004).

Dahmen, Abdenour, McIntyre, & Noga-Styron (2017) note that "the analyzed coverage of the mass shootings at Virginia Tech and [Umpqua Community College] gave great visual prominence to the perpetrators" and that this is "a disturbing conclusion *given agenda-setting theory*" (p. 175; emphasis added). A study of coverage of the Aurora shooting found that local coverage was more likely to focus more on victims; the authors hypothesized that this is because more readers are likely to know them (Holody & Daniel, 2017). Finally, and perhaps most relevant to the current study, an analysis of stories about the Christchurch shooting found that "only 14% of U.S. publications reported the shooter's name" (Baumgartner, Bermejo, Ndulue, Zuckerman, & Donovan, 2019).

2.1.6. Agenda-setting in the current study

Given that mass shooters are often fame-seeking individuals who are often inspired by coverage of other shootings and their perpetrators (e.g. Lankford, 2018), it is worth shedding light on whether the image-based aspects of television news coverage do indeed give undue attention to the perpetrators of mass shootings. Therefore, to the extent

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that second-level agenda setting is occurring in media coverage of mass shootings, it is important to make note of what attributes of the shooting are being depicted most frequently, as viewers are likely to ascribe more salience to attributes highlighted by the media.

Second-level agenda-setting provides the theoretical framework through which to assess the individuals involved in a shooting–particularly the shooter himself–as "attributes" that may be given disparate weight in the process of covering a mass shooting in the media. In the wake of the Pulse Nightclub shooting in Orlando, Florida, then-FBI Director James Comey urged the media to minimize the shooter as an attribute, but it is worth noting that he did not specify which attributes should be highlighted in the shooter's stead. The No Notoriety project, meanwhile, suggests a focus on the victims and their lives (No Notoriety, n.d.); however, at least in print news coverage, Dahmen (2018) found that shooters outnumbered depictions of their individual victims by a ratio of 16 to 1. The above gives way to the following research question:

RQ1a: Within the coverage of these two shootings (El Paso and Pittsburgh), which attributes or stakeholders [the shooter, the victims, the survivors, the manifesto, and first responders] are depicted most frequently?

In speaking about the Iraq War, Altheide (2006) notes that "analysis of news media coverage of previous wars indicates that each "current" war is greatly informed by the images, symbols, language, and experiences associated of [sic] previous wars" (p. 159). Similarly, coverage of mass shootings is at all consistent, one would expect journalists to take cues from coverage of previous mass shootings. This may be especially true in the competitive economic landscape of mass media; if a particular pattern of

coverage is rewarded with increased viewership, one can reasonably expect those patterns to continue in future coverage of similar incidents. This may be problematic from the perspective of second-level agenda-setting; if news outlets find that emphasis on the shooter is positively correlated with viewership, guidelines promoting emphasis on other attributes are far less likely to be widely adopted.

Finally, the role of need for orientation is particularly relevant to the issue of mass shootings. Given how frequent mass shootings are in the United States–along with the widely- that mass shootings in the United States are now relatively normative (e.g. Dahmen, 2018)–few audiences are likely to have a need for orientation regarding this issue. Therefore, if need for orientation does play a role in second-level agenda-setting effects, this may impact the extent to which second-level agenda-setting regarding a mass shooting in general would affect audiences. Holody & Daniel (2017), however, argue the opposite, suggesting that existing schemas about the concept of mass shootings in general will lead audiences to "direct their attention to the particulars of a distinct shooting (i.e. specific details about victims or perpetrators)" (2018, p. 91). Second-level agenda-setting, may be most useful in analyzing the attribute salience of individual mass shootings, especially as they relate to certain aspects of the shooting (e.g. whether the media will focus on the shooter more in shootings where the shooter expressed a political motivation).

2.2. Mass shootings and contagion

2.2.1. Contagion effects

A consensus is emerging in the literature that there may be a "contagion effect" among mass shootings. While this term is not well-defined in the mass shooting literature, it seems to take a cue from the literature on contagion among suicide incidents, or "copycat" incidents in cases of murder and other crime (Towers, Gomez-Lievano, Khan, Mubayi, & Castillo-Chavez, 2015; Johnston & Joy 2016). In particular, the contagion literature on suicides suggests that individuals contemplating suicide may be inspired by media depictions of other suicides to follow through on their thoughts or plans (Johnston & Joy, 2016). This concept has been expanded to the realm of mass shootings, with results that show promise in establishing mass shootings as potentially "contagious," or more likely to occur in the wake of a previous mass shooting covered in the media. Studies on the period during which contagion occurs are remarkably consistent: one model showed a 13-day period (Towers, Gomez-Lievano, Khan, Mubayi, & Castillo-Chavez, 2015); another two weeks (Kissner, 2015). This period also closely mirrors the rate of frequency for mass shootings in the U.S. (12.5 days) [Johnston & Joy 2016].

This contagion–specifically, the prevalence of "copycat" mass shootings–may well be driven by social learning theory, wherein individuals are likely to model a behavior they observed being rewarded (Bandura, 1980). Lankford and Madfis (2018) write extensively about how media coverage of mass shooters may be perceived as rewarding to their potential imitators, stopping just short of invoking social learning

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theory by name. Some social scientific literature on mass shootings suggests that would-be mass shooters are certainly seeing their predecessors experience what they would call rewards from media. The examples of such rewards are numerous.

2.2.2. Media coverage as reward

While mass shooters are unlikely to be given positive coverage, the fact that their actions receive significant press (even of negative valence) may be enough to motivate them (e.g. Lankford & Madfis, 2016). Meindl and Ivy (2017) note that the media's focus on the shooter can essentially turn him onto a household name and even bestow a kind of celebrity status. (There is even some precedent for intentionally treating mass killers as celebrities; Boston marathon bomber Dzokhar Tsarnaev was featured on the cover of Rolling Stone.) Fame has been shown to be a high motivator for mass shooters (Johnston & Joy, 2016), and Lankford and Madfis (2018) note that "in many cases, winning a Super Bowl or an Academy Award garnered less media attention than committing a high-profile mass killing" (p. 153).

Perhaps even more compelling than empirical evidence that mass shooters seek fame are the anecdotes describing how they go about this. The Umpqua community college shooter is on record claiming that, "when they spill a little blood, the whole world knows who they are… seems the more people you kill, the more you're in the spotlight" (in Lankford & Madfis, p. 71). Even more chillingly, the shooter at Pulse nightclub in Orlando also sought the reward of news coverage: Dahmen, Abdenour, McIntyre, & Noga-Styron (2017) note that "the lone perpetrator stopped to check Facebook for news of the incident during his three-hour rampage" (p. 458; emphasis added).

There is also precedent for the notion that terrorists intentionally use media to amplify their actions. As Baudrillard (2002) notes on the 9/11 hijackers, "[they] exploited the 'real time' of images, their instantaneous world-wide transmission, just as they exploited stock market speculation, electronic information, and air traffic" (Baudrillard 2002 p. 21). Fahmy, Cho, Wanta, & Song (2006) inculpate the news media directly for some of the terror related to 9/11 (though obviously not the attack itself), arguing that "U.S. media played an important role in amplifying the effects of the 9/11 attack" (p. 6). Particularly in cases of mass shootings with a political intent (one of the criteria for an act to be considered terroristic), a mass shooter may also view the media as a tool by which to spread his message. Covering a manifesto attached to a shooting also spreads the content of the manifesto to a wider audience than would otherwise see it (Meindl & Ivy, 2017)

Media coverage may also allow would-be mass shooters to find inspiration from previous mass shooters. Murray (2018) puts it bluntly: "these killers are enthralled with watching media reports and learning from their predecessors" (p. 121). Lankford & Madfis (2018) note the dark culture of hero-worship around mass shooters in some online spheres (Lankford & Madfis, 2018). Specifically, the Virginia Tech shooter was obsessed with the Columbine shooters (Murray, 2014); the Sandy Hook shooter, in turn, was inspired by the Columbine killers (Langman, 2018) and the Virginia Tech shooter (Murray, 2017). The Sandy Hook shooter also referred to the Aurora theater shooter by a nickname that reads like a term of endearment, and he kept meticulous, systematic notes on over 500 previous mass shooters (Murray, 2017).

This tracks with the overall notion that media coverage of these events can serve as an inspiration for would-be mass shooters. Dahmen (2018) found that 30% of mass shooters drew inspiration from a previous event (p. 457). More generally, as Johnston & Joy (2016) put it, media coverage of previous mass shooters provides would-be mass shooters "a glorified model with whom to identify and emulate in the pursuit of infamy" (p. 23). Langman (2018) also noted that the mere prevalence of these shootings in the media may provide potential perpetrators with an imagined community, allowing would-be mass shooters to feel less deviant not only morally, but statistically. Finally, there is a possibility that would-be mass-shooters are forming parasocial relationships with the shooters covered in the media; parasocial relationships refer to a one-sided perceived relationship that an audience member has with a media figure (Horton & Wohl, 1956).

Finally, media coverage of mass shootings can even serve as a procedural model for would-be mass shooters (e.g. Dahmen, Abdenour, McIntyre, & Noga-Styron, 2017); Meindl & Ivy (2017) point out that "all information [on one shooting] that could serve as a model for imitative behavior was provided via various media sources… in instances of mass shootings, the media appear largely responsible for providing the model to imitate" (p. 369-370). Along the same lines, Heffgott (2008, in Dahmen, Abdenour, McIntyre, & Noga-Styron, 2017) notes that shooters "mimicked or altered their behavior based on media stories of actual or fictional killers" (p. 458), suggesting that these perpetrators find in this media coverage not only a source of inspiration, but a set of procedural cues.

2.2.3. Attribute salience and coverage patterns

Given the foregoing evidence that mass shooters are rewarded by media coverage, it is essential to elucidate what factors of a shooting are most likely to result in it garnering significant media coverage. The question of why any given mass shooting would garner coverage over other contemporaneous stories is a question of first-level agenda-setting, which would theoretically render it less germane to this study. However, if there are attributes common to all or most mass shootings that lead to increased coverage, it is reasonable to assume that the media is giving those attributes significant airtime. It is especially important to elucidate what those shared attributes are given that mass shooters are likely to find increased media coverage rewarding; if would-be mass shooters begin to notice trends in what garners a shooting increased coverage, they may begin to incorporate those attributes into planned shootings.

Unfortunately, the attributes that have most reliably been found to increase media coverage are perhaps the most dangerous. There is evidence of a positive correlation between the number of people a shooter is able to kill and the amount of media coverage he receives (Schildkraut, Elsass, & Meredith, 2017). A similar finding from Dahmen (2018) showed that an increased number of victims led to more front-page photos of the shooting in newspapers.

Silva & Greene-Colozzi (2019) found that shooters who seek fame outright are more likely to be rewarded with media coverage of their actions than shooters who do not. The relationship between fame-seeking and coverage may also take more mediated paths: fame-seeking shooters were more likely to use combinations of weapons (Silva & Greene-Colozzi, 2019), which has been found to increase the likelihood that a mass

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shooting would receive news coverage (Silva & Capellan, 2019). The fact that fame-seeking, in particular, is likely to be rewarded with media coverage is deeply disturbing. Bushman (2018) contends that there is a higher-than-average proportion of narcissistic personality factors among mass shooters than in the general population; Lankford & Madfis (2017) note that narcissists rely on external sources to boost their egos and that when narcissists commit violent acts, "the media are essentially offering them a stage" (p. 156).

Furthermore, it ought to be self-evident that mass shooters aim to kill large numbers of individuals. There has often been evidence showing that past mass shooters have aimed to kill more individuals than they were actually able to and that using death count as a criterion for what constitutes a mass shooting (currently 4 or more) is erroneous given "random and systematic factors (e.g. firearm malfunction, EMT responses) that may impact [a shooter's kill count]" (Silva & Capellan, 2019, p. 82). As one example, of this, the Dayton, Ohio shooter was able to kill nine people in a matter of 30 seconds and was shot down by police officers while shooting into the crowd (Gorman & Palmer, 2019). In other words, not only is a higher death toll a greater "success" in the eyes of the shooter (i.e. in terms of loss of life and bereavement), it is also more likely to be rewarded with more of the media coverage that the shooter was likely already seeking out. To this end, the compounding factor of media "reward" could arguably be deadly.

2.2.4. Developing best practices

Scholars are quickly coalescing around the consensus that media coverage of mass shootings can elicit contagion effects and have further nuanced the nature of these

effects as the literature on this subject has expanded. While the concept of "contagion" is somewhat abstract, mass shootings themselves are not–they result in death, and in many cases a lot of it. The fact that mass shooters not only view news coverage as rewarding but may also take procedural cues from it should be of significant enough concern to warrant changes in this coverage.

Sidhu (2017) notes that there is no established set of journalistic guidelines for covering mass shootings, and goes on to suggest that "efforts [at creating best practices] can be part of a solution to decrease the frequency of mass casualty events in the near future" (p. 4). Several scholarly sources have implored that the media adjust their coverage on mass shootings to minimize any possible contagion effects. Dahmen (2018) urges an emphasis on victims' stories and visceral photos of their healing (implied, with permission) as the "visual hook" needed to engage audiences with a story. This, again, fits neatly within second-level agenda-setting theory, as it calls for emphasizing particular attributes of the issue (victims and their stories). According to Meindl & Ivy (2017), current practice does the opposite–focusing on the shooter's story, including his manifesto in cases where one exists; the authors note that minimizing depictions of the shooter could lead to a decrease in contagion and copycat incidents. Meindl & Ivy also implicitly invoke second-level agenda-setting in their recommendations, and perhaps more broadly than Dahmen, suggesting that "only the details necessary to describe the event should be provided" (2017, p. 370).

These changes, however, cannot take place without a specific and cohesive set of best practices. Johnston & Joy (2016) note that a research-driven set of best practices was successfully proposed with regards to reporting on suicides (O'Carroll & Potter, 1994, in

Johnston & Joy, 2016) and has largely been implemented by the media (Stack, 2002). The site ReportingOnSuicide.org, a collaborative effort among several universities and federal health organizations (e.g. the CDC), offers a brief but comprehensive outline of best practices for reporting suicides that minimize the likelihood of contagion and copycats. Some of these guidelines mirror the concepts elucidated by the literature on mass shooting contagion, such as avoiding the invocation of "success" in suicide coverage and refraining from glamorizing the individual's death (ReportingOnSuicide.org, n.d.), though both of these refer more to adjustments in framing than minimization of particular attributes (i.e. second-level agenda-setting). The site also mentions that "more than 50 research studies" have found possible correlations between media coverage of suicide and contagion (ReportingOnSuicide.com, n.d.); given that evidence for a similar phenomenon in the realm of mass shootings is accumulating rapidly, the widespread adoption of these best practices could make a compelling case for undertaking a similar effort in the realm of mass shootings.

This body of literature discussed above has lent support to two initiatives aimed at addressing the role played by media in mass shootings, one in the public sector and one in law enforcement. The No Notoriety campaign encourages media outlets to keep the focus on humanizing the victims rather than the shooter (No Notoriety). The project rests on the well-supported notion that to give the shooter extensive media attention is essentially to glorify him and that his actions and will be viewed as rewarding to those inclined to commit similar acts of violence.

Similarly, the FBI has adopted an initiative entitled Don't Name Them, which discourages media outlets from saying the names and showing the pictures of mass

shooters unless they are still at large. The Bureau contended that, "media coverage featuring the offenders' names, photos, and life stories only cements the legacies they seek to achieve" (Federal Bureau of Investigation, 2017). While there is certainly more research to be done on the exact mechanisms of contagion in mass shootings (as well as more replication of the existing contagion research, particularly that concerning the time frame of importance), there is arguably little harm in assuming that contagion is a real risk in depicting mass shootings and imploring news media to take concrete steps to minimize that risk.

The relatively cohesive body of literature supporting a contagion effect means that these guidelines effectively serve as an attempt to bridge theory and practice in terms of covering mass shootings in a responsible manner. However, the wide latitude afforded to the American press under the First Amendment means that these guidelines remain just that–guidelines–and therefore lack consistent enforcement. Although enforcement is not necessary in gaining compliance with best practices from the media–as seen with the shift in reporting suicides–the lack of an established set of proposed guidelines is obviously a significant barrier to their widespread adoption. This problem provides the basis for the following research question, which is similar to the above question rooted in second-level agenda-setting, but broader in scope.

RQ1B: How closely does television news coverage of mass shootings adhere to the guidelines put forth by the FBI and the No Notoriety project? Specifically, how often is the shooter depicted in these broadcasts?

2.3. Semiotics and the role of images

2.3.1. Semiotics

The role of imagery–both in media coverage of mass shootings and in this

analysis–is paramount, as the study of semiotics suggest that images in particular will

have symbolic value. In *The Spirit of Terrorism,* the seminal work on the semiotics of

terror, Baudrillard (2002) keenly observes the symbolic value of visual depictions of acts

of terror: they are, he writes, "not only about the violent irruption of death in real time –

'live,' so to speak – but the irruption of a death which is far more than real: a death which

is symbolic and sacrificial – that is to say, the absolute, irrevocable event. This is the

spirit of terrorism" (Baudrillard, 2002, p. 13). Fahmy, Cho, Wanta & Song (2009) also

make note of the symbolic value of mediated images of 9/11, suggesting that these

images helped shape audiences' understanding of the event. They then further advance

the notion of news images as having symbolic value for viewers, arguing that "audiences

recall news through several key images, or icons" (Fahmy, Cho, Wanta, & Song, p. 13).

However, the value of these images (the word "value," here, is used in a neutral

sense) may move beyond the symbolic and into the experiential. Bouvier (2007) wrote of

9/11 that television depictions were meant to essentially allow viewers to experience the

event by proxy, arguing that "the recurrent shots and repeats compensate for not being

there in the flesh (p. 57). Neal (2005) seems to concur with the assessment of mediated

images serving as a proxy for real-world experience of the event: "Through mass

communications, the millions of people constituting large viewing and listening

audiences become aware of much more than they could experience directly. Happenings

in faraway places are brought into the homes and lives of millions of people" (Neal 2005 p 15-16). Neal (2005) further notes that individuals without firsthand experience of an event may be even more likely to seek out media depictions of it as a way of understanding the experience (2005), perhaps as a consequence of lurid curiosity, human empathy, or both.

2.3.2. Traumatic Effects of Graphic Images

In addition to possible contagion effects, another major concern regarding media coverage of mass shootings is that the graphic images that result from this coverage may induce post-traumatic stress and other relevant psychological sequela in some viewers. There is a substantial body of literature suggesting that exposure to media coverage of mass casualties can induce vicarious stress, post-traumatic stress (PTS), and even post-traumatic stress disorder (PTSD; distinguished from PTS in that it is an established clinic diagnosis where PTS is a subthreshold symptom cluster) [Pfefferbaum & Newman, 2018]. A metanalysis of 43 studies (n = 31,162) approaching this question found a relatively robust connection between exposure to graphic imagery and PTS/PTSD (Pfefferbaum, Nitiéma, & Newman, 2019).

Other studies have focused more on the role of media depictions of these events in instilling cultivated fear (i.e. cultivation theory; Gerbner & Gross, 1974). Viewing coverage of these shootings can induce cultivated fear in audiences (e.g. Holody & Daniel, 2017), especially when fatalities are higher in number (Silva & Capellan, 2019). Neal (2005) seems to address cultivated fear as well, noting that upon observing the

seemingly random murder of their fellow citizens, "no one can be completely certain that they won't be victimized" (p. 181-182).

Another possible psychological sequela is that this coverage may challenge an individual's beliefs about the safety of the world (Janoff-Bulman, 1992), beliefs an individual may not have even been aware of possessing until they were destroyed. Such a dramatic and likely anxiety-inducing shift in a core schema has also been linked to the risk of developing PTSD (e.g. Park, Mills, & Edmondson, 2012; Park, Smith, Lee, Mazure, McKee, & Hoff, in press). As Neal (2005) notes in his book *National Trauma and Collective Memory,* "the emergence of trauma confirms [some people's] ready-made notions about living in a chaotic and unpredictable world" (Neal, 2005 p. 17).

To this end, the current work seeks to determine which channels employ graphic imagery of the shooting and at which points in the news cycle this imagery is used. This may be of particular importance given that newscasts tend to be viewed by audiences beyond those who intentionally tune into them; as Lankford and Madfis (2018) put it, "post-attack coverage is largely inescapable as people go about their daily lives" (p. 155). As one example, newscasts are often displayed in public places (e.g. airports); if the use of graphic imagery is particularly aversive to certain audiences, it would likely be beneficial for them to know which channels may use this imagery more heavily so that they may limit both intentional and unintentional exposure to aversive images.

This leads to the following research questions:

RQ2A: Which stations, if any, are more likely to employ graphic imagery?

RQ2B: At what point in the coverage cycle is graphic imagery most frequently employed?

Within the realm of "graphic imagery" is the issue of whether and how to depict

bodies. The El Paso shooting resulted in the loss of 22 lives; the Pittsburgh shooting

killed 11 people. Depending on the images available, there is a considerable likelihood

that dead bodies may be visible in visual depictions of one or both of these events. While

Lankford & Madfis (2018) contend that the news media rarely shows photos of dead

bodies, Fishman (2017) argues that traditional media does indeed depict bodies in the

aftermath of fatal incidents. Furthermore, there has been a considerable ethical debate

around whether and how bodies of those killed in a newsworthy event *should* be depicted

in the news (e.g. Lewis, 2016).

While a body could reasonably be categorized as a "graphic image" in that it

meets the criterion of "inducing fear, helplessness, or horror" (American Psychological

Association, 2013), it is arguably a unique category in that it is the closest the news can

or will come to conveying the actual loss of life in a visual manner (which is arguably

distinct from depicting the victims in the interest of memorialization). To this end, it

seemed important to address the depictions of bodies specifically (i.e. separate from the

more general category of graphic imagery), resulting in the following research questions:

RQ2C: Which stations, if any, show dead bodies?

RQ2D: At what point in the coverage cycle are images of bodies (if they are

shown) most frequently employed?

All of the above are designed to address the more overarching question of how

image use changes throughout the coverage period under analysis (days 1-3, i.e. the day

of the shooting and the two days following). Understanding the patterns in image use

during coverage of mass shootings will allow for a better understanding of when and how

these images are being deployed and at what points, if any, their use fits with best

practices. Furthermore, this work will elucidate whether specific channels are better at

adhering to best practices than others.

CHAPTER 3. METHODS

3.1. Selecting coverage

The shootings the author chose to analyze include the Pittsburgh synagogue shooting on October 27th, 2018 and the El Paso Walmart shooting on August 3rd, 2019. While the author originally intended to analyze the 2018 mosque shooting in Christchurch, New Zealand, logistical issues with the timing of that shooting (to be addressed later in this section) led to the decision to remove Christchurch from analysis.

These shootings were chosen for two primary reasons: the first, their relative recency at the time of the project, and the second, their heightened newsworthiness in relation to other mass shootings. In particular, both shootings are particularly newsworthy due to the fact that in each case, the shooter published some sort of "manifesto" or public statement about his intention in committing the shooting. This is crucial to the newsworthiness of these shootings given that ideological motive is a factor that can increase the likelihood that a mass shooting will garner significant media coverage (Silva & Capellan, 2019).

Additionally, in both cases, the shooter's motive was designed toward targeting a particular group: the El Paso shooter targeted Mexican immigrants and the Pittsburgh shooter targeted Jews. The discriminatory and hateful elements specific to these acts of violence contributed to a larger conversation about the role of bigotry in a globalizing society and the reasons for what appeared to be an uptick in hate-based violence. The El Paso shooting is also notable for having occurred on the same day as another mass shooting (the Dayton, Ohio nightclub shooting, which was excluded from this analysis due to the lack of expressed motive on the part of the shooter).

The author first conducted an inductive analysis of the coverage of these three shootings for the primary purpose of noting when these events were being consistently covered and at what point the level of coverage dropped substantially to the point where there was little left to analyze. This analysis was conducted using the University of Kentucky's COMTV system, which aggregates news coverage of particular events and compares the frequency of this coverage across the period of interest. The author found fairly consistently that coverage of these events was largely limited to the first three days–in other words, on the day of the event and the two days that followed. This tracks with similar findings in the literature: Dahmen (2018) notes that "shooting coverage peaks between 2 and 4 days following an incident" (p 167). Given that both of the shootings being analyzed occurred relatively early in the day, there is arguably enough time for them to appear on the evening news agenda on the day of; the fact that most channels covered the shootings on the day of bears this out.

Based on this, this study consisted of an analysis of the first three days of coverage of each event, including the day of the shooting. Content was drawn from the six major news channels: ABC, CBS, CNN, FOX, MSNBC, and NBC. Three of these are national channels (CNN, FOX, and MSNBC), and three are cable channels (ABC, CBS, and NBC) which share a station with a local affiliate.

Only the national news segment from the latter three channels were analyzed. These segments traditionally air at 6:30pm EST. Both of these shootings happened on a Saturday, meaning that coverage was analyzed on a Saturday, Sunday, and Monday. However, on the Sunday following both shootings, ABC ran a special edition of its national news segment, World News Tonight, at 6:00pm EST. This meant that there was

no way to keep all of the channels consistent on Sundays. Therefore, cable news coverage was analyzed at 6:30pm on Saturday and Monday and 6:00 on Sunday for both shootings. The choice was made to observe the cable channels at 6:00pm to line up with ABC (resulting in two outliers, CBS and NBC) rather than to line them up with CBS and NBC (resulting in ABC being the lone outlier). Some could argue that the most important consideration should have been minimizing the number of outliers, especially given that ABC's time change does not come with precedent. However, the author reasoned that if viewers seeking ABC's national news were used to getting local news at 6:00, they might be more likely to turn to cable news during that time frame; therefore, seeing how cable news was covering the shootings during that time could be impactful for the largest number of viewers (ABC's, and the viewers of the three cable news channels). The shift to align with ABC was also rooted in an initial planned research question as to whether the 6:00 and 6:30 segments differed significantly on the metrics addressed in the first two research questions; however, this author decided against analyzing this research question given the extremely small likelihood that two adjacent news segments would differ significantly.

This decision to analyze half-hour segments did bring up one possible issue based on the inductive analysis of the footage from El Paso: that is, that live coverage from the site of the event does not seem to be broken out into half-hour "stories" in the typical fashion of nightly news broadcasts. That is, individual stories clearly seemed to bleed across the traditional half-hour segments. This left the author with a choice between ensuring that the length of footage to be analyzed was consistent across channels, but recognizing that this may lead to analysis of partial stories at the end of the block, or

analyzing full stories on CNN, FOX, and MSNBC but recognizing that the windows of time analyzed may be partially inconsistent with those of ABC, CBS, and NBC due to the nontraditional segmentation of the stories. Given that the unit of analysis here consisted of half-hour segments, it seemed less important to follow an entire story through to its conclusion than to keep the analysis window consistent across channels. Therefore, the author chose to limit each channel to the half hour time frame.

3.2. Intercoder reliability

This resulted in a total sample of 3 hours of news coverage per event (.5 hours per station across 6 stations), or 6 total hours of news coverage. These hours break out into 36 individual segments: each event (2) covered by 6 news channels for 3 separate days. The coding was primarily conducted by the author, with a fellow graduate student in the program assisting in establishing inter-coder reliability. Inter-coder reliability was conducted on 8 out of the 36 segments, which calculates to roughly 22% of the total sample; this is well within the acceptable percentage of the sample required to establish inter-coder reliability (Neuendorf, 2017). After a single category that could not achieve reliability was dropped from analysis, reliability values ranged from .714 to 1.

The segments used to establish reliability for the latter two days of the El Paso shooting (CBS and MSNBC respectively) were coded together. This was because coverage of days two and three of El Paso was mixed in with coverage of the Dayton shooting, which occurred in the early hours of the morning after the El Paso shooting. Given that the secondary coder was not familiar with the circumstances around either of these shootings and the individuals involved, this was done to ensure that occurrences of the coding categories from the Dayton shooting were not being counted in the

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frequencies of occurrences for the El Paso shooting. Additionally, six other segments were coded separately to establish reliability.

Generally speaking, the unit of analysis was the half-hour segment; to quantify the frequency of each of these image types, the coders counted how often each appeared in the entire half-hour segment. A depiction was considered to be a "new" depiction when the camera shot cut to another image; images that panned across a screen were considered a single depiction. Therefore, the single shot was also important as a unit of analysis in this study.

The two coders used a consensus process whereby each coded the reliability sample independently, then came together and discussed possible differences in categories where discrepancies resulted in unacceptably low reliability. These discussions resulted in some nuancing of the categories, as laid out in the discussion of each specific category below. After these additional specifics were established, the coders would once again approach the ICR sample independently. After three rounds of this, reliability was acceptable for all categories except for that of "collective victims," leading this category to be cut from analysis.

3.3. Coding Categories

In order to answer the research questions laid out in the previous section, the author coded for the following content.

3.3.1. Graphic imagery

The question of whether the segment contained graphic imagery was operationalized using the DSM-V criterion for a "traumatic event" (referred to in the diagnostic criteria for simple PTSD) [American Psychological Association]. The traumatic event is described in the DSM-V as "something that elicits fear, helplessness, or horror" (American Psychological Association); thus, this was turned into "the segment contains an image that elicits fear, helplessness, or horror." This was a yes/no question, with the "yes" answer further broken out into two categories: whether the graphic image was obscured in some way (e.g. blurred, pixelated, covered with black bars) or not. Multiple segments contained both graphic imagery that was obscured and graphic imagery that was not obscured.

3.3.2. Depiction of dead bodies

The next coding category was the inclusion of images of dead bodies in the segment. Dead bodies could be both obscured or unobscured; the coders relied on judgment for what constituted an obscured dead body, though often, the image of a dead body was shown more than once with the first instance unobscured and later instances blurred or pixelated. This made it significantly easier to determine whether a pixelated image was in fact a dead body, as it mirrored previous images that clearly depicted a dead body.

3.3.3. Depiction of first responders

The term "first responders" in this case was operationalized as police officers, firefighters, EMS, military, and members of federal organizations (e.g. CBP, DEA) who were clearly on the scene in an emergency capacity. The question here was whether the image contained first responders; any image that contained one or more first responders, no matter how many individuals were present or how many different groups (e.g. police, fire) they represented, was counted as one depiction of first responders. While first responders were counted if they could be seen in their vehicles, the vehicles themselves were not counted in this category; this code represented images of first responders, not mere suggestion of their presence. Canine first responders were determined to count on the off chance they appeared alone, but they were not shown without their handlers.

3.3.4. Depiction of survivors

This was operationalized as a depiction of anyone who had clearly survived the shooting–for example, an interview with someone in a hospital bed. People milling around outside the building where the shooting had taken place were not counted as survivors, as there was no way to determine that they had been inside the building at the time of the shooting; however, images of individuals being led out of the building where the shooting had taken place were counted as survivors, as they had been inside the building during the shooting. Unless a survivor was depicted individually, for example in an interview, images of a large group of survivors were coded once, as it was impossible in most cases to determine the number of individuals in these images. People seen running or hiding (in the El Paso case) were assumed to have survived.

3.2.5. Depiction of the shooter

This was operationalized as any picture of the shooter or any mention of his name or the words "shooter" or "suspect" in the chyron or somewhere on the screen. Often, multiple images of the shooter would appear in quick succession, and sometimes multiple "images" of the shooter (e.g. his likeness and his name in the chyron) would appear in the same frame; each of these were counted as separate depictions.

3.2.6. Depiction of the manifesto

In both shootings coded in this study, the shooter published a "manifesto" before the shooting. This was operationalized as any depiction of the manifesto itself, as well as any mention of the manifesto or phrases like "online writings" in the chyron. A common hallmark of a manifesto was the depiction of a stack of papers with overlaid words revealing some of the content of the manifesto. In the Pittsburgh case, another common hallmark was a depiction of the logo for the site 8chan, where the shooter published his manifesto; depictions of the 8chan logo alone were not counted as depictions of the manifesto, but the logo usually accompanied other images (e.g. sheets of paper) that would evoke a manifesto.

3.2.7. Depictions of individual deceased

This was operationalized as a picture or name of a singular individual who had died in the shooting. Often, multiple pictures or multiple names would appear on the

same screen, but these were counted as unique instances of individual deceased given that there was a clear effort not to anonymize them. Names of specific victims mentioned in the chyron were also counted as individual deceased, as were memorials that bore names of specific individuals. If a still, portrait-style picture of an individual other than the shooter was accompanied by a chyron referencing death, the person in the still photo was assumed dead and the image was coded as one of a deceased victim.

3.2.8. Depiction of collective deceased

Depictions of collective deceased was operationalized as any reference made to the deceased victims wherein they were anonymized or collectivized, such that no names or likenesses of any single person appeared on the screen. A common example of this would be a chyron reading "11 dead in synagogue shooting" (in the Pittsburgh case) or "22 dead in Walmart shooting" (in the El Paso case). Another common depiction of collective deceased consisted of images of makeshift memorials to the deceased wherein no individual name could be made out. The word "deadly," which appeared frequently, was decided not to be a reference to collective deceased.

3.4 Data Cleaning

During coding, two of the news segments (ABC and CBS on day one of the Pittsburgh shooting) did not cover the shooting at all; those two segments were removed from analysis in order not to skew the descriptive statistics on frequencies with which each stakeholder was depicted. Furthermore, while graphic imagery was initially coded for whether it was obscured or unobscured, it was collapsed into a single category (i.e.

did the segment use graphic imagery, with the presence of either obscured or unobscured

graphic imagery sufficient to count as a "yes"), in order to answer the research questions

related to graphic imagery in as parsimonious a manner as possible.

CHAPTER 4. RESULTS

4.1. Intercoder Reliability

Intercoder reliability was acceptable for all categories except that of collective

victims. Given that reliability for this category could not be reached after four rounds of

coding, this category was dropped from further analysis. Intercoder reliability was

determined using Cohen's kappa; those values and percent agreement are reported below

by category.

Table 1. Intercoder Reliability Values

Category	Percent Agreement	Kappa Value
Total	**84.4**	**.804**
Graphic Imagery	87.5	.795
Depiction of Bodies	87.5	.714
First Responders	75	.724
Survivors	87.5	.843
Shooter	100	1
Manifesto	87.5	.75
Individual Victims	87.5	.784
Collective Victims	*62.5*	*.556*

This table lists the percent agreement and kappa values for intercoder reliability.

4.2. Research Questions

4.2.1. RQ1A and RQ1B

Two research questions concerned the frequencies with which each of the

stakeholders appeared: RQ1A (how frequently does each attribute appear within coverage

of the shootings) was constructed from an attribute salience standpoint and RQ1B (does

this coverage follow guidelines on covering the shooter) was constructed through the lens

of best practices. To answer the former, descriptive statistics on each of the five

categories whose appearances were counted (first responders, survivors, the shooter, the manifesto, and individual victims) were calculated. First responders (m = 21.24, sd 16.1) appeared most frequently, while the shooter's manifesto (m = 1.29, sd = 2.15) appeared least frequently. Individual (deceased) victims (m = 15.15, sd = 23.12) outpaced survivors (m = 9.65, sd = 11.68); however, both groups outpaced the shooter (m = 8.68, sd 7.77) in terms of appearances. Only the manifesto (m = 1.29, sd = 2.15) appeared less frequently than the shooter, meaning that in terms of categories involving people, the shooter appeared least frequently.

4.2.1.2. Frequencies in the El Paso shooting

In the El Paso shooting, first responders again appeared most frequently (m = 20.11; sd = 14.40). However, in this case, depictions of survivors (m = 16.83, sd = 11.96) outpaced depictions of the individual deceased (m = 8.61, sd = 14.01); both still outpaced the shooter (m = 6; sd = 6.87). The manifesto was once again depicted least often (m = 1.11, sd = 2.11).

4.2.1.2. Frequencies in the Pittsburgh shooting

In the Pittsburgh shooting, depictions of first responders (m = 20, sd = 18.61) and individual deceased (m = 20, sd = 28.26) were relatively comparable. The shooter was mentioned roughly half as often as either of the former (m = 10.39, sd = 8.25), and survivors (m = 1.39, sd = 2.38) were mentioned at a frequency roughly equivalent to that of the shooter's manifesto (m = 1.33, sd = 2.17).

Table 2. Mean Frequencies for Each Attribute.

Category	Total		El Paso		Pittsburgh	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
First responders	20.06	16.64	20.11	14.40	20	18.61
Survivors	9.11	11.56	16.83	11.96	1.39	2.38
Shooter	8.19	7.81	6.00	6.87	10.39	8.25
Manifesto	1.2	2.1	1.11	2.11	1.33	2.17
Individual	14.31	27.73	8.61	14.01	20	28.26

This table lists the mean frequency with which each attribute appears in each shooting.

4.2.1.3. Respective frequencies

To determine whether the frequencies of each of these categories differed significantly between the two shootings, multivariate analysis of variance (MANOVA) was conducted. This analysis revealed that survivors were depicted significantly more frequently during the El Paso shooting than the Pittsburgh shooting (F = 28.864; p < .0001), while the difference between frequencies for the shooter (shown more often during the Pittsburgh shooting) approached significance (F = 3.004; p = .092). Differences in frequency of depiction between the shootings were not significant for any other categories.

4.2.1.4. Conclusions

This suggests that in the overall coverage of both shootings, the media largely focused on first responders, survivors, and deceased victims–the latter two of which No Notoriety suggests should receive the most coverage in depictions of these events. However, given that two separate shootings were analyzed in this study, it is also fruitful to determine whether depictions of these two shootings differed in what attributes they

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chose to emphasize. Therefore, these same statistics were calculated for each individual shooting.

Given the above data on the two different shootings, it seems that coverage of the Pittsburgh shooting trends in the direction of allowing the shooter to outweigh survivors. Coverage of the Pittsburgh shooting also mentioned the shooter more than that of the El Paso shooting; this number approached statistical significance, but the difference in mean depiction count for the shooter (approximately 6 and 10 for El Paso and Pittsburgh respectively) seems to have practical significance, especially in the context of a half-hour segment that contains about twenty minutes of actual news coverage.

Additionally, the above statistics answer RQ2B (whether this coverage is in line with guidelines on covering the shooter. Given that mean depiction counts were approximately 6 per broadcast for El Paso, 10 per broadcast for Pittsburgh, and 8 per broadcast across both, the answer to RQ2B is clear: in neither case is coverage of these events in line with suggested best practice on depicting the shooter. Even the most conservative mean depiction count per broadcast (6) is far above the one depiction per broadcast suggested by No Notoriety and certainly flouts the FBI's guidance against naming or depicting the shooter at all.

4.2.1.5. Post hoc analysis

Given the set of best practices that has emerged with regard to depicting the shooter, it is arguably worth analyzing how well each of the channels analyzed conforms to these (informal) guidelines. A MANOVA found that the national news broadcasts (ABC, CBS, and NBC) were somewhat more likely than cable news outlets (CNN, FOX,

and MSNBC) to depict the shooter (F = 2.084; p = .095), though this figure only approached significance. This figure may also be significantly skewed by the fact that the half-hour segments on the former set of channels comprised the entirety of their national news broadcast each night, while cable news devotes 24 hours a day of coverage to national news of which this study analyzed a mere half hour. Certainly, more data on the cable news outlets is required to come to any solid conclusions on the accuracy of these comparisons.

4.2.2. RQ2A-D

Research question 2 parts A through D dealt with the use of graphic imagery and bodies–particularly, whether these variables were significantly predicted by either the news outlet covering the shooting or the day within the coverage period (the first, second, or third day of coverage).

Specifically, RQ2A asked which stations, if any, were most likely to employ graphic imagery. There was no significant difference between channels in terms of the use of graphic imagery (χ^2 = 6.438, p = .266).

RQ2B asked whether the day during the coverage period that a segment aired would predict whether graphic imagery was more likely to be shown. There was no significant difference between days of the coverage period in terms of whether graphic imagery was more likely to be used (χ^2 = 2.959, p = .228).

RQ2C asked which stations, if any, were more likely to show dead bodies. Chi-square analysis found no significant difference between the station on which a segment aired in terms of the likelihood that a viewer would see a dead body (χ^2 = 9.867, p =

.085). This number does approach significance, however, and an inductive look at the data suggests that of the six segments where bodies were shown, three took place on NBC, two on CBS, and one on MSNBC. Given that bodies were only shown during the El Paso shooting, this means that NBC showed bodies on every segment in which they could have done so, with CBS close behind.

RQ2D asked whether the day during the coverage period that a segment aired would predict whether bodies were more likely to be shown. There was no significant difference between days of the coverage period in terms of whether bodies were more likely to be shown ($\chi^2 = .857$, p = .652).

4.2.1.1. El Paso subgroup analysis

Given that El Paso was the only shooting of the two that included footage of bodies, and that it included significantly more graphic imagery than footage of the Pittsburgh shooting, the research questions related to graphic imagery and the depiction of dead bodies (RQ2A, RQ2B, RQ2C, and RQ2D) should arguably also be applied to El Paso in isolation. To this end, the same chi-square analyses conducted above for the whole sample were conducted on just the data from the El Paso shooting.

RQ2A asked which stations, if any, were most likely to employ graphic imagery. There was no significant difference between channels in terms of the use of graphic imagery ($\chi^2 = 3.6$, p = .608).

RQ2B asked whether the day during the coverage period that a segment aired would predict whether graphic imagery was more likely to be shown. There was a significant difference between days of the coverage period in terms of whether graphic

imagery was more likely to be used ($\chi^2 = 7.2$, p < .05). Specifically, days 1 and 2 were about twice as likely to show graphic imagery than day 3.

RQ2C asked which stations, if any, were more likely to show dead bodies. Chi-square analysis found a significant difference between the station on which a segment aired in terms of the likelihood that a viewer would see a dead body ($\chi^2 = 12$, p < .05). Specifically, CBS, MSNBC, and NBC showed bodies while the others did not.

RQ2D asked whether the day during the coverage period that a segment aired would predict whether bodies were more likely to be shown. There was no significant difference between days of the coverage period in terms of whether bodies were more likely to be shown ($\chi^2 = 1.5$, p = .472).

4.2.3. Qualitative Findings

In addition to the quantitative findings described above, which provide direct answers to the previously-stated research questions, examining this footage also lent itself to several qualitative observations, particularly when viewing the footage through the lens of whether this coverage could potentially glorify the shooter. The author made note of these qualitative observations as they emerged. Most are in relation to one of the stakeholders whose frequency of appearance was counted in the quantitative coding (e.g. shooter, first responders), but some are more general observations about coverage of mass shootings. Additionally, many of these observations may bear primary relevance to the depiction of one of these stakeholders while also touching upon the depictions of others. Finally, it should be noted that these are preliminary and subjective observations

by a single author of a quantitatively-oriented piece; in no way do they represent a complete critical or discourse analysis of this sample of mass shooting coverage.

4.2.3.1. The shooter

In examining the coverage of the shooter, particularly in relation to the victims, there were linguistic nuances in the chyron that seemed as though they could be impactful. As a primary example, chyrons framed the deceased victims of the shooting in several different ways; in the Pittsburgh shooting, construction of chyrons related to the victims vacillated between "11 lives lost," "11 dead," and "11 killed." While noting the variation in these chyrons may seem like a distinction without a difference, use of this language arguably ties into the literature on mass shooters and contagion.

"11 killed," in particular, emphasizes a "success" on the part of the shooter; given that mass shooters generally seek to maximize their kill count (e.g. Towers, Gomez-Lievano, Khan, Mubayi, & Castillo-Chavez, 2015), which predicts an increase in media coverage (e.g. Silva & Capellan, 2019), this may frame the death that occurred in the shooting in a way that mass shooters find more rewarding. Perhaps an observed framing that would most obviously flout best practices was the phrasing "[name of Pittsburgh shooter] killed 11," as this not only names the shooter but uses active voice to depict what he did, arguably attributing a "kill count" to him in the most direct possible manner.

Related to these differences in framing is the observed use of both active and passive voice to reference the shooter's actions. In particular, both were used to convey the way in which the shooter obtained his weapons: chyrons varied between "suspect legally purchased guns used in attack" and "3 guns used in attack purchased legally."

This distinction may be relatively inconsequential given that the shooter's name is not invoked in either of the two chyrons. Additionally, there is an argument to be made for both constructions: passive voice removes the shooter from the equation entirely, arguably denying him the spotlight he seeks, but it could also be interpreted as downplaying the gravity of gun violence as it constructs the action without the actor. Determining best practice on this would require weighing the costs and benefits of both acknowledging the shooter and eliminating the actor from depictions of gun violence.

Notably, there was also a case in which it was particularly obvious that the shooter was unnecessarily named. In one broadcast, the chyron noted the crimes that the shooter was charged with, using the words "suspect charged with [criminal charges]." Almost immediately after that, the broadcast put the shooter's name and picture on the screen. This case was a stark example of the fact that there are ways to at least lessen the limelight given to the shooter as an individual and minimize the likelihood that he becomes a household name. Additionally, this arguably makes the case that coverage out of sync with best practices is in at least some cases due to carelessness; if the news outlet in this case had been consciously adhering to best practices, the shooter would have remained "suspect" and his picture would not have appeared on the screen.

On a related note, chyrons also tended to vary between "victims include [names and/or ages of victims]" and "*shooter's* victims include [names or ages of victims]." While it is laudable on the part of news organizations to individualize the victims, it seems far more advisable to rely on the former construction, as the latter implicitly frames the victims as in some way belonging to the shooter. This, again, could be interpreted as invoking the idea of a kill count.

Another observation on coverage of the shooter related more specifically to the semiotic value of images. Specifically, in the El Paso case, there were several images of the shooter looking "menacing" and wielding a weapon. While there is no literature suggesting that these particular depictions motivate the shooter more so than others, they do implicitly frame him as capable, both in terms of weaponry skills and in terms of an ability to elicit fear.

The bottom line regarding coverage of the shooter is that in cases like El Paso and Pittsburgh (where the shooter was not at large at the time of news coverage), naming and showing him more than once is too many times according to best practice guidelines. This is particularly important given the potential for a copycat effect–a potential that, of the six channels under analysis, only Fox News ever acknowledged in their coverage.

4.2.3.2. The shooter

Perhaps the most dangerous finding within these qualitative observations is the news coverage of the shooters' respective "manifesto." In the El Paso case, the shooter apparently appreciated President Trump's reframing of immigrants as "invaders" and mentioned this in his online postings. Multiple news outlets within this sample covered the shooter's affinity for that framing; more starkly, they were able to convey this through images (i.e. screenshots of his online postings) and chyrons alone. This resulted in a sort of "meta-amplification" of this framing of immigrants; viewers who had not previously been aware of this discourse were being exposed to it because an individual killed 22 people based in part on his affinity for it. This arguably represents a substantial magnification of the shooter's hateful discourse.

The case of the Pittsburgh shooting was even more direct: ABC, in particular, reproduced some of the most vile and bigoted quotes from the Pittsburgh shooter's manifesto in large text on the screen. This means that, again, the media were not only giving incredible amounts of press to the shooter's actions–which were already implicitly rooted in the hatred he expressed–but shining a spotlight on yet more hateful rhetoric. While the exclusion of voiceover for this analysis leaves it unclear whether news anchors tried to contextualize this rhetoric in any way, the act of spreading it on such a large platform is arguably inappropriate given the above.

Interestingly, at times the media also categorized the shooter's manifesto as anti-Semitic "ramblings" or an anti-Semitic "screed," dismissing the notion that the speech had any value while simultaneously giving it airtime on a platform viewed by hundreds of thousands of people. The fact that these two actions are inherently contradictory ought to be relatively self-evident. Most viewers can infer that the shooter had anti-Semitic motives based on the fact that the shooting was committed at a synagogue, and it is certainly important to acknowledge hate crimes when they occur. However, given that the Pittsburgh shooter used Gab–a platform used almost exclusively by racists and extremists–most viewers were unlikely to have been exposed to the content of his manifesto but for its coverage in the media.

Finally, as Meindl and Ivy (2017) note, portraying the manifesto in the context of the shooting sends the implicit message that the shooter was able to "fulfill" the manifesto through the shooting and can "heap rewards on the violent act and display [the shooter's] competence" (p. 369). This mirrors the previously-mentioned observation that displaying the shooter in a menacing light can inadvertently attribute capability to him;

while this observation dovetails more with framing than second-level agenda-setting, it is nonetheless an important one to note as it may again highlight the reward potential of the media for mass shooters.

4.2.3.3. The deceased (individual and collective)

In addition, discussing the depiction of the deceased also leads back to the earlier discussion on how they are framed. While the author previously established how "11 killed" differs in potentially consequential ways from "11 lives lost" or "11 dead," there is room for further nuancing between these latter two terms. Specifically, "11 lives lost" may provide slightly more of an individualized depiction of the deceased than "11 killed."

Furthermore, the word "deadly" was a significant debate between the two coders in terms of whether to categorize it as a reference to the collective deceased. The decision was ultimately made not to code the word "deadly" as a direct invocation of collective deceased; given that this category was ultimately removed from analysis, the point is rather moot. However, there is room for more in-depth discourse analysis, particularly situated within a critical orientation, on how this word may operate to further anonymize those lost in these tragedies.

Given that the Dayton shooting took place in the early hours of the morning after El Paso, several news outlets collectivized the El Paso victims not only with one another but with the Dayton victims as well (e.g. "31 killed in two mass shootings"). FOX news even collectivized those two sets of victims with the victims of all mass shootings in 2019 at the time of the broadcast.

It should also be noted that given the length limits of chyrons, it is difficult for individual victims to be named in the chyron unless the news outlet were focusing on one or two. While this is a natural technological limitation, it places even more importance on not naming the shooter, lest his appearances in the chyron significantly outweigh those of his victims. News outlets tended to place individual victims' pictures on a shared screen, meaning that viewers cannot possibly process them all or may not focus on any one of them in particular. While these shared-screen moments were counted individually in the "individual victims" category (which is addressed in the limitations section), there is arguably an inherent collectivization at play in this format. Additionally, while victims' family members were attached to specific victims when being interviewed (i.e. a chyron reading, for example, "brother of Melvin Wax"), friends were usually referred to as "friend of victim," offering another opportunity to bring these victims out of anonymity. Finally, since the shooter is a single individual, he tended to occupy the screen alone, meaning that his depictions were arguably capable of eliciting a more singular focus from viewers than those of the victims.

4.2.3.4. Graphic images and bodies

There are also several observations to be made about the use of graphic imagery in this coverage. Given that the El Paso case took place inside a shopping mall, that shooting begat footage posted to social media by survivors, particularly from Snapchat, usually depicting those shooting the footage and their loved ones running and hiding. This represented El Paso's primary source of graphic imagery, and given that news outlets regularly replayed the few instances of this footage that they were able to gather, this code was remarkably consistent. While it is important to depict the survivor

experience, the immersive nature of this footage could be particularly disturbing to some viewers. It is worth noting here that this is a two-sided coin: this immersive may also result in increased telepresence, which has been found to elicit prosocial behavior toward survivors of mass casualty events (Westerman, Spence, & Lachlan, 2009). However, these images may also invoke, either directly through telepresence or more indirectly through empathy, a sense of mortal fear in viewers and should be used judiciously.

Another important observation concerns the use of bodies. While the Pittsburgh shooting did not generate images of dead bodies, the El Paso shooting did, and those images were displayed more than once by multiple outlets. In several of the segments that included the depiction of dead bodies the body would usually be unobscured the first time it was shown and obscured in later depictions. While the effort put forth by news outlets to obscure the body is certainly laudable, one could also make the case that showing a body unobscured (or any graphic image for that matter) and then later obscuring it makes the long-term viewer more aware that they saw something upsetting enough to warrant being obscured.

4.2.3.5. Evocative depictions

There is also a case to be made that some visual decisions made by the news outlets resulted in overly evocative, dramatized imagery of the event. Some of the terminology used in chyrons, such as referring to the United States as "a nation traumatized" by the shooting and referring to the shooting as a "massacre," was emotionally laden, particularly when paired with dramatic images such as first responders racing to the scene and small armies of emergency vehicles creating a field of flashing

lights. While these images and words in isolation could be argued to be neutral depictions of the story, it is important to consider their collective effect in constructing the event. Mass shootings are undoubtedly emotional and visceral events, but dramatizing the shooting may also be rewarding to the shooter (Meindl & Ivy, 2017).

4.2.3.6. Differences between channels

NBC seemed to be the fastest-moving among the six channels analyzed, often opening segments with montages composed of rapid-fire cuts between evocative images and featuring several codable aspects within a single frame. This often required viewing a particular footage sequence multiple times in order to code the segment fully; while this was necessary for the accuracy of the study data, it does not replicate the viewer experience. FOX News, meanwhile, was the stillest, sometimes depicting an anchor speaking over a single shot that featured no codable images (e.g. a police car with flashing lights but no police officers visible in the frame) for several minutes at a time.

4.2.3.7. Potential best practices

For most of these channels, the stories covered in relation to the shooting seemed to move more peripheral to the event itself as the temporal distance from the shooting increased. For instance, on day 3, ABC ran a story about the broader Hispanic community in El Paso, their resilience, and how they were coping with the fact that members of their community were targeted and killed. FOX and MSNBC, meanwhile, were largely employing a panel format by day 3, where the shooting was discussed, but not depicted. Both of these are consistent with best practices on covering these events,

especially with relation to depictions of the shooter and avoiding excessive amounts of graphic imagery. This may also explain the finding from the El Paso shooting that coverage was significantly more likely to show graphic images on days two and three.

Three human-interest stories stand out as representing the best of what news media has to offer during these tragedies. In El Paso, multiple outlets devoted time to the father of a Parkland victim who painted murals to honor victims of gun violence; similarly, outlets also focused on a man who makes wooden crosses bearing victims' names for use at makeshift memorials at the shooting sites. In Pittsburgh, the broader religious community including members of all faiths gathered for an interfaith vigil, showing solidarity to the fallen members of the Jewish community. Covering these events in depth allows news outlets to address the shooting while focusing their coverage on those doing good as a result of these tragedies rather than glorifying those who perpetrate the violence.

CHAPTER 5. DISCUSSION

5.1. Overview

This analysis represents a quantitative content analysis spanning three days of news coverage of two mass shootings across six channels. There were two main branches of inquiry within the study, the first concerning what attributes were depicted in these broadcasts and with what frequency and the second concerning the use of graphic imagery and the depiction of bodies. Within the first branch of inquiry, findings showed that the media tended to focus on first responders, individual victims, and survivors; these aspects of the shooting were covered more often.

Mean frequency counts of the depiction of each of these attributes also show that the shooter is depicted far more than is recommended by best-practice guidelines. This suggests that while the news media is perhaps focusing on attributes that it is desirable for them to cover, they are spending too much of the remaining time focusing on the shooter, his motives, and his manifesto. Additionally, qualitative findings highlight a concerning tendency to amplify the content of shooter manifestos, essentially spreading the shooter's message for him; contextualized within second-level agenda-setting, this also likely occurs at the expense of covering other information that is more conducive to the public good.

The second branch of inquiry concerns the use of graphic imagery. The use of graphic imagery was significantly more frequent on days one and two than on day three. If other studies show similar findings, this would suggest that those averse to graphic imagery may prefer print coverage of mass shootings; television might be "safest" after the first few days. However, the data trends toward (though does not explicitly show) a

difference in how frequently these channels depict bodies, with NBC and CBS leading in this respect. While this data is based on a small sample and is not statistically significant, those averse to seeing images of dead bodies may find such information helpful.

This study is limited by a small sample size. This analysis was conducted on 36 half-hour news segments; while the sample represents the sum total of broadcast news coverage of these events for the first three nights, it does not come close to representing the full cable news coverage of these events. Furthermore, only two mass shootings were analyzed in this study; it may well be the case that analyzing other mass shootings yields very different results.

With that said, this study still offers news outlets a starting point in any attempts they may want to make to bring their coverage in line with best practices. In this sample, the shooter was covered more than the maximum number of times recommended (one) by every channel in many of the segments aired. To this end, news outlets could focus on minimizing their coverage of the shooter and using that time to highlight other attributes of the shooting.

5.2 Limitations

While this analysis provides insights into the depictions of two recent mass shootings, it is also limited by several factors. Perhaps most primary of these is the fact that only a half hour of each day's broadcasts was coded; depictions of these events may have looked drastically different outside of primetime. Furthermore, this sample only included broadcast news, for which the average age of viewership is around 60 (Pew Research Center, 2007); this means that these depictions are primarily exerting effects on

that demographic. Future studies could examine the way that these shootings are depicted on social media or through "alternative media" such as Breitbart, Infowars, and Vox. This limitation in scope is largely attributable to the limitations on time and resources inherent in an M.A. thesis; however, analyzing more coverage on each day would certainly provide a fuller picture of these depictions.

Another set of limitations is procedural. The most notable of these is that the voiceovers of the broadcasts were not coded; to avoid accidentally coding the voiceover, or coding an image in a way that it could only reasonably be coded if informed by the voiceover, both coders watched the segments on mute. However, this may have contributed to under-coding some images if it was not immediately clear who those images depicted. Additionally, not accounting for the role of the voiceover in these broadcasts may have deprived the qualitative observations of some necessary nuance. As one example of this, referring back to the observation of how the news outlets magnified the Pittsburgh shooter's manifesto, voiceover analysis may have revealed that they were doing so for the specific purpose of denouncing it (though whether that justifies depicting the words themselves is debatable).

As another example that reflects a lack of nuance in the quantitative data, there were a few frames through the sample where the victims' photos shared a screen for a substantial amount of time; it may have been the case that this time was being used to verbally memorialize some or all of these victims individually. Therefore, the quantitative data should be read solely for what it is: data on the number of *visual* (i.e. image-based) depictions of each of these stakeholders, which does not account for the possible supplementary role of voiceover in fully constructing these depictions.

Another possible procedural limitation involves the unitization of the content–or, more specifically, how it was determined that a new depiction was taking place. While this determination was consistent across categories, it led to some irregularities in how frequency counts were noted. As one example, an interview with a survivor of the El Paso shooting involved several cuts, demarcating unique shots. In order to remain consistent with the determination of how to categorize a new depiction, each of these shots was counted as a unique depiction. However, cases like this, where there were multiple sequential shots of the same instance of a category (e.g. the same survivor), may artificially inflate the frequencies of some of these categories.

A specific procedural limitation is in the conceptualization of (or, perhaps more accurately, the failure to precisely conceptualize) the "collective victims" category. This was a difficult category for which to agree on a set of criteria: sets of memorials could be argued to collectivize the victims, but some of them bore names; "in memoriam" segments often forced pictures of each of the victims to share a screen, however, these victims were depicted individually. Ultimately, there was such significant overlap with the "individual victims" category that a depiction would have had to exclude any individualization of victims being collectivized; however, this is something of an inherent paradox. This category could possibly have worked if codable depictions of collective victims were limited to collectivization in the chyron; however, this would have been out of step with the coding criterion for the other categories of stakeholders.

Finally, one category of image that should perhaps have been included is mourners. There were several images throughout the coverage of both shootings of people openly grieving; while these images may serve to further dramatize the shooting,

these images are evocative and arguably represent stakeholders in the shooting and as such, should have been coded. On the one hand, it could be argued that mourners add to the reward experienced by the shooter and his potential counterparts who view this coverage; conversely, mourners also add a more human element to the shooting. Coding for mourners could have shed some light on this debate.

This omission is likely attributable to the fact that the study was constructed in terms of "stakeholders" within the shooting; this orientation frames mourners as relatively external to the event itself. While this figure would not likely have played into the quantitative analysis in any significant fashion, it may have shed more light on how evocative these broadcasts are in nature and given way to the above debate about their role in the depiction of the shooting.

5.3. Potential for future research

This work, not only in its limitations but also in its strengths, highlights the significant potential for future studies to be conducted in this area. While the literature on contagion and the related best practices offered by the public and private sector arguably lend themselves to a grounding in second-level agenda-setting, there are other theories that could shed light on the issue of media coverage of mass shootings. In particular, framing theory comes to mind as one possible theoretical grounding for future analysis on this issue, as it would allow for more nuance regarding how these individuals and categories are depicted than does quantitative data on their respective frequencies of depiction. The literature on contagion in mass shootings also lends itself well to studies grounded specifically in (rather than simply alluding to) social learning theory, especially

given that much of the literature on contagion addresses the reward potential for would-be mass shooters in seeing media coverage of mass shootings.

In addition to analysis of who is depicted in mass shooting coverage, future studies could also examine the role of graphic imagery in coverage of these shootings. The concept of telepresence and its role in mediating viewers' reactions to news footage of similar events could easily be applied to mass shootings, particularly those like El Paso that contain footage shot by survivors during the shooting. Additionally, scholars concerned with potential traumatic effects of graphic news coverage could begin to incorporate mass shootings that include graphic imagery and depictions of bodies in their analysis of such content; given the increasing prevalence of mass shootings in the United States, these events could very well generate significant graphic footage, and studies of the effects of this footage may therefore be crucial to further understanding the relationship between graphic news coverage and post-traumatic stress and PTSD. Furthermore, given that a lot of survivor-shot footage tends to end up on social media–if the news outlets don't draw the footage from social media in the first place–it is important to understand the effects of this kind of footage on audiences, as many social media users may not be viewers of traditional media.

There is also potential for discourse analysis related to how the media discusses manifestos put forth by mass shooters. Given that it was impossible to determine from this study whether news outlets were in any way contextualizing the hateful rhetoric they were inadvertently magnifying, future studies could narrow their focus to the discourse of news anchors rather than the visual impact of the images. This can help determine

whether hateful rhetoric from mass shooters is being appropriately condemned when it is given a platform.

Discourse analysis in this realm is especially crucial given that mass shootings fall into an emerging subcategory of terrorist behavior known as stochastic terrorism. Stochastic terrorism is defined as lone-wolf acts by terrorists who are "radicalized" by hateful rhetoric from influential figures; while these figures do not outright encourage violence against the groups they speak ill of, the construction of stochastic terrorism contends that those utilizing hateful rhetoric from a public platform are at least aware of the possibility that violent actors will "take up the cause," so to speak, behind their words (Kayyem, 2019). Given the central role of discourse in this construction, a discourse analysis of how shooters' hateful language is discussed could be crucial in determining whether the media may be inadvertently magnifying this problem.

Finally, mass shootings are a politically loaded issue, with stakeholders in the debate arguing for both an unlimited Second Amendment (e.g. the NRA) and the right to freedom from the threat of gun violence (e.g. Everytown). Therefore, per Camaj's (2014) assessment of the role of partisanship in second-level agenda-setting effects, it may be the case that viewers with a political opinion on gun rights may be more vulnerable to second-level agenda-setting effects from depictions of mass shootings. Additionally, McCombs, Shaw, & Weaver (2014) argue that "vertical" media, which includes local news broadcasts, is more likely to predict second-level agenda-setting effects than "horizontal" media, including more national-level sources (e.g. cable news); therefore, it could be the case that the national news segments on the broadcast level would exert a stronger second-level agenda-setting effect.

Both of these last points represent the necessity of mixed-methods research regarding coverage of mass shooting–or, in other words, determining whether the attributes emphasized by the media during coverage of mass shootings actually translate to the public. Neuendorf (2017), among others in the field of content analysis, has argued for the need to combine content analysis with survey data to examine whether the presence of content actually tracks with the proposed effects of that content on audiences. The case of mass shootings would be a particularly interesting topic in which to combine content analysis with survey data, not only to determine whether attribute salience is indeed being transferred to audiences through depictions of this issue but to further parse out the role of political partisanship in the second-level agenda-setting process.

5.4. Conclusion

This work represents a content analysis of the way the TV news media depicts mass shootings from the perspective of attribute salience and second-level agenda setting. Findings show that while the media places more visual emphasis on survivors, victims, and first responders than on the shooter, visual depictions of the shooter far exceed what both advocacy groups and the FBI have recommended. Furthermore, in the shooting with significant amounts of graphic imagery (El Paso), this imagery was used more often on the first and second days of the coverage than on the third.

Within the literature on mass shootings and the media, this work is arguably one of the first to be empirically grounded in, and derived from, social scientific theory. Future studies in this area would benefit immensely from more a priori theoretical grounding. This shift could also lead to fruitful synthesis between theoretical and applied

research into this topic and, more importantly, between researchers situated in both of these approaches. Furthermore, this work begins to establish how media coverage of these events actually looks, particularly from the perspective of emerging best practices. The development of a set of data on "how things are" (i.e. how the media currently covers mass shootings) in addition to guidance on "how they should be" can provide providing news outlets with a more concrete set of changes they can make in order to bridge this gap.

This study represents the first known content analysis of television coverage of mass shootings. It also benefits from an a priori grounding in second-level agenda-setting theory and synthesizes the application of this theory with the literature on contagion among mass shootings, particularly as it relates to coverage of the shooter. Findings from this study also contribute to the literature on graphic coverage of mass fatality events by both applying that literature to the realm of mass shootings and providing concrete data on the use of graphic imagery during these events. In short, the images displayed during television coverages of mass shootings are far more consequential than their fleeting nature might suggest. Determining how images are used to construct depictions of mass shootings will allow researchers to paint a fuller picture of the media's ideal role in these events.

APPENDIX

Coding Category	Operationalized As	Research Question Addressed
Is the image graphic?	Could reasonably induce "fear, helplessness, or horror" in an average person (Note: could be obscured or unobscured. All images needing to be obscured other than faces were considered graphic, but not all graphic images were obscured.)	RQ2A, RQ2C
Image of bodies	Any image of a still or unmoving body lying on the ground at the scene of the shooting.	RQ2B, RQ2D
Image of the shooter	Any image known to be of the shooter. In order to qualify, the image should either be explicitly identified by a newscaster as the shooter have been previously identified as being of the shooter (i.e. a repeated image)	RQ1A, RQ1B
Image of the manifesto	Any image of the shooter's "manifesto" or broader online postings about his motives, or a mention of the above in the chyron	RQ1A
Image of deceased victims, shown individually	Any image of a deceased victim of the shooting or a memorial bearing his or her name	RQ1A
Image of deceased victims or memorials, shown collectively	Any image of or interview with multiple victims, memorialization of victims wherein multiple pictures or names share a single screen (e.g. in memory of: [list of names])	RQ1A *(note: cut from analysis due to inability to obtain intercoder reliability)*
Image of first responders/heroes	Any image of, or interview with, an individual in some sort of professional rescue capacity. This included police, fire, EMS, military, and some response from federal organizations (e.g. Customs and Border Patrol	RQ1A

	responded to the El Paso shooting given its proximity to the border)	

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