FRAMES, MODALITIES, TOPICS AND SOURCES: A COMPARATIVE CONTENT
ANALYSIS OF NATURAL DISASTER, TERRORIST ATTACK AND CIVIL
UNREST CRISES BY EGYPTIAN JOURNALIST BLOGGERS AND
CITIZEN BLOGGERS

By

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ABSTRACT

FRAMES, MODALITIES, TOPICS AND SOURCES: A COMPARATIVE CONTENT
ANALYSIS OF NATURAL DISASTER, TERRORIST ATTACK AND CIVIL
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News blogs provide the media and individuals with analyses and information

about crises. The researcher looked at the differences between journalist and citizen

bloggers in their coverage of crises: natural disaster, terrorist attack and civil unrest. In

particular, the researcher examined frames, topics, sources, and modalities.

A quantitative content analysis was conducted of 214 Egyptian journalists blog

posts and 227 citizen blogs posts. The researcher collected blog posts about each crisis

(in both Arabic and English) from the first day and two weeks after each crisis date in 33

journalist blogs and 33 citizen blogs. The researcher analyzed posts about Sinai terrorist

attacks and flooding because they were small samples, and took a random sample of 140

blog posts about the revolution from each type of blogger because it was a large sample.

The researcher found citizen bloggers were more likely to cover a natural disaster

(flooding) than journalist bloggers. The researcher also found that journalist bloggers

were more likely to cover a terrorist attack in the coverage of a civil unrest crisis,

whereas citizen bloggers used the attribution of responsibility, and human-interest frame

more than journalist bloggers. In framing a terrorist attack crisis, journalist bloggers were

more likely to use a conflict frame than citizen bloggers, while citizens were more likely

to use human interest than journalist bloggers. According to the frames used in the

natural disaster crisis, journalist bloggers used the morality frame more than citizen

bloggers.

Politics was the topic most frequently used in the lead and the one that got the most space in journalist and citizen bloggers. Journalist bloggers are more likely to put the topic that got the most space in the lead paragraph than citizen bloggers. On the other hand, journalist bloggers are more likely to use sources than were citizen bloggers. Journalist bloggers are more likely to use scientists, eyewitnesses, and media sources than citizen bloggers, while citizen bloggers are more likely to use documents and governmental sources than journalist bloggers.

With regard to post modalities, citizen bloggers were more likely to use images in their posts than journalist bloggers, while journalists are more likely to use video posts than citizen bloggers. Journalists used hyperlinks in their posts more than citizen bloggers. Citizen bloggers when compared to journalists were more likely to use images that looked professional and had people in the photos while journalists were more likely to use info-graphic images than citizen bloggers.

This dissertation expands the existing knowledge about two types of bloggers, journalists and citizen, and how they used frames, topics, sources, and modalities in the coverage of crises. Future studies could look at the comparison between types of bloggers in the coverage of two continuous crises or sudden crises to make sure that the duration does not make a difference.

Dedicated to my parents, my husband, and my children for their
prayers, support, and love.

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CHAPTER 1: Introduction

Media professionals used to be the only individuals who could write, publish, and broadcast news and information through media platforms such as print newspapers, radio, and television. However, with the advent of the Internet, important changes occurred in journalism. The Internet permitted anyone to write, publish, and broadcast news on online platforms at zero cost and to compete with media organizations. News blogs are examples of online platforms, which allow media professionals and non-professionals to post their opinions of news and analyze events without limitations or gatekeeping.

News bloggers have provided the media and individuals with analyses and information about events (Gamon, Basu, Belenko, Fisher, Hurst & König, 2008), particularly crises and disasters. Bloggers have become more active in posting news, analyses, and opinions. Examples of some events the blogs covered are the 2004 U.S. presidential election, the 2003 Iraq War, the September 11, 2001 World Trade Center terrorist attacks, the ongoing 2008-2009 Israeli assault on Gaza, and the ongoing Arab Spring 2010 revolutions in the Middle East (O'Donnell, 2011; Technoeati, 2009). The importance of news blogs in coverage of crises brings attention to the importance of examining two types of bloggers, journalists and citizen, and their coverage of three crises: natural disaster, terrorist attack and civil unrest. The researcher looked at the differences in frames, topics, sources, and modalities used by each type of blogger.

Purpose and Justification for the Study

Previous framing studies have overlooked the differences between journalists and citizen writers in crises coverage and their framing of different types of crises. It is

important to see how previous journalism experience can make a difference in framing crises. Knowing the difference in framing crises helps the public to understand the intentions of bloggers. This study increases understanding of how different types of writers framed crises by looking at who was responsible for the crisis, how a human face was used in the coverage (personal examples), if the conflict was between two or more parties, use of moral messages, and the economic impact of the crisis. In addition, it helps to know the main topics, sources, and modalities used by each type of blogger. This research helps to understand the tasks and goals of blogging and encourages the audience to learn the bloggers' backgrounds and interests. The results of this study also help predict future coverage of crises and extend existing knowledge by identifying different types of bloggers and their coverage of crises. In addition, this research helps governments, crisis managers, bloggers, news organizations, non-governmental organizations (NGOs), and the public to know what appropriate type of blogger to read and use when crises happen.

This study is also significant because few studies have looked at crises coverage in Arab countries (Al-Saggaf, 2006; Dimitrova & Connolly-Ahern, 2007; El-Nawawy & Khamis, 2013; Hermida, Lewis, & Zamith, 2014). This is the first study that focuses on differences in framing between journalists and citizen bloggers (e.g. using conflict frame) and the content of posts (e.g. using images). The researcher selected Egypt as a case study because it has confronted three different types of crises: natural disaster, terrorist attack and civil unrest. The focus on Egyptian crises is up-to-date, and the opportunity to collect data not only in English, but also in Arabic, enhances understanding of Arab World media, especially blogging. Egypt was the first Arab country to acquire Internet

access, which occurred in 1993 (Abdulla, 2010), and it has the largest number of blogs in the Arabic blogosphere (Etling, Kelly, Faris & Palfrey, 2010). These blogs consist mostly of political content that engage the public in the political movements, and critique the political regime (Etling et al., 2010).

Free blog services such as WordPress, Bloggers, Maktoob, Blogspot, and Tumblr made for an increase in the number of bloggers. Blog engines provide bloggers with free templates to complement their blog category and subject. According to Technorati's annual report, approximately 77% of global Internet users read blogs (IACP Center for Social Media, 2014; Winn, 2009). The bloggers may write about politics, women, business, technology, entertainment, lifestyle, sports, and health, among other categories (Technorati, 2014). The Nielsen/McKinsey Company recently estimated the global number of blogs to be more than 181 million compared to 36 million in 2006 (Nielsen, 2012). Because of this huge increase in the world's blogosphere, and the effect of blogs on the mainstream media it is important to understand how bloggers are using blogs, to explore different types of bloggers, and to focus communication research on blogging. Blogs are important tools that can shape public opinion about a crisis through framing, which could influence perceptions, impressions, and emotions.

CHAPTER 2: Literature Review and Theoretical Framework

This chapter covers three parts: 1) Blogging: This part provides a brief history of blogging, definition of blogs, types of bloggers, blogging in the Arab World, and blogging in Egypt. 2) Crises: This part provides definition of crises, types of crises, and crises in Egypt. 3) Theoretical framework: This part includes media framing, media framing in the Arab World, framing crises, framing sources, modalities in the media, and research questions and hypotheses.

Blogging

History and Definition of Blogs

In 1997, Jorn Barger[1] created the term "web log" or "weblog" to refer the process of posting daily entries on the World Wide Web (Cross, 2011). In 1999, Peter Merholz shortened this term to "blog" and referred to the blog host as a "blogger" (Kaye, 2005). A blog is "a chronologically organized website updated by an individual (or a group of individuals) with entries/posts" (Sethi, 2007, p.116). Blog entries are called "posts" and are shown in "reverse chronological order" (Nardi, Schiano, Gumbrecht & Swartz, 2004, p.43). Each entry contains a title, body, and date/time. The body can include different elements, such as text, images, audio, and other types of multimedia. Figure 1 below shows an example of a blog post with an image.

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[1] Jorn Barger is an American blogger whose *Robot Wisdom Auxiliary,* established in 1997, was the earliest influential blog on the Web (Cross, 2011).

Figure 1: An Example of a Blog Post
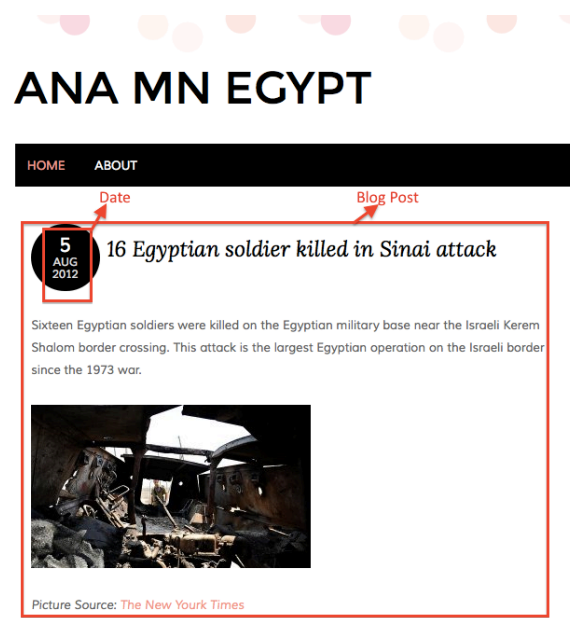
In 1999, Pyra Labs[2] established Blogger.com,[3] a web service that allows web users to create their own page and establish trends, report news, express opinions, concerns and emotions on any issue of interest (Blood, 2000; Horowitz, 2010; Wortham, 2007). This service permitted bloggers to become producers by interpreting and analyzing news and information (El Gody, 2009).

Blogger.com, WordPress.com and Tumblr.com are the most popular engines hosting blogs (Bik & Goldstein, 2013; Nielsen, 2012). These engines publish millions of personal, organizational and topic-specific blog posts every day. For example, Tumblr publishes approximately 28,000 blog posts each minute, or approximately 20 million posts a day (IACP Center for Social Media, 2014; James, 2012). These engines offer bloggers complete freedom to select unique blog styles, content and format.

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[2] Pyra Labs was co-founded by Evan Williams and Meg Hourihan, the creators of blogger.com.
[3] In 2003, Google bought the Blogger Web service (Gill, 2004).

The foremost goal of blogging is to create a conversation between the blogger and his or her readers, with the hopes of leading to a better understanding of the information in a post (Grabowicz, 2003), and to having a conversation with the audience, which helps to explain and analyze the information (Gillmor, 2006). In addition, blogs are tools for expressing alternative viewpoints and influencing social and political change. They can be fun, gossipy, literary, and news sources. This study focuses on news blogs, which provide their audiences with important information and news.

Many communication researchers consider news blogs a type of online journalism (Deuze, 2001; Matheson, 2004). Another academic sees blogs as "transforming the way news and information are disseminated" in an intimate way (Huffington, 2006). News bloggers provide their audiences with important information and news, and they are "the true pit bulls of reporting" (Huffington, 2006, para.7).

Types of Bloggers

The types of bloggers depend on the types of blogs. According to Domingo and Heinonen (2008), there are four types of blogs: 1) citizen blogs produced by people, "outside media organizations;" 2) media blogs produced by professional journalists inside media organizations; 3) audience blogs that permit the audience to "produce on platforms provided by the media;" and 4) journalist blogs that "journalists maintain outside their companies" (p. 7). The latter offers journalist bloggers the freedom to publish posts without any control or censorship by their media organizations. In this study, the researcher focused on two popular types of bloggers within Egypt, journalists and citizen.

Journalist Bloggers

To define the journalist blogger, I have to give a definition of a journalist. A

journalist is a person who works or has worked as a news writer, reporter, or editor of news in a newspaper, radio, television station, magazine or other news medium. In addition, a journalist can also be a person who works or worked on pamphlets and leaflets (Docter, 2010). Blogs enabled journalists to increase their news writing and publishing activities. Therefore, a journalist blogger is a writer with journalism background (Sheehy & Ji, 2011).

Journalist bloggers publish personal stories and articles that they choose not to publish, or fail to publish, through the professional media on their self-publishing spaces. These bloggers function as journalists and incorporate the professional ethics and standards of the journalism industry. However, not all journalist bloggers are associated with their organizations. Some of them started blogging after they gain experience from media organizations, and others are blogging while working as journalists.

Many famous journalists are bloggers. An example of a well-known American journalist blogger is Kevin Sites, who covers wars and disasters for ABC, NBC, CNN, and Yahoo! News (Sites, 2014). Sites worked with CNN before the outbreak of the war in Iraq in 2003. On the first day of the war, CNN asked Sites to stop posting on his personal blog (kevinsites.net, which is now kevinsitesreports.com). He chose to leave CNN and continue his blog coverage of the Iraqi war, freelancing for NBC (Boese, 2004; Domingo & Heinonen, 2008).

Pandey, Srivastava and Shukla (2013) examine why journalists create their blogs while they are working in the media. The researchers found that 52% of bloggers do so to analyze and express their personal views on lead news of media, 28%for their own creative expression, 13.1% to write about news, and 6.3% to write about media-related

news content, such as journalistic ethics. In addition, journalist bloggers enjoy writing when they receive feedback and comments from readers, which encourages dialogue and continued updating of their blogs (Wallsten, 2007). According McKenna and Pole (2008, p. 97), political bloggers write to inform their readers, share with them media articles and unreported news, and to "draw attention to key posts on other blogs." This type of blogger tends to write about local issues (Etling, Kelly, Faris & Palfrey, 2009).

Iacono and Skerik (2010) found that 52% of bloggers consider themselves journalists because they consider their blogs as newspapers comprised of only op-ed pages (Leccese, 2009). Media workers collect important information from blogs that are able to highlight some important issues to the forefront of the public sphere ignored by the mainstream media (Docter, 2010).

Xin (2010) states that journalist blogs are a "vehicle for the expression of nationalistic sentiments or hatred speech" (p.341), which means that these bloggers express opinions that they cannot express in the official media, with particular regard to politics.

This journalist bloggers are using the hyperlinks to refer to the main sources of information to increase the credibility of their blogs. About 85% of journalist bloggers provide the links or URLs extensively to refer to their main news sources, which are mainly media sites and related materials (Singer, 2005).

Citizen Bloggers

Citizen bloggers, or ordinary bloggers, are not affiliated with media organizations and write news without journalism training or experience. They do not depend on the standards of professional journalism because they are not professional journalists

(Domingo & Heinonen, 2008; Lowrey, 2006). A citizen blogger engages in news gathering and reporting, and considers a blog to be a personal journal for writing personal opinions about events, communicating with readers via comments, and providing readers with news, photos, videos, etc.

Citizen bloggers are also known as amateur bloggers (Xin, 2010, p. 333). They think of their blogs as a tool for self-expression. They determine their own editorial standards, including whether to publish under pseudonyms that "enable the authorities to keep tabs on potential troublemakers" (Posner, 2005, para. 14).

Blogging in the Arab World

A large portion of Arab bloggers write about sensitive issues such as governmental and human rights (Awad, 2010) that many people read and track to get information not readily available in the mainstream press. Few Arab bloggers write about travel, cooking, art, and other things. In Egypt, for example, bloggers published videos of people being tortured in police stations, and others of police failing to protect victims of sexual harassment (Open Arab Internet, 2014). The limits of freedom of expression laws, or lack thereof in Arab countries cause many Arab bloggers (especially females) to write under pseudonyms, while others, such as journalists, use their real names. However, some of anonymous bloggers become famous, such as Zeinobia in Egypt.

Political blogs are very popular in the Arab world, and the number of political blog readers is increasing every day (Etling et. al., 2009; Lynch, 2007). Political bloggers primarily discuss their local political leaders, government, and elections, while a few write about foreign political news. Arab blogs began appearing soon after the start of the U.S. war with Iraq in 2003 as an expression of political views, particularly in opposition

to the war and the lack of freedom and rights.

Arab bloggers have used blogs as a platform for societal change and reform, raising political awareness in the Arab countries, particularly in Egypt because it has the largest cluster of blogs in the Arab blogosphere. Egyptian bloggers used their blogs as a new platform for freedom of expression, encouraging Internet users in Egypt to bravely share their opinions about the political system (Mohamed, 2010, Open Arab Internet, 2014).

The estimated number of bloggers in the Arab world in 2009 was 600,000, only 150,000 of which are active (Open Arab Internet, 2014). The largest number of bloggers in the Arab world is Egyptian (around 33%), followed by Saudi Arabian, Kuwaiti, and Moroccan. Politics, religion, human rights and culture are very popular topics in the Arabic blogosphere (Etling et al., 2010). The Egyptian bloggers are focusing on local politics, while Saudi and Syrian bloggers write primarily about their personal lives (Open Arab Internet, 2014).

Many Arab bloggers tend to use Arabic language in their blogs (Russell & Echchaibi, 2009). However, most Kuwaiti blogs are written in English, and many Moroccan blogs are written in Arabic and French. Males represent 66% of bloggers in the Arab world and nearly 45% of them are between the ages of 25 and 35 (Open Arab Internet, 2014).

Some examples of the popular Arabic blogs that had the highest numbers of followers and readers in 2013 were Ahmad Wld Jedo (http://ahmedjedou.blogspot.com/) from Mauritania, Heber (http://7iber.org/) from Jordan (Sabry, 2013), Sami Ben Gharbia (http://samibengharbia.com/) from Tunisia and Manal and Alaa (http://manalaa.net/) from

Egypt.

Blogging in Egypt

According to a report by Population Reference Bureau, the 2013 population of all 25 Arab countries[4] is approximately 371 million. Egypt has the largest population among these countries at 84.7 million (Haub & Kaneda, 2013). With 43 million users, Egypt also has the largest number of Internet users among the Arab World countries, and has the second highest number in Africa, with an Internet use percentage of 15.5% in 2013 (Internet World Stats, 2014). The Internet provided Egyptians a place to write about events outside of news organizations. Blogs, Twitter and Facebook are the main online platforms used by Egyptian journalists and citizens to write about local events because these platforms are free of charge and are subject to little control and censorship to which news organizations were subjected. Internet forums, Instagram, YouTube, and other social networking sites were also used in Egypt to post about local events.

Blogs started in Egypt in 2003. By the end of 2004, 40 bloggers began writing and maintaining their personal sites. That number increased to 160,000 by July 2008. More than 30% of Arabic blogs are Egyptian, and more than 30% of blogs written in Arabic are Egyptian (Arif, 2014; Information and Decision Support Center, 2010), which is the biggest cluster in the Arabic blogosphere (Lim, 2012). Lynch (2007) found that most Egyptian bloggers were blogging about the need for change in the political system, and either in support or protest of political clusters, such as Kefaya (Enough!), a movement looking to change the political regime. Many famous political bloggers in

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[4] The Arab world consist of: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Israel, West Bank, Gaza Strip, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, Western Sahara, and Yemen.

Egypt became more popular after blogging as a part of the Kefaya movement since its start in 2004, such as Wael Abbas, Alaa Abdel Fattah, and his wife Manal, who used their blogs to mobilize the movement's protests in 2005 (Hamdy, 2009; Hofheins, 2005; Isherwood, 2008). The slogan of the pro-democracy movement was "enough… no to extension … no to heredity." The protesters railed against Hosni Mubarak who was re-elected for a fifth term and his son, Jamal (Modammad, 2010). This movement influenced the Arabic press and the commentators, and gathered the political dissidents, activists, sympathizers, and bloggers in one union (Hamdy, 2009).

Blogs are a popular media tool for Egyptian people and that became more visible after the Egyptian Revolution of 2011 (El-Nawawy & Khamis, 2013). Blogs played a significant role in the uprising, especially in the first 20 days of the revolution when many bloggers appeared in the Arab mainstream media to provide news and information, such as Hossam el-Hamalawy, Wael Abbas, Nawara Negm, and Amr Ezzat (Haddad, 2012). Fifty three percent of Egyptian bloggers are young (20-29 years old), and 73% are male. Egyptian bloggers write in different languages, mostly in Arabic (67.8%) because it is their mother language, then English (9.5%), nearly 21% write in both Arabic and English, and 1.9% speak other languages (Information and Decision Support Center, 2010).

Egyptian journalist and citizen bloggers wrote about what is happening in their country by sharing links and images of demonstration suppression, torture of protesters, and people who have been killed or injured. Renowned Arabian and Egyptian journalist Mohammed Hasanayn Haykal said that he is "the greatest reader of blogs" (Lynch, 2007, para.2), which is one sign of this importance as a source of information in Egypt.

Several Egyptian citizen and journalist bloggers were arrested for blogging about pro-democracy activities, protesting Islam, or critiquing the political regime and pushing for change. The first Egyptian blogger, Wael Abbas, was among them. Ahmad Anwar, another blogger, was arrested for uploading a video to YouTube of a dancing Egyptian policeman (Dooley, 2013). These examples show that blogs can help raise local awareness about issues in the communities. Another good example of the importance of blogs during the crises was in the first 20 days of the Egyptian revolution; many bloggers were stars in Arab media channels and provided the audiences with information and analyses (Haddad, 2012).

Crises

Definition of Crises

Historically, the term "crisis" came from the Greek (kpinein: to separate or to shift). The separation between two things were in the interactive community refers to the boundary. And to explore the boundaries, people should identify and distinguish what happened that made this shift (McNamee & Gergen, 2009; O'Connor, 1981).

Coombs and Holladay (2004) define a crisis as an event that people seek to find causes and make attributions. Other researchers defined crisis as "a serious threat to the basic structures or the fundamental values and norms of a system, which under time pressure and highly uncertain circumstances necessitates making vital decisions" (Rosenthal, Charles, & Hart, 1989, p. 10). This definition covers a variety of crisis types, such as civil unrest, natural disaster, and terrorist attacks. The main three components of this definition are serious threat, uncertain circumstances, and urgency of making decisions.

The expected values of any society are safety, health, and welfare, if something happened that violates these values can lead to threats and harms. These threats bring uncertainty of the reasons, consequences and solutions of the threat by searching for "What is happening and how did it happen? What's next? How bad will it be? What can we do? What happens if we select this option? What will others do?" (Borin & Hart, 2007, p. 44). When people discuss these questions to find answers, then it will be a crisis. The urgency of making decisions during a crisis is also important, and time plays a big role in facing a threat, and the sooner a decision is made, the better (Borin & Hart, 2007).

Hewitt (1983) provided a definition of a crisis as an unexpected or undesirable situation. This unexpected event happens when a community, an organization, or a nation notices big threats that may affect its ability to continue and opportunities for change. Borin and Hart (2007) said that a crisis combines "the grave threat and the escape door: the situation may look bad, but it is not hopeless" (p.43). That means that the results of a crisis can be completely negative, or partially negative.

Types of Crises

In this study, the researcher focused on three types of crises: natural disaster, terrorist attacks, and civil unrest.

A *natural disaster* is an adverse event that occurs because of natural changes on earth. Natural disasters, such as floods, earthquakes and storms, often cause loss of human life and property damage, which affects the economy of a community (Bankoff, Frerks & Hilhorst, 2003; Skoufias, 2003). Recent natural disasters covered by the media include flooding in Bosnia and Serbia in 2014, Typhoon Haiyan hitting the Philippines in 2013, and Hurricane Sandy battering the northeastern United States in 2012.

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A *terrorist attack* is defined as a surprise event that uses violence against civilians to attain political or religious goals (Ganor, 2002). A historical example of this type of crisis is the September 11, 2001 plane hijackings by the terrorist group Al Qaeda, which caused the death of nearly 3,000 civilians when the planes crashed into the World Trade Center Twin Towers, the Pentagon and a field in Pennsylvania (Salaverria, 2005).

Civil disorder or unrest is a form of protest against social and political problems in a community and is normally started by civilian groups. This type of crisis can take place in the form of demonstrations, parades, protests, riots or sabotage.

This research focused on these three types of crises because they are international in scope. The natural disaster is a main crisis because it occurs suddenly. After the 9/11 terrorist attacks, the focus on the terrorist attack crisis became important because it affects people's lives and changes communities. The revolutions in the Arab countries showed that civil unrest could affect the political systems and communities.

Crises in Egypt

Egypt has the largest population in the Arab world. Several crises have occurred recently in Egypt that led Internet users to be more active than in the past. Civil unrest in particular is a crisis that causes more online media activity, not only in Egypt, but the entire Middle East, and has received significant attention from media researchers. One of the recent civil unrest crises that occurred in Egypt was the 2011 revolution, which began the Arab Spring uprising. Flooding in 2010 and terrorist attacks in 2012 in the Sinai were two other recent Egyptian crises. Below is a brief summary of each crisis.

Civil Unrest. On January 25, 2011, demonstrations started in the Egyptian capital of Cairo as a response to an invitation launched by youth activists on social media and in

blogs, calling Egyptian civilians to participate in protests demanding freedom and human rights. Ironically, the demonstration coincided with National Police Day. The Egyptian forces used live ammunition against protesters, killing four and injuring dozens. The demonstrations spread to other cities, and protesters demanded that President Hosni Mubarak step down, ending his 30-year tyrannical rule. Protesters staged a sit-in in Cairo's Tahrir Square, which has been the focal gathering point for demonstrations against the regime. In an attempt to defuse the crisis, Mubarak dismissed the government and opened dialogue with the opposition, but the demonstrations continued, eventually forcing him to resign from power on February 11, 2011 (McGreal & Shenker, 2011). Between January 25 and February 11, at least 846 people were killed and more than 6,400 were injured (BBC News, 2011). This was the first uprising that brought millions of Egyptian citizens to gather in the streets.

Terrorist Attacks. On August 5, 2012, the Egypt–Israel border terror attack took place in the Sinai Peninsula. Sixteen Egyptian soldiers were killed on the Egyptian military base near the Israeli Kerem Shalom border crossing, and no Israelis were killed or injured. This famous attack was the largest Egyptian operation on the Israeli border since the 1973 war and received a significant amount of media coverage (CBS News, 2013).

Natural Disaster. More than 1,500 people died in Egypt because of natural disasters between 1980 and 2013, and hundreds of thousands were affected during the same period. Flooding and earthquakes are natural disasters that not only affect people, but also the economy (Prevention Web, 2013). In January 2010, flooding took place in several areas in Egypt, including the Sinai and Aswan, killing 15 people and destroying

40 homes and 57 electrical towers, causing the evacuation of hundreds from their homes.

This flood was the worst natural crisis in Egypt in more than a decade, impacting the

people, agriculture and economy of Egypt (Hassan, 2010).

Theoretical Framework

Media Framing

Framing is commonly used in communication research as a theoretical model

(Scheufele, 1999). Many framing researchers characterize media framing as a theory

(e.g., Chong and Druckman, 2007; Scheufele, 1999), while others consider it to be a

method (e.g., Carpenter, 2007; Entman, 1993) or a theory and typology (e.g., de Vreese,

2005). Researchers who use framing as a method look at how people understand an issue,

event, or situation. When considering framing as a theory, researchers examine how

journalists activate certain frames (Grimm, 2009), and how the audience is affected by a

news frame (Scheufele, 1999). This study is employing framing as a theory.

Iyengar defined media framing as "subtle alterations in the statement or

presentation of judgment and choice problems" (1991, p.11). Iyengar refers to media

framing as a way to tell news stories. Journalists make some changes to the news context

and then present it to the audiences in a way and shape that is more acceptable.

Entman's definition of media framing is one of the most cited in communication

studies (König, 2006). Entman (1993) states that media framing is "select[ing] some

aspects of a perceived reality and mak[ing] them more salient in a communicating text, in

such a way as to promote a particular problem definition, causal interpretation, moral

evaluation, and/or treatment recommendation for the item described" (p.52). The

significant elements in his definition are selection and salience. A journalist's beliefs,

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attitude, work environment and other factors can affect the selection process. By making some news facets more salient, news frames may also consciously or unconsciously interpret causes of problems, make moral evaluations of events, and provide treatment for problems. When the media provide people with solutions and treatments for the problem, issue, or event, it may affect how they perceive, evaluate, describe and think about that problem or event, and lead them to a particular understanding of this news.

Framing is conceptually defined as a strategy employed by journalists to structure news stories (Dunwoody & Peters, 1992) by selecting aspects of events and creating a relationship among them (Reese, 2001). Reese states that "frames are the organizing principles that are socially shared and persistent over time, that work symbolically to meaningfully structure the social world" (p.11). The main component of Reese's definition is the organizing process of values and beliefs that are common in society. He argues that frames have roles in developing the structure of the social world. This concept of media framing came from the need to organize news and information in a form that is more meaningful for readers, which can help them better understand the content (Kensicki, 2004).

Scheufele (1999), who defined frames as schemes of how to present and understand news, compared between media and individual frames. He observed that some prior framing researchers look at media frames as a practical method that allows journalists to identify information easily and classify it quickly. Individual frames are how people or media audiences make sense of news and categorizes them in groups (Kinder & Sander, 1990; Scheufele, 1999). Also, they refer to individual frames as "internal structures of the mind" (Kinder & Sander, 1990, p. 74).

Entman (1991) also mentioned the individual frame when he talked about two different levels of news frames: The first is the "information-processing schemata" or "event-specific schema" that refer to individual frames, and the second is when media "describe attributes of news itself" or "event-specific schema" (p.7). Entman explained that this process creates frames that guide audiences to perceive and think about the problem or the event, and also lead them to a particular understanding of the news. In addition, the individual frames are "mentally stored clusters of ideas that guide individuals' processing of information" (Entman, 1993, p. 52) that direct individuals to interpret information differently according to their pervious knowledge and personal characteristics. In addition, Entman (1993) identified four types of frames — "the communicator, the text, the receiver, and the culture" (p. 52) — that leads to the understanding that the creator of media frames could be the sender, the receiver, or the culture.

According to de Vreese (2005), media framing is a two-level process: frame-building and frame-setting. Frame-building is the collaboration between journalists, media, and people of influence, which results in frames. Frame-setting is the "interaction between media frames and individuals' prior knowledge and predispositions" (de Vreese, 2005, p. 52).

Other researchers have found that framing is "the process by which people develop a particular conceptualization of an issue or reorient their thinking about an issue … having implications for multiple values" (Chong & Druckman, 2007, p. 104). Chong and Druckman agree with Entman (1993) and de Vreese (2005) that framing is a process or procedure, but think that the goal of framing is to conceptualize the content of a news

article. Chong and Druckman argue that framing occurs when individuals perceive an event from many perspectives. Researchers have also mentioned various moderators that believe framing has effects on people's perceptions of issues such as moral values.

Previously, I discussed two frame dimensions: media and individual. This study puts journalist and citizen bloggers under the individual frame dimension, which is defined as how individuals describe attributes of news (p. 74). Journalist and citizen blogs do not have gatekeeping restrictions or media organizations controlling what they publish. In addition, this study provides an explanation as to why and how a blogger's media experience, or lack thereof, impacts individual frames. This creates two subcategories within the individual frame dimension.

Media Framing in the Arab World

Studies that examined media framing in the Arab World focused on how media framed war, terror, human rights, and civil unrest crises; mostly about the Arab Spring, Iraq War 2003, and Palestinian-Israeli conflict (Fornaciari, 2012; Hermida, Lewis & Zamith, 2014; Hamdy & Gomaa, 2012; Kolmer & Semetko, 2009; Liebes & First, 2003). Others looked at how media framed Arab women (Amireh, 2000; Killian, Olmsted & Doyle, 2012) and political ideology (Browers, 2009; Hanafi, 2010).

An example of framing a civil unrest crisis, Fornaciari (2012) looked at how Al Jazeera English and the BBC framed the Egyptian revolution in 2011. The researcher examined the use of five frames: attribution of responsibility, conflict, human-interest, morality, and economic consequences. Fornaciari found that both news networks focused their coverage in two frames: the attribution of responsibility and conflict, and the network reporters represented the government as the side who is responsible for the

crisis. BBC used also the human-interest frame, which showed personal stories of people affected by the crisis.

Another example of framing in the Arab world was by Dimitrova and Connolly-Ahern (2007). They conducted another comparative content analysis to examine frames of a crisis in the Arab World. The researchers compared between the coverage of the Iraq War 2003 in Arab online news media (Qatar and Egypt) and the Coalition media (United States and United Kingdom). The study found that the US and UK media were more likely to use the rebuilding of Iraq frame, whereas the Qatari and the Egyptian media were more likely to use the military conflict and violence of war frame. In addition to frames, the researchers examined the sources of information, and they found that both are using government representative more than another type of source.

Al Jazeera and Al Arabia news networks are important sources of information to analyze media framing in the Arab World. Many research used these two sources to look at frames in the Arab media (Al-Saggaf, 2006; Cherribi, 2006; Elmasry et al., 2013; Meltzer, 3013). These two networks are at the top of the list of news providers in the Arab World.

Framing Crises

Prior research found common crises frames of news: conflict, human-interest, morality, economic consequences, and attribution of responsibility (Semetko & Valkenburg, 2000). Semetko and Valkenburg developed the news frames scale depending on previous studies by Iyengar (1987, 1991), Neuman, Just and Crigler (1992), Price Tewksbury and Powers (1997), and Bennett (1995). The researcher of this dissertation used Semetko and Valkenburg's (2000) scale because it is the most

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commonly used measure in framing crises research, and it is the most commonly cited scale in Google Scholar.

Journalists used the conflict frame to cover crises, which "emphasizes conflict between individuals, groups, or institutions as a means of capturing audience interest" (Semetko & Valkenburg, 2000). In this frame, a news story is presented as a discussion or debate between persons, parties, groups, or governments. The human-interest frame "brings a human face or an emotional angle to the presentation of an event, issue, or problem" (p. 95). The morality frame is used when journalists quote or cite others, and are objective and unbiased in writing the news report (Neuman et al., 1992). The economic consequences frame presents when a problem results in negative consequences in the economy for people and society (An & Gower, 2009). The attribution of responsibility frame is when the writer puts the responsibility of a problem or crisis on the government, institution, or other individuals, and motions the reasons and results of the problem (Semetko & Valkenburg, 2000).

Framing Sources

Usually, the authors of news stories frame the event, however, the choice of news sources may influence the interpretation of events (Scheufele, 2000). Using sources in the news story predicts credibility of the information and the writer. Journalists rely on different sources to be more credible and objective.

A source is a person, organization, document or thing that is used as a provider of information. Different words are used to attribute information to the sources, such as "said," "claimed," or other words referring to the source, such as "confirmed," "thinks," or "suggests." Journalists select their sources according to different judgments, such as

credibility, accessibility, and time pressure (Powers & Fico, 1994). Credibility means

trustworthiness. (Hovland & Weiss, 1951), accessibility means easy to reach any time,

and time pressure means the limited time for finding sources and publishing a story

before any other news organization. Another judgment is using a knowledgeable source,

which means using a source that knows more about a topic than others. Journalists

incorporate professional ethics and standards of the journalism industry, such as revealing

sources of information (Christians, 1977). Government, science, business, non-

governmental organizations (NGO), media, and individuals can be the sources of

information for bloggers (Messner & DiStaso, 2008), in addition to documents. Knowing

the most frequently used sources by bloggers could help to understand the relationship

between the blogger and source.

Modalities in the Media

Modalities are defined as the structural properties of a thing (Giddens, 2013).

Prior research found that the modalities of media (e.g., text, audio, picture, video,

graphics, tables) affect the human memory (Hoogeveen, 1997; VanDijck, 2007), and

provide rich information (Appiah, 2006; Fletcher & Major, 2006). Each modality has

specific characteristics that make audiences decode the information in different ways

(Unnava, Burnkrant & Erevelles, 1994), and each characteristic (e.g., sound, image, etc.)

can make the content of information more memorable than others (Sundar, 2000). Sundar

(2000) mentioned two theories that may explain memory processing when having

different modalities. The first is the dual-coding theory (DCT) that predicts that the

content that has two modalities will have more outcomes than the content using one

modality. The verbal content that is presented with a picture has a "better chance of dual

coding and [will] enhance better recall than would an item without a picture" (David, 1998, p. 184). The second theory is the cue summation in the multiple-channel communication developed by Severin (1967a, 1967b). This theory assumes that the learning process increased when stimuli in the content increased. For example, the content with image provides readers more learning cues than the content without an image, and content with a colored image provides readers more learning cues than the image in black and white. This assumption came from Miller's (1957) interpretation of cue summation that is:

> "When cues from different modalities (or different cues
>
> within the same modality) are used simultaneously, they may
>
> either facilitate or interfere with each other. When cues elicit
>
> the same responses simultaneously or different responses in the
>
> proper succession, they should summate to yield increased
>
> effectiveness. When the cues elicit incompatible responses,
>
> they should produce conflict and interference" (p. 78).

The cue summation in the multiple-channel communication and DCT theories provide an explanation of why using different modalities is important in blogging and how it can affect audiences. Knowing who is using different modalities, journalists or citizens can predict which messages affect readers more.

Moore, Burton, and Myers (1996) talked about the approach of information-processing, and memory system that goes through three stages: First, the sensory system, which holds the information until the mind recognizes it. Second, the short-term memory

(STM) does not hold information like in the sensory system but recognizes it. This stage has limited capacity of information. Last, long-term memory (LTM) that is more complex than the previous stages, has the permanent knowledge the individual received from his life. Using multimedia in the content can increase the human cognition, which enhances the information content in the LTM process. In addition, using different modalities in the content helps to have better communication between the message sender and receiver, especially if the receiver is illiterate. Using pictures, video and audio within the text can help illiterate[5] people to decode the messages, but not with equal ease as literate people.

Research Questions and Hypotheses

To examine the purpose of the study, nine research questions were asked, and two hypotheses were tested:

Frames

Semetko and Valkenburg (2000, p. 95) examined five frames of crises: conflict, human interest, morality, economic consequences, and attribution of responsibility. The conflict frame "emphasizes conflict between individuals, groups, or institutions as a means of capturing audience interest." In this frame, a news story is presented as a discussion or debate between people, parties, groups, or governments. The human-interest frame "brings a human face or an emotional angle to the presentation of an event, issue, or problem." While, the morality frame appeared when the writer used quotations or cited what others said and were objective and *unbiased* in writing the news report (Neuman, Just & Crigler, 1992). The economic consequences frame is present when a problem results in negative consequences for people and society (An & Gower, 2009).

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[5] Illiterate is a person who does not have reading or writing skills.

And finally, the attribution of responsibility frame is when the writer puts the responsibility of a problem or crisis on the government, institution, or other individuals (Semetko &Valkenburg, 2000).

Prior studies found that the bloggers use the attribution of responsibility frame more frequently than the other four frames when they cover crises (An & Gower, 2008; Cho & Gower, 2006; Semetko & Valkenburg, 2000). This study examines two different types of bloggers and how each type used the different frames across different crises.

RQ1: How do journalists and citizen bloggers differ in framing the Egyptian revolution in 2011?

RQ2: How do journalists and citizen bloggers differ in framing the Sinai terror attack in 2012?

RQ3: How do journalists and citizen bloggers differ in framing the flooding in Egypt in 2010?

Topics

The topic of a story refers to the subject of an essay or a discussion. Knowing the topics associated with each type of blogger reflects their interests and provides an evaluation of a crisis. Because of their professional experience, journalists understand the importance of the lead paragraph of the story and know that the lead paragraph has to include the topic that received the most space in the story. The lead, abstract, or summary is a very important aspect that tells the main point of the story (e.g., topic) (Bell, 1991). Thus, it's very important to examine:

RQ4: What were the most frequent topics used in the lead within blog posts by

Egyptian journalist bloggers and citizen bloggers when covering the following crises:

a) The Egyptian revolution in 2011.

b) The Sinai terror attack in 2012.

c) The flooding in Egypt in 2010.

RQ5: What were the most frequent topics that got the most space within blog posts by Egyptian journalist bloggers and citizen bloggers when covering the following crises:

a) The Egyptian revolution in 2011.

b) The Sinai terror attack in 2012.

c) The flooding in Egypt in 2010.

RQ6: How did the Egyptian journalist bloggers and citizen bloggers use the topic that got the most space in the lead paragraph when covering the following crises:

a) The Egyptian revolution in 2011.

b) The Sinai terror attack in 2012.

c) The flooding in Egypt in 2010.

Sources

Sources are the providers of information, which include individuals, organizations and documents. Prior studies found that journalists are using official sources more than bloggers when they cover crises (Cornfield, Carson, Kalis, & Simon, 2004; Liu, 2010; Lowery, 2006). The term official sources refer to the sources that are able to establish "primary interpretation of the topic in question" (Hall, Jefferson, Clarcke & Roberts, 1978, p. 58) such as government officials and media sources. In addition, journalists are

using specialists[6] (e.g., scientists) and eyewitnesses as sources of information (Domingo & Heinonen, 2008). Moreover, journalists may have a better experience than bloggers in how to reach the sources, especially government sources. Thus, it's very important to examine:

H1: Egyptian journalist bloggers use sources of information more than citizen bloggers.

H2: When covering crises, Egyptian journalist bloggers are more likely to use governmental, specialist (e.g., scientists), and eyewitness sources than citizen bloggers.

Modalities

Modalities refer to the structural properties of a thing (Giddens, 2013), text, audio, picture, video, graphics, tables are good examples of online modalities. Previous research found that using modalities can affect the human memory (Hoogeveen, 1997; VanDijck, 2007) and provide rich information (Appiah, 2006; Fletcher & Major, 2006).

News bloggers are using different modalities to send their messages to all people, literate and illiterate. Textual posts are the most frequently used modality by bloggers, and they are usually "brief, direct and informal" (Domingo & Heinonen, 2008, p. 5), and then come picture, video and audio posts. Approximately 90% of textual posts include an image, 50% include videos, and 10% include audio files (Stein, 2011). The textual blog posts contain words that have semantic coherence of the topic (Mei, Liu, Su & Zhai, 2006). Image blog posts contain pictures, photographs or hyperlinks to pictures (Cohen,

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[6] A specialist is a person "who devotes or limits his interest to some special branch" (Beecroft, 1988, p. 109).

2005). Video blog posts contain video files or video games. Audio blog posts, also known as podcasts, consist of audio files, podcast links, and recordings (Fareed, 2010; Hill, 2005; Tan & Detenber, 2006).

Pictures, audio, and video in the textual content are powerful psychological cues that improve an individual's memory and save time. Knowing who is using different modalities in covering crises helps the PR and ad agencies, as well as researchers and organizations that are working on reducing illiteracy, to narrow their focus of research. Thus, it's very important to examine:

RQ7: How do Egyptian journalists and citizen bloggers differ in modalities used to cover the following crises:

    a) The Egyptian revolution in 2011.

    b) The Sinai terror attack in 2012.

    c) The flooding in Egypt in 2010.

RQ8: What kind of images did the Egyptian journalists and citizen bloggers use in their coverage of different crises?

RQ9: What kind of hyperlinks did the Egyptian journalists and citizen bloggers use in their coverage of different crises?

CHAPTER 3: Method

This research focuses on the differences between journalist bloggers and citizen bloggers in the coverage of three crises that happened in Egypt: natural disaster, terrorist attack and civil unrest. The researcher used a quantitative content analysis of blog posts to look at how each type of blogger's frames, topics, sources, and modalities in their coverage of different crises. This chapter provides information about how the researcher conducted her research, which includes: sample and data collection, sampling procedures, operational definitions, reliability assessment, and validity assessment. The researcher analyzed 441 blog posts by journalists and citizen bloggers about the three crises.

Sample and Data Collection

Content analysis method gives the researcher a good idea of the content of blog posts. Several researchers have defined content analysis as a systematic method (Riffe, Lacy, & Fico, 2008; Rourke, Anderson, Garrison, & Archer, 2001; Stemler, 2001). For instance, Riffe, Lacy and Fico (2008) defined it as "the systematic and replicable examination of symbols of communication, which have been assigned numeric values according to valid measurement rules and the analysis of relationships involving those values using statistical methods, to describe the communication, draw inferences about its meaning, or infer from the communication to its context, both of production and consumption" (p.25). By using this method, the researcher looked at the clusters of messages in six groups of blog posts, two types of bloggers and three types of crises (see Table 1).

Table 1: Six Groups of Blog Posts

Blogger type Crisis Type	Journalist	Citizen
Natural disaster	Journalist + a natural disaster	Citizen+ a natural disaster
Terrorist attack	Journalist + a terrorist attack	Citizen+ a terrorist attack
Civil unrest	Journalist+ civil unrest	Citizen+ civil unrest

Sampling Procedures

Blog post consists of a title, date, and body, and the post's body may contain text, links, images, videos and/or graphs. The unit of analysis of most of the research questions and two hypotheses was the entire blog post, which gives the reader a good explanation of is the content of the post. While the unit of analysis of RQ4 was the first paragraph in the post, which provides the reader with the main topic in the lead. And the unit of analysis in RQ8 was the photo, and RQ9 was the hyperlink. Two coders analyzed each blog post and identified the meaning of each post to answer the questions in the coding sheet (see APPENDIX D).

The study population is all blog posts by Egyptian journalist bloggers and citizen bloggers during three crises: the January 25, 2011 Egyptian Revolution, the Sinai terror attack of August 5, 2012, and the flooding in Egypt in January 2010. The researcher created a list of journalist bloggers in Egypt from the search on Google.com of "Egypt journalist blogger" in English and "sahafi, modawen, masri" in Arabic (see APPENDIX E). The researcher only found 33 journalist bloggers. To confirm this sample and get a credible and reliable sample, the researcher used two more steps: 1) scanned Twitter lists to search for journalists in Egypt who also have blog accounts, and looked at their

followers to determine if any of them are journalists and bloggers in Egypt, and 2) looked

at the bloggers' blogrolls[7], which are lists of bloggers deemed to be experts in their

community (Park & Thelwall, 2008) (see Example 2). As a result, the researcher

collected a list of 33 journalist bloggers in Egypt. To confirm that this list consists of all

journalist bloggers in Egypt, the researcher created another list of 519 journalists working

for 24 Egyptian newspapers and news sites. The researcher searched for each name in

Arabic and English and found only six journalists who have blogs; therefore, 33

journalist bloggers is a considerable number.

The researcher excluded eight blogs[8] that fell outside of the study time frame; six

blogs that did not blog about the three crises[9], one blog that had only hyperlinks to news

articles in an online newspaper, and one photo blog because the posts were not dated.

Other Egyptian journalist micro-bloggers[10] that appeared in the Google and Twitter

search results were ignored, because this study focuses on blogs rather than micro-blogs,

such as Twitter.

Blogs include a short biography of the blogger that includes his or her name,

background, and goals in creating the blog. To confirm the first list of the sample, the

researcher reviewed the "About me," "About," "Anni" and "Mn Anna" section of each

blog and conducted a Google search on each blogger to confirm their status as

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[7] A blogroll is published on a blogger's homepage and are commonplace among bloggers (Bruns, 2007).

[8] Ashraf Shahata- http://pressmisr.blogspot.com/, Nada Abd Alwahed- http://hamselnada.blogspot.com/, and Ethar El-Katatney- http://etharelkatatney.wordpress.com/-tweeter, Hussain Hassan Hussain- http://alwardy.wordpress.com/, Mosa'ab Elshamy- http://www.mosaabelshamy.com/, Nora Younis- http://web.archive.org/web/20110202034353/http://norayounis.com/, Mohammed Yahia- http://theunwriting.wordpress.com/2013/05/, Jamal Abd Alrahim- http://gamalrahim.blogspot.com/

9 Ashraf Khalil, Gihan "Gigi" Ibrahim, Mohamed Abdelfattah, Mohammad Abd Alrahman, Mohammad Monir, Mona Eltahawy, and Sharif Abdel Kouddous.

[10] Nora Younis, Amro Majdi, Abdullah Elshamy, Mouna Abouissa, Sherine Tadro, Amro Hassan and Ibrahim Elgarhi.

professional journalists.

Omraneya.net was once the largest Egyptian blog aggregator of active Egyptian blogs until it ceased publishing in 2013. Therefore, the researcher used the second largest blog aggregator, ArabO, a search engine and directory of the English and Arabic websites in 22 Arab countries, to collect samples of Egyptian citizen bloggers. This engine contains more than 1300 active Egyptian blogs, from which 33 were randomly selected (see APPENDIX F). The researcher looked at the "About me," "About," "Anni," and Mn Anna" page in each blog and searched through Google to confirm that the bloggers were not working and had not worked as journalists. To confirm that all citizen bloggers in the list are not journalists, the researcher emailed them and received feedback from 18 bloggers that they are not journalists. Only two worked as journalists and were moved to the journalist bloggers list. The researcher reviewed the blog archives and ignored any blog posts dated outside the three periods of the study. The researcher analyzed all blog posts from within the three periods (see Table 2).

Study Time Frame

This analysis covers two weeks from the first day of each crisis date, January 25 - February 11, 2011, August 5-19, 2012 and January 17-30, 2010. The researcher used the blogs' archives to collect a sampling of blog posts about each crisis. The researcher collected all blog posts (in both Arabic and English) containing specific keywords from the first day and two weeks after each crisis date (N=1,500) (see Table 2). The researcher excluded any post that had only an image, video, audio, or hyperlink without text because examining the content of only an image, video, audio, or hyperlink may affect the coders' emotions and lead to biased results.

Table 2*:* Crises Time Periods and Keyword Searches

Crisis Type	Time Period	Keywords
Sinai terrorist attack (August 5, 2012)	August 5-19, 2012	Sinai attack, terror attack, Egyptian–Israeli border, Egyptian soldiers, Kerem Shalom border crossing, Ansar Bayt al Maqdes, Rafah
Egyptian Revolution (January 25, 2011)	January 25- February 11, 2011	Revolution, demonstration, Jan 25, anti-government, Mubarak, civil unrest, civil disorder, civil strife
Flooding in Sinai, Al-Arish and Aswan (January 17, 2010)	January 17-30, 2010	Flooding, flood, rain, Sinai, Aswan, Al-Arish, Taba, Nuweiba and Sharm el Sheik, Red Sea, natural disaster

The researcher collected 1,500 blog posts about the three crises. The researcher analyzed all of the posts about Sinai terrorist attacks and flooding because they are small samples. The researcher collected the links of posts about the revolution by each type of blogger in separate word sheets. Then she took a random sample of 140 blog posts from each sheet until she collected 140 posts (see Table 3), resulting in a total sample size of 441 blog posts.

Table 3: Number of Blog Posts of Each Crisis

	Journalist	Citizen	TOTAL
Terrorist attack	58/ 13.15%	32/ 7.26%	90
Revolution	140/ 31.75%	140/ 31.75%	280
Flooding	16/ 3.63%	55/ 12.47%	71
TOTAL	214/ 48.53	227/ 51.48%	441/ 100%

Operational Definitions

To determine **frames** of the crises, the researcher used Semetko and Valkenburg's (2000) scale, because it is clear and general. In each frame, there are five questions to be answered either by yes (1) or no (0). For the *attribution of responsibility* frame, the researcher determined if the blog post implies: 1) "that some level of government has the ability to alleviate the problem/issue," 2) "some level of the government is responsible for the issue/problem," 3) "solution(s) to the problem/issue," 4) "an individual or group of people in society is responsible for the problem/issue" (p.100). This researcher added 5) an institution or organization is responsible for the problem/issue.

Regarding the *human-interest* frame, the researcher asked if the blog post 1) "provide[s] a human example or 'human face' on the issue," 2) "employ[s] adjectives or personal vignettes that generate feelings of outrage, empathy-caring, sympathy, or compassion," 3) "Emphasize[s] how individuals and groups are affected by the issue/problem," 4) "go[es] into the private or personal lives of the actors," 5) "contain[s]

visual information that might generate feelings of outrage, empathy-caring, sympathy, or compassion" (Semetko & Valkenburg, 2000, p.100).

In the *conflict* frame, the researcher asked if the blog post 1) "reflect[s] disagreement between parties-individuals-groups-countries," 2) "show[s] one party-individual-group-country reproach another," 3) "refer[s] to two sides or more of the problem or issue," 4) "refer[s] to winners and losers" (Semetko & Valkenburg, 2000, p.100). This researcher added 5) refer to consequences of disagreement two or more sides.

In looking at the *morality* frame, the researcher asked if the blog post 1) "contain[s] any moral message," 2) "make[s] reference to morality, God, and other religious tenets," 3) "offer[s] specific social prescriptions about how to behave" (Semetko & Valkenburg, 2000, p.100), and this researcher added two questions: 4) if they contain any action or behavior against humanity, or 5) refer to a group of people or individual against law.

Regarding the *economic consequences* frame, the researcher asked if the blog post 1) "mention[s] current or future financial losses," 2) "mention[s] the costs/degree of expense involved," 3) "contain[s] a reference to economic consequences of pursuing or not pursuing a course of action" (Semetko & Valkenburg, 2000, p.100), and the researcher added two more questions: 4) if they refer to any financial assistance to overcome the crisis, or 5) link the crisis to other events that caused financial losses or gains (see APPENDIX C).

To examine the blog post **topics** used in the journalists and citizen bloggers coverage

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of different crises, the researcher examined three things: 1) the topic that was mentioned first, 2) the one that got the most space (main topic), and 3) if the one that got the most space mentioned in the first paragraph or not. The section about the topics covers seven areas, and was answered by yes (1) or no (0):

- Economy, which includes unemployment, agriculture, economic losses, etc.

- Politics, to include Mubarak, government, constitution, law, elections, etc.

- Violence and terror, detailing the number of people killed or injured by other people, sexual harassment or other violent behavior. Any death by natural causes is not considered violence.

- Environment, which covers issues such as flooding, changing weather, death, injuries by natural causes.

- Human rights, which entails women rights, prisoner rights, healthcare, educational rights, etc.

- Military, which covers information about troops, soldiers, bombs, tanks, weapons, guns, or any military equipment or action.

- Other, for topics that cannot be included in the above categories, such as technology.

The researcher compared journalist bloggers and citizen bloggers by looking at five content **modalities**, or structural features of the posts:

- Text, a post that only contains written text. All blog posts contain text.

- Photo, a post comprised solely of photographs

- Video, when embedded videos make up the post

- Audio, when a post contains audio

- Hyperlink, when a post contains an URL or link, the coders looked at where these links take them.

To code the type of modalities, the researcher asked yes (1), no (0) questions: If the post contains a text, photo, video, audio, or hyperlink. The researcher also asked yes (1), no (0) questions: weather the photo was professional, black and white, an infographic, and has people. To examine the hyperlinks, the researcher asked yes (1), no (0) questions: If the first hyperlink contains a story, picture, video, and other.

The **sources** cited by bloggers are a person, organization or document that provided information used by the bloggers. Some bloggers use quotes or paraphrase information from sources in posts. Various words refer to source attributions, such as "said," "claimed," "confirmed," "thinks," and "suggests." The researcher seeks to determine whether the blogger used a source or not. To code the type of **sources**, the researcher asked yes (1), no (0) questions: If the source is government, science, business, non-governmental organization (NGO), media, and individuals (Messner & DiStaso, 2008), in addition to the documents that a written, printed, or electronic statement that provide information from a group or an individual. If the source of information is other than these sources, the coders choose "other" and write the name of the source.

Reliability Assessment

Intercoder reliability is the "agreement among coders about categorizing content" (Riffe et al., 2008, p. 123). According to Riffe et al. (2008), there are three main reliability requirements: "reliability testing on randomly selected content … a test for chance agreement, and report[ing] the reliability figures for all relevant variables." (p.154). Tucker, Weaver, & Berryman-Fink (1981) suggest the coefficient should be

tested first on an instrument to check the agreement of the categories' conceptual and operational definitions with coders.

To measure inter-coder reliability, two coders randomly coded 40 blog posts, a selected subsample of 10% of the total sample. The researcher used Krippendorff's alpha and Scott's pi. The researcher used ReCal website to calculate the reliability scores of variables. ReCal helps the content analysis researchers to get accurate coefficients for nominal-level data (Freelon, 2010).

The researcher calculated the inter-coder reliability based on Krippendorff's alpha and Scott's pi with nominal categories and a large sample. Before the actual coding took place, the researcher trained the coders by using sample blog posts from outside the study period. During the training, the researcher tested the definitions of each category. The coders agreed in most "instances about the proper category for each unit of analysis" (Wimmer & Dominik, 2003, p. 151); this agreement is inter-coder reliability. The highly defined categories also help to increase reliability.

Upon completion of training, the researcher and coders conducted a reliability check by analyzing 40 of the posts and checking the agreement and disagreement between the coders. Based on the coding protocol, two coders coded independently, after reading the coding instructions and definitions for each variable.

The inter-reliability process went through two stages. After the first stage, the researcher refined the protocol to make it clearer and to increase the reliability of some variables. The range of the Krippendorff's alpha of framing questions were between .89 and .95; conflict was .90 ($SD = 0.03$), human-interest was .94 ($SD = 0.04$), morality was

.93 (*SD* = 0.1), economic consequences was .95 (*SD* = 0.1), and attribution of responsibility was .89 (*SD*=0.07). The averages of the inter-coder reliabilities of the first topics were .99 (*SD* = 0.02) (the range between 1 and .95), the topic got the most space .99 (*SD* = 0.02) (the range between 1 and .95), type of source .98 (*SD* = 0.03) (the range between 1 and .92), and type of modalities .96 (*SD* = 0.09) (the range between 1 and .81) (see Table 8).

Validity Assessment

Validity is an important factor of any academic research. It shows how well an analysis measures what it is supposed to measure (Carmines & Zeller, 1979). Getting acceptable scientific results as evidence are the main purpose of research. Wimmer and Dominick (2003) suggest validity is never an all-or-nothing situation. To some degree, the researcher must use his/her own judgment to assess the validity. The researcher used face validity to measure what is supposed to be measured, and how it appears in the blog posts. Face validity in the content analysis provides the coders with greater confidence in the measurement procedure, also gives the researcher greater confidence in the study results (Potter & Levine-Donnerstein, 1999). In measuring the frames, the researcher used an existing scale developed by Semetko and Valkenburg in 2000, and added some questions to make it more consistent. To examine each of the attributes, the questions in the coding sheet were quick and easy to answer either by yes (1) or no (0). In addition, the researcher provided the coders with instruction and guidance, and tested it before coding began.

CHAPTER 4: Results

This part of the dissertation reflects the statistical results that answer the research questions and test the hypotheses. The researcher analyzed a total sample of 441 blog posts about the three crises: natural disaster, terrorist attack and civil unrest. Journalist bloggers posted 214 blog posts during two weeks of the start of each crisis, while citizen bloggers posted 227 blog posts; 327 blog posts were written in Arabic (74.15%) because it is the main language in Egypt, 80 in English (18.14%), and 34 in three or more languages (7.71%). The bloggers provided a translation of words other than Arabic and English. A significant difference between journalist bloggers and citizen bloggers was found in using language ($X^2(2) = 37.56$, $p < .001$). Journalist bloggers (131 posts, 29.71%) were less likely to write in Arabic than citizen bloggers (196 posts, 44.44%). Journalist bloggers (61 posts, 13.83%) were more likely to write in English than citizen bloggers (19 posts, 4.31%). And journalist bloggers (22 posts, 4.99%) were more likely to write in mixed languages than citizen bloggers (12 posts, 2.72%) (see Figure 2).

Figure 2: Frequencies of Languages Used by Journalist and Citizen Bloggers
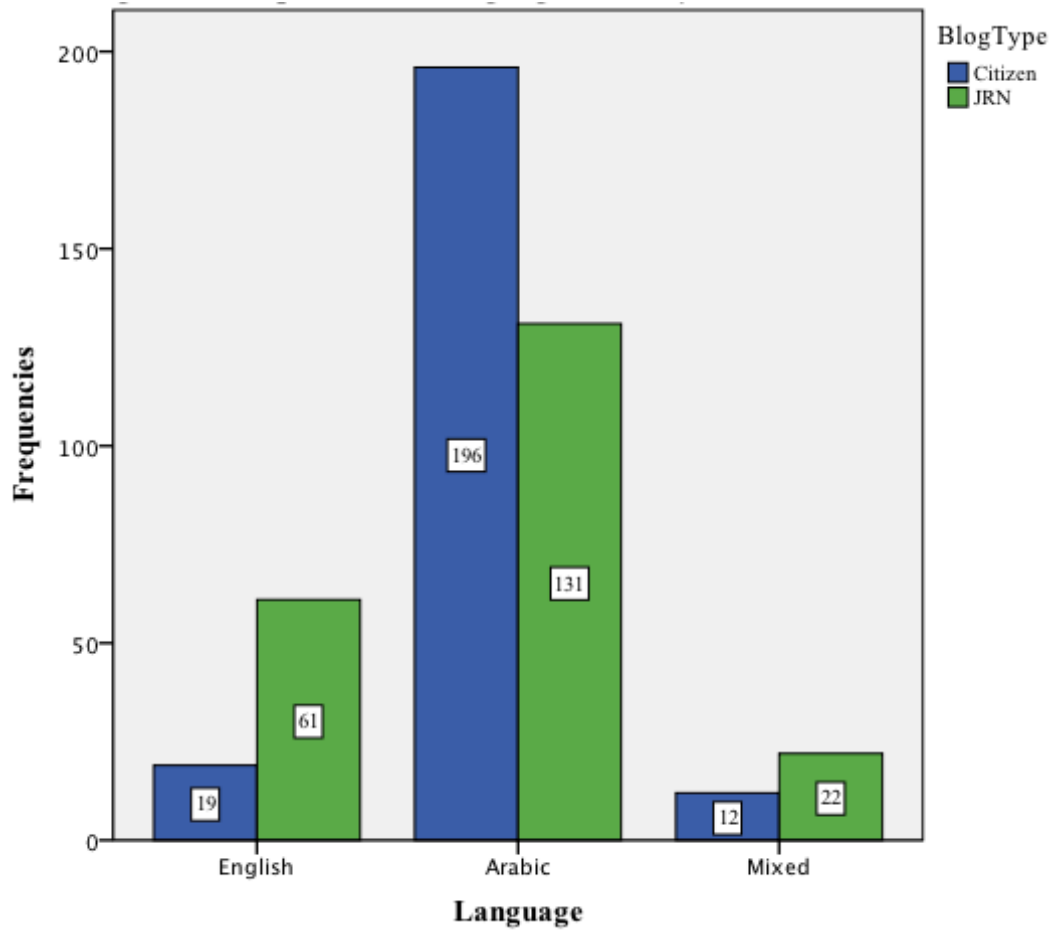
Frames

The researcher asked five questions to examine each frame, and every question is answered either by yes (1) or no (0). The researcher counted the number of questions answered by yes (1) in each frame, and came up with continuous scales of frames. **RQ1** asked whether differences existed between the citizen bloggers and journalist bloggers regarding frames used in a civil unrest crisis (Egyptian Revolution, 2011). The researcher computed a one-way ANOVA comparing the citizen bloggers and journalist bloggers in using five frames to cover the revolution. Significant differences were found among bloggers in using the attribution of responsibility frame ($F (1, 278) = 7.47, p < .01$), and

the human-interest frame (F (1, 278) = 10,27, p < .01). Tukey's HSD was used to determine the nature of the differences between the bloggers. This analysis revealed that the journalist bloggers who used the attribution of responsibility frame scored lower (m = 2.06, sd = 1.48) than the citizen bloggers who used the same frame (m = 2.56, sd = 1.54), and journalist bloggers who used the human-interest frame scored lower (m = 1.84, sd = 1.83) than the citizen bloggers who used the same frame (m = 2.54, sd =1.78).

The analysis also found a trend close to significance (p = .06) in using the morality frame (F (1, 278) = 3.41). The mean of the citizen bloggers who used this frame was lower (m = .69, sd = 1.21) than the mean of the journalist bloggers (m = 1.00, sd = 1.55).

No significant differences were found between the means of citizen bloggers and journalist bloggers in using the conflict frame (F (1, 278) = .29, p > .05), and the economic consequences frame (F (1,278) = .43, p > .05) in the coverage of the Egyptian revolution, 2011. The mean of journalist bloggers who used the conflict frame (m = 2.68, sd = 1.70) was not significantly different from the mean of citizen bloggers (m = 2.58, sd = 1.40), and the mean of journalist bloggers who used the economic consequences frame (m = .21, sd = .67) was not significantly different from the mean of citizen bloggers (m = .14, sd = .83) (see Table 4).

The **RQ2** asked whether differences existed between the citizen bloggers and journalist bloggers in frames used to cover a terrorist attack crisis (Sinai terror attack, 2012). The researcher computed a one-way ANOVA. The results show significant differences between journalist and citizen bloggers in using the human-interest frame (F

(1, 88) = 5.5 *p* < .05), and the conflict frame (*F* (1, 88) = 18.68, *p* < .001). Tukey's

HSD was used to determine the nature of the differences between the bloggers. This

analysis revealed that journalist bloggers who used the human-interest frame scored

lower (*m* = 1.21, *sd* = 1.60) than the citizen bloggers (*m* = 2.06, *sd* = 1.76), and the

journalist bloggers who used the conflict frame scored higher (*m* = 3.81, *sd* = 1.43) than

the the citizen bloggers (*m* = 2.47, *sd* = 1.37). No significant differences were found

between the citizen bloggers and journalist bloggers in using the attribution of

responsibility frame (*F* (1, 88) = .12, *p* > .05), the morality frame (*F* (1, 88) = .17, *p* >

.05), and the economic consequences frame (*F* (1, 88) = 1.29, *p* > .05) in the coverage of

the 2012 Sinai terror attack. The mean of journalist bloggers who used the attribution of

responsibility frame (*m* = 2.52, *sd* = 1.31) was not significantly different from the mean

of citizen bloggers (*m* = 2.63, *sd* = 1.52); the mean of journalist bloggers who used the

morality frame (*m* = 1.09, *sd* = 1.82) was not significantly different from the mean of

citizen bloggers (*m* = .94, *sd* = 1.24), and; the mean of journalist bloggers who used the

economic consequences frame (*m* = .17, *sd* = 68) was not significantly different from the

mean of citizen bloggers (*m* = .38, *sd* = 1.00) (see Table 4).

To answer **RQ3**, regarding if any differences existed between the citizen bloggers

and journalist bloggers in framing a natural disaster crisis (Flooding in Egypt, 2010), the

researcher also used a one-way ANOVA. The researcher found a significant difference

between the two groups of bloggers in using the morality frame (*F* (1, 69) = 4.14, *p* <

.05). The analysis showed that journalist bloggers who used the morality frame scored

higher (*m* = 1.25, *sd* = 1.65) than citizen bloggers (*m* = .55, *sd* = 1.07). And no significant

differences were found in framing a flooding crisis when using the attribution of

responsibility frame (F (1, 69) = .38, p > .05), the human-interest frame (F (1, 69) = 0, p > .05), the conflict frame (F (1, 69) = 4.13, p > .05), and the economic consequences frame (F (1, 69) = 1.27, p > .05). The mean of journalist bloggers who used the attribution of responsibility frame (m = 2.00, sd = 1.26) was not significantly different from the mean of citizen bloggers (m = 1.73, sd = 1.63); the mean of journalist bloggers who used the human-interest frame (m = 3.253, sd = 1.98) was not significantly different from the mean of citizen bloggers (m = 3.250, sd = 1.29); the mean of journalist bloggers who used the conflict frame (m = 2.13, sd = 2.06) was not significantly different from the mean of citizen bloggers (m = 1.25, sd = 1.62); and the mean of journalist bloggers who used the economic consequences frame (m = 1.75, sd = 1.88) was not significantly different from the mean of citizen bloggers (m = 1.22, sd = 1.60) (see Table 4).

Table 4: Analysis of Variance of Frames Used in a Civil Unrest, Terrorist Attack, and
Natural Disaster Crises

	SS	df	F	Mean Square
Civil Unrest (N = 280)				
Attrib.	17.00	1	7.47 **	17.00
Human-Intr.	33.60	1	10.27 **	33.60
Conf.	.70	1	.29	.70
Moral	6.60	1	3.41	6.60
Eco.	.36	1	.63	.36
Terrorist Attack (N = 90)				
Attrib.	.24	1	.12	.24
Human-Intr.	15.10	1	5.50 *	15.10
Conf.	37.12	1	18.68 ***	37.12
Moral	.46	1	.17	.46
Eco.	.85	1	1.29	.85
Natural Disaster (N = 71)				
Attrib.	.92	1	.38	.92
Human-Intr.	0	1	0	0
Conf.	9.39	1	3.14	9.39
Moral	6.15	1	4.14 *	6.15
Eco.	3.51	1	1.27	3.51

Note. n=441, *$p < .05$, **$p < .01$, *** $p < .001$

Over the average of all crises, the researcher ran independent t-tests to compare

the mean scores of citizen bloggers and journalist bloggers. The researcher found

significant differences between journalist bloggers and citizen bloggers in using the human-interest frame (t (439) = 5.12, p < .001), the conflict frame (t (439) = 4.47, p < .001), and the morality frame (t (439) = 2.60, p < .01). The mean of journalist bloggers who used the human-interest frame (M = 1.78, SD = 1.85) was significantly lower from the mean of citizen bloggers (M = 2.64, SD = 1.71). The mean of journalist bloggers who used the conflict frame (M = 2.94, SD = 1.74) was significantly higher from the mean of citizen bloggers (M = 2.24, SD = 1.55), and the mean of journalist bloggers who used the morality frame (M = 1.04, SD = 1.63) was significantly higher from the mean of citizen bloggers (M = .69, SD = 1.18) (see Figure 3).

Figure 3: Estimated Means of Frames by Blogger Type
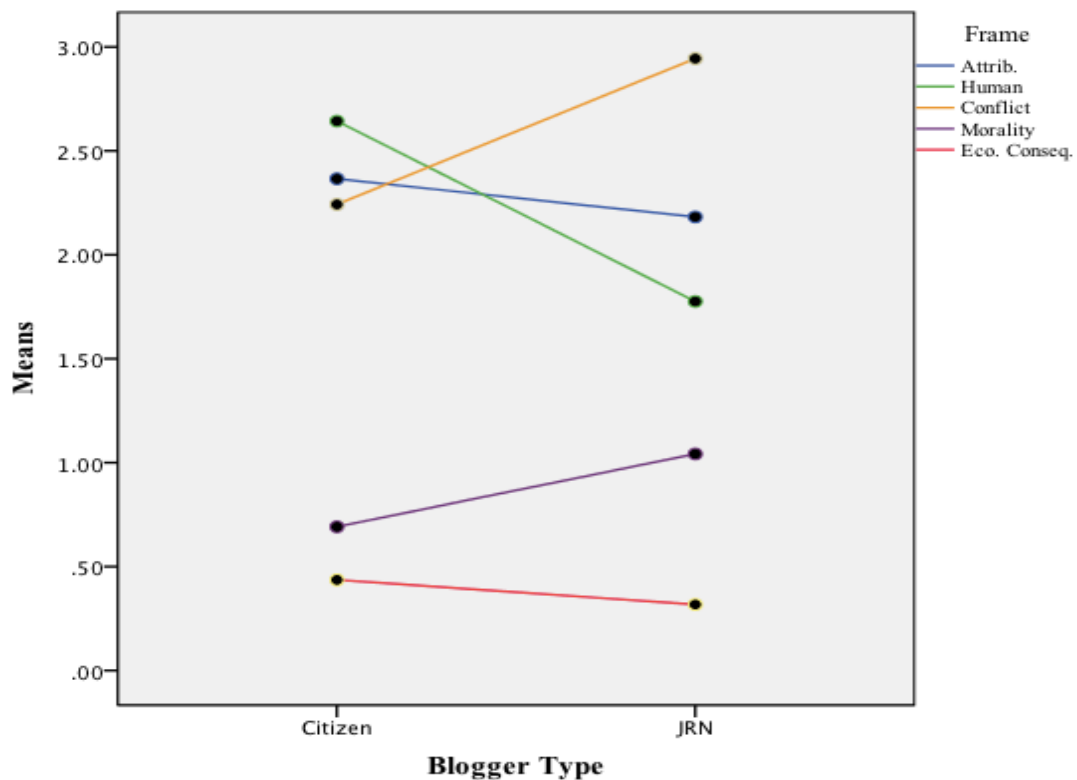
To look at frequencies and percentages of frames question, see Table 9.

Topics

RQ4 asked about the topics most frequently used in leads within blog posts by Egyptian journalist bloggers and citizen bloggers about three crises: a) Egyptian revolution, b) Sinai terror attack, and c) flooding. The topics most frequently used in the lead by journalists and citizen bloggers were politics, violence and terror. Chi-square tests of independence were calculated comparing the percentages of topic used by each type of blogger in each crisis. The researcher dropped the economy and some cells in the environment and human rights topics because there were not enough data to perform a chi-square test. In the coverage of a *civil unrest* crisis (Egyptian revolution) significant interactions were found in the political topic ($X^2(1) = 13.69$, $p < .001$), and violence and terror ($X^2(1) = 3.89$, $p < .05$). In the coverage of a *terrorist attack* crisis, a significant interaction was found in the violence topic ($X^2(1) = 5.34$, $p<.05$). In the coverage of a *natural disaster* (flooding), a significant interaction was found in the military topic ($X^2(1) = 6.68$, $p < .01$). Citizen bloggers were more likely to mention politics as the first topic (130, 31.18%) than were journalist bloggers (106 posts, 25.42%). Journalist bloggers used violence and terror topics in the first paragraph (54 posts, 12.39%) more than citizen bloggers did (48 posts, 11.52%). Other topics mentioned by journalist bloggers were about the media, women, sport, agriculture, religion, culture, and life (see Table 5).

Table 5: Frequencies and Percentages of the First Mentioned by Type of Bloggers

	Civil unrest		Terrorist attack		Natural disaster		Total	
	Citizen	JR	Citizen	JR	Citizen	JR	Citizen	JR
Politics	109	80	13	26	8	0	130	106
	26.14% ***	19.18% ***	3.12%	6.24%	1.92%	0%	31.18%	25.42%
Violence and Terror	26	40	14	12	8	2	48	54
	6.24% **	9.59% **	3.36% **	2.86% **	1.92%	0.48%	11.52%	12.93%
Environment	- -	-	-	-	36	9	36	9
		-	-	-	8.63% ***	2.16% ***	8.63%	2.16%
Human rights	2	8	-	-	-	-	2	8
	0.48%	1.92%	-	-	-	-	0.48%	1.92%
Military	2	1	4	13	1	3	7	17
	0.48%	0.24%	0.96%	3.12%	0.24% *	0.72% *	1.68%	4.08%
N	139	129	31	51	53	14	**417**	
Total	33.34%	30.93%	7.44%	12.22%	12.71%	3.36%	**100%**	

Note. n=417, *p < .05, **p < .01, *** p <.001

RQ5 asks about the topic that got the most space by journalist bloggers and

citizen bloggers in their coverage about three crises: a) Egyptian revolution, b) Sinai

terror attack, and c) flooding. The top two topics that got the most space in the

journalists' posts were politics, and violence and terror. The researcher dropped the

economy and some cells in the environment, human rights, and military topics because there were not enough data to perform a chi-square test. Citizen bloggers were more likely to write about politics and environment. In the coverage of a *civil unrest crisis* (Egyptian revolution), significant interactions were found in the political topic ($X^2(1) = 32.98$, $p < .001$), violence and terror ($X^2(1) = 16.99$, $p < .001$), human rights ($X^2(1) = 5.63$, $p < .05$). In the coverage of a *terrorist attack crisis*, a significant interaction was found in the violence topic ($X^2(1) = 5.34$, $p < .05$). In the coverage of a *natural disaster* (flooding), a significant interaction was found in the political topic ($X^2(1) = 7.31$, $p < .01$), environment ($X^2(1) = 15.06$, $p < .001$), and military ($X^2(1) = 7.07$, $p < .01$). According to the topics that got the most space, citizen bloggers were more likely to use politics (149 posts, 35.82%) than journalist bloggers (120 posts, 28.85%). Journalist bloggers were using violence and terror (47 posts, 11.3%) more than citizen bloggers did (21 posts, 5.05%). Other topics covered by journalist bloggers include media, women, sport, agriculture, religion, and life (see Table 6).

Table 6: Frequencies and Percentages of the Topics that Got the Most Space by Type of Bloggers

	Civil unrest		Terrorist attack		Natural disaster		Total	
	Citizen	JR	Citizen	JR	Citizen	JR	Citizen	JR
Politics	125	83	22	33	2	4	149	120
	30.05%	19.95%	5.29%	7.93%	0.48%	0.96%	35.82%	28.85%
	***	***			**	**		
Violence and Terror	11	37	6	8	4	2	21	47
	2.64%	8.89%	1.44%	1.92%	0.96%	0.48%	5.05%	11.3%
	***	***						
Environment	-	-	-	-	47	6	47	6
	-	-	-	-	11.3%	1.44%	11.3%	1.44%
					***	***		
Human rights	1	8	-	-	-	-	1	8
	0.24%	1.92%					0.24%	1.92%
	*	*						
Military	2	1	3	11	-	-	5	12
	0.48%	0.24%	0.72%	2.64%			1.2%	2.88%
N	139	129	31	52	53	12	**416**	
Total	33.41%	31.01%	7.45%	12.5%	12.74%	2.88%	**100%**	

Note. n=416, *p < .05, **p < .01, *** p <.001

To answer **RQ6** and find how each of the two types of bloggers used the topic

that got the most space in the lead paragraph when covering: a) Egyptian revolution, b)

Sinai terror attack, and c) flooding, the researcher conducted a chi-square test. The results

showed a significant interaction in using the topic that got the most space in the post in

the first paragraph when covering the *revolution* (X^2(1) = 28.15, p < .001). The journalist

bloggers are more likely to put the topic that got the most space in the first paragraph

(lead) when they cover a civil unrest crisis (132, 75.4 %) than citizen bloggers (98,

42.6%). The results also showed a significant interaction in using the topic that got the

most space in the post in the first paragraph when covering the *flooding* (X^2(1) = 6.68, p <

.05). The journalist bloggers are more likely to put the topic that got the most space in the

first paragraph (lead) when they cover the natural disaster crisis (58, 64.4%) than citizen

bloggers (32, 35.6%). In addition, the results showed no significant difference between

journalist and citizen bloggers in using a topic that got the most space in the first

paragraph (lead) when they cover *terrorist attacks* (X^2(1) = 2.04 , p > .05).

Sources

To test **H1**, a test of independent proportions was calculated comparing the

proportion using sources by journalist bloggers and citizen bloggers. Journalist bloggers

are more likely to use sources (135, 30.6%) than were citizen bloggers (99, 22.4%),

which supports the H1. The study also found 207 (47%) blog posts do not have any

source.

To test **H2** to see whether Egyptian journalist bloggers are more likely to use

governmental, scientists, and eyewitness sources than citizen bloggers, the researcher ran

a test of proportions. The researcher found that citizen bloggers (34, 7.7%) are more

likely to use governmental sources than journalists (24, 5.4%). Sixteen posts by journalist

bloggers used scientist sources (16, 3.6%), while none by citizen bloggers used this

source. And journalists (37, 8.4%) are more likely to use eyewitnesses than citizen bloggers (31, 7%). In sum, the H2 is partially supported.

The researcher looked at using media and documents as sources of information. Results showed that journalist bloggers are more likely to use media sources (69, 15.9%) than citizen bloggers (26, 5.9%), while citizen bloggers are more likely to use documents as sources of information (29, 6.6%) than journalist bloggers (13, 2.9%) (see Figure 4).

Figure 4: Percentage of Different Sources Used by Journalists and Citizen Bloggers
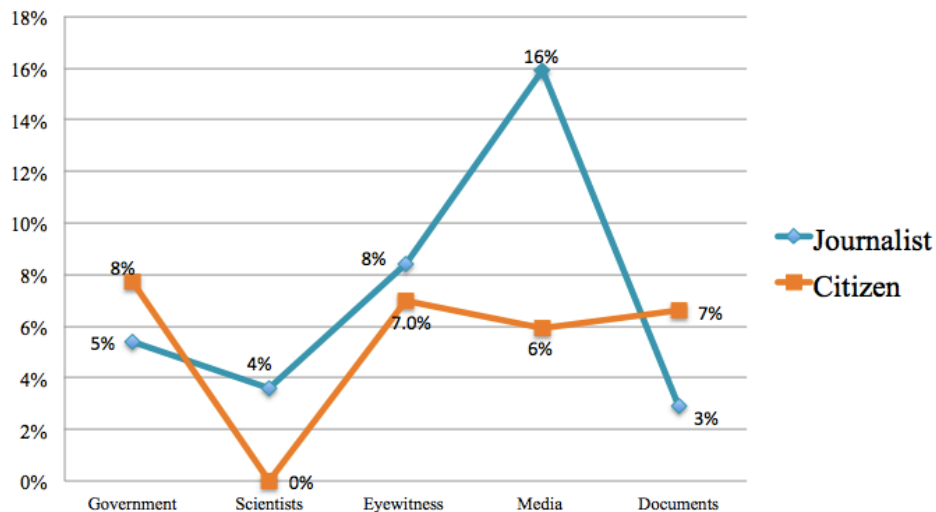
According to media sources, journalist bloggers use online media (39, 8.8%) more than using offline media (30, 6.8%), while citizen bloggers are less likely to use online media sources (11, 2.5%) than offline media (15, 3.4%).

Modalities

RQ7 addressed whether blogger types differed in using modalities to cover the different crises. A chi-square test of independence was calculated comparing the

frequency of modalities used by journalist and citizen bloggers. Significant interactions were found in using images ($X^2(1) = 22.84$, $p < .001$), video ($X^2(1) = 23.09$, $p < .001$), and hyperlinks ($X^2(1) = 9.95$, $p < .01$). Citizen bloggers were more likely to use images in their posts (159, 36.1%) than journalist bloggers (102, 23.1%), while journalists are more likely to use video posts (30, 8.8%) than citizen bloggers (9, 2%). Ninety (20.4%) blog posts by journalists had hyperlinks, and 63 (14.3%) citizen blogger posts used hyperlinks in their coverage of crises. In addition, the results showed no significant difference between journalist and citizen bloggers in using audio ($X^2(1) = .95$, $p > .05$) (see Figure 5).

Figure 5: Percentage of Different Modalities used by Journalists and Citizen Bloggers
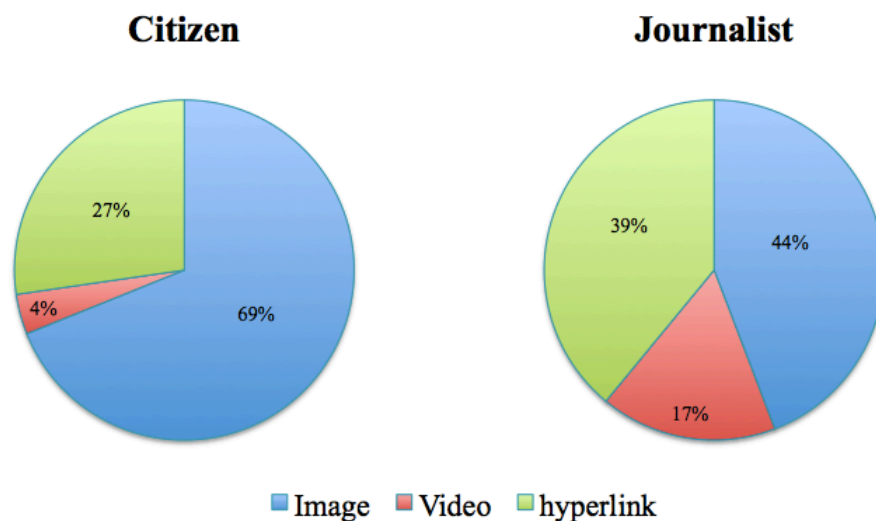
RQ8 asked about the kind of images the Egyptian journalist and citizen bloggers use in their coverage of different crises. Sixty two (14.1%) of the images used by journalists looked professional, only five (1.1%) were in black and white, 39 (8.8%) were info-graphics, and 81 (18.4%) had people. Of the images used in citizen blog posts about

crises, 97 (22%) look professional, 12 (2.7%) were in black and white, 38 (8.6%) were

info-graphic, and 124 (28.1%) had people (see Figure 6).

Figure 6: Percentage of Kind of Images used by Journalists and Citizen Bloggers
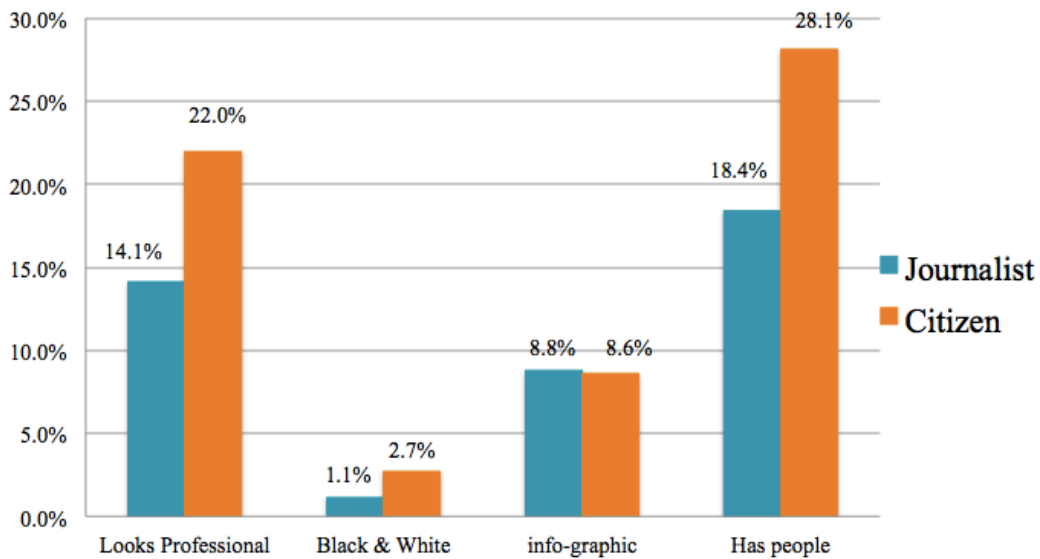
Lastly, journalists were more likely to use hyperlinks than citizen bloggers (see

Table 7). The researcher examined the first link of each post to answer **RQ9** and found

that 67 (15.2%) of journalists' first hyperlinks go to stories, five (1.1%) to pictures, 10

(2.3%) to YouTube, and 10 (2.3%) to main websites without stories (e.g., Twitter.com,

Facebook.com). The results also showed only 44 (10%) of the first hyperlinks by citizens

went to stories, 15 (3.4%) to pictures, two (.5%) to YouTube, and one (.2%) to a main

website.

Table 7: Sum, Average, and Standard Deviation of Using Hyperlinks by Journalist and Citizen Bloggers.

Type of Blogger	Sum of hyperlinks	Average	SD	Number of Posts
Citizen	84	.37	.83	228
Journalists	244	1.14	3.6	213

Summary

In summary, the results showed that significant differences were found between the two types of bloggers in the coverage of crises. In the civil unrest crisis, journalist bloggers were using the attribution of responsibility and the human-interest frames less than the citizen bloggers. In the coverage of a terrorist attack crisis, the journalists were using the human-interest frame less than citizen bloggers. Journalist bloggers were using the conflict frame more than citizen bloggers to cover the same crisis. In the coverage of a natural disaster crisis, the journalist bloggers were using the morality frame more than citizen bloggers. In sum, regarding frames, the researcher found differences between the two types of bloggers in using the human-interest frame, the conflict frame, and the morality frame.

In regard to the first topic mentioned in the posts and the topics that got the most space, politics was the most frequently used topic by both types of bloggers. Citizen bloggers though were more likely to use this topic than journalist bloggers. Journalist bloggers were more likely to use the topic that got the most space in the lead paragraph than citizen bloggers do. Significant differences were found in using sources; journalist

bloggers use scientists more than citizen bloggers, which support the first hypothesis, and partially support the second hypothesis. Moreover, they use media more than citizen bloggers, while the latter were using more documents. According to modalities, citizen bloggers were more likely to use images in their posts than journalist bloggers, while journalists were more likely to use video and hyperlinks.

CHAPTER 5: Discussion

This research aimed to examine the differences between journalist bloggers and citizen bloggers in the coverage of three crises: civil unrest, a terrorist attack, and a natural disaster. The researcher took a sample of Egyptian bloggers and crises to reach the aim of the study. A content analysis showed the differences between these two types of bloggers in the frames, topics, sources, and modalities they used in their crises coverage. This chapter shows why these differences exist and gives an explanation of the results from previous studies (An & Gower, 2009; Christians, 1977; Cornfield, Carson, Kalis, & Simon, 2004; de Vreese, 2005; Deuze, 2003; Etling et al., 2010; Gao, 2011; Gillmor, 2006; Hall et al., 1978; Hoogeveen, 1997; Liu, 2010; Lowery, 2006; Lynch, 2007; Neuman et al., 1992; Odden, 2014; Semetko & Valkenburg, 2000; Shoemaker & Reese, 1996; Sundar 2000; VanDijck, 2007; Ward, 2005).

After the Arab Spring revolutions, governments, organizations, researchers, and people around the world started paying more attention to the crises. The Arab World's crises are very important examples that made governments deal with future crises easier. Predicting the results and solutions of a crisis come from reading news and analyses about the crisis. The blog is one medium that provides audiences with this information. This dissertation offers a window into the world of bloggers during the crises. The theoretical contribution of this paper provides knowledge about these two different types of bloggers, and probes the differences between how they used frames, sources, and modalities. In addition, the paper provides important contributions to the development of framing theory and the crisis coverage.

The results of this dissertation show significant differences in the frames, sources, topics, and modalities used by two types of bloggers in Egypt. A large number of blog posts were about the civil unrest crisis (revolution), and a small number of posts focused on the terrorist attack and a natural disaster because the revolution started on the first day of our sample and continued through two weeks. The flooding and terrorist attack in Sinai were one-day crises that resulted in less coverage. In addition, the on-going nature of the civil unrest and the magnitude and impact of the event was much greater. As an example, the Egyptian revolution received global attention. Major media around the world covered this crisis because it affected the governments and the economy (Amin et al., 2012). Moreover, millions of Egyptian protestors went to the streets asking for freedom and democracy. At least 846 people were killed, and more than 6,400 were injured (BBC News, 2011). Media cover crisis that is important to most of the people. The more people and victims appear in a civil unrest crisis, the more media coverage of the crisis. The crisis that gets the attention of global media can easily get the attention of bloggers.

Citizen bloggers are more likely to cover a natural disaster (flooding) than journalist bloggers. And journalist bloggers are more likely to cover a terrorist attack. Citizen bloggers are more open to cover what they want, and journalist bloggers are subject to their specialization. Shoemaker and Reese's (1996) hierarchy of influences model show the levels that media messages go through from the most micro to the most macro: individual (journalist), media routines, organization, extra media, and ideological (culture) level. The journalists used to go through these levels when they shape their messages, and used to have gatekeepers on their messages. In the individual level, the

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personal and professional roles and attitudes (e.g., organization regulations, journalists'

code of ethics, etc.) influence the content of messages. This study predicts that citizen

bloggers miss those personal and professional roles. The only way to know that is by

interviewing both types of bloggers and know what are their roles when they blog. This

explanation shows that journalists are using blogs to express their emotions, but they are

still using the journalism professional roles in an indirect way when they post on blogs.

Moreover, the Arab World faced many political crises, conflicts, and wars, which

made journalists write about politics and wars every day while they are working in media

organizations. The daily practice made them write easily about heavy topics (terrorist

attacks, wars, etc.), and they know how to find resources for this type of crisis. However,

citizen bloggers do not write much about heavy topics because of fear of responsibility

and freedom of expression laws. In Egypt, the fear of responsibility and arresting

influential bloggers made many citizen bloggers worry about posting political posts, and

write under pseudonyms, while journalist bloggers use their real name because they are

protected by the freedom of expression laws.

In terms of language, both types of bloggers used Arabic more than English

because it is their main language. However, journalist bloggers were more likely to write

in English than citizen bloggers. The reason for that may be the experience the journalists

have in reading and finding online resources for information, such as using foreign online

newspapers. The results showed that the journalist bloggers are more likely to use

hyperlinks that were going to media sources, which confirms our explanation.

Frames

The research found significant differences between two types of bloggers in using media frames. In the coverage of the civil unrest crisis, citizen bloggers were more likely to use the attribution of responsibility and human-interest frames more than journalist bloggers. For the attribution of responsibility frame, Semetko and Valkenburg (2000) asked whether the blogger blamed a person, party, or government. Bloggers are using blogs to air their opinions of news and analyze events, and 52 journalist bloggers are using blogs to air their analyses on the main news of the mainstream media, especially politics (Pandey, 2013). However, the journalist bloggers are keeping and not blaming any side of the problem by staying neutral, because otherwise their trust, credibility and reputation could be affected. For the human-interest frame, citizen bloggers are more likely to express their feelings of sympathy by using a human face example that generates feelings. Journalists are more likely to be objective in their writing and unbiased toward a side, which are the basic ethical principles in journalism (Christians, 1977; Ward, 2005).

On the other hand, there are many governmental newspapers in Egypt. The journalists in these newspapers write positive articles about the government. The results show that the journalist bloggers who are in the study may work in newspapers that never show the government is responsible for a crisis.

In the coverage of a terrorist attack crisis, the researcher found significant differences between two types of bloggers in using human-interest and conflict frames. Citizen bloggers are using human-interest more than journalist bloggers. As mentioned in the previous paragraph, citizen bloggers try to attract audiences by putting a human face in their posts and trying to stir their emotions, which will increase the interactivity with

the audiences. Moreover, journalists are more likely to use conflict frame than citizen bloggers. According to a previous study, the conflict frame was very commonly used by American news media (Neuman et al., 1992) and audiences (de Vreese, 2005). Another study found that this frame is the second most common frame used by media (Semetko & Valkenburg, 2000), and "the more serious the newspaper, the more the conflict frame was in evidence" (An & Gower, 2009, p.108). The researcher of this dissertation thinks that reporting about a conflict between two or more sides is showing readers the conflict between parties. In a terrorist attack crisis, usually there is disagreement between the individuals who prepared the attack and the government, and the people affected. This kind of sensitive crisis needs someone who specializes in reporting and analysis, such as journalists, who can reach the information and the resources easily and early.

In the coverage of a natural disaster crisis, a significant difference between types of bloggers was found in using the morality frame. Journalist bloggers were more likely to have used this frame in their coverage of flooding than citizen bloggers. Entman (1993) defined media framing as "select[ing] some aspects of a perceived reality and mak[ing] them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described" (p.52). Thus, "moral evaluation," or making moral judgments, is one of the aspects of media framing. Journalists learned that from their careers, and try to apply it when they blog on their personal sites. In addition, the morality frame is showing the event in context of religious tenets, social prescriptions, or moral prescriptions (de Vreese, 2005; An & Gower, 2009). Neuman et al. (1992) found that the morality frame is a common frame used by journalists to cover an event in an

indirect way by using quotations or inference; they tend to use an indirect way in reporting because of the objectivity that is the norm in journalism.

Topics

Politics and violence and terror were the topics most frequently used by both journalist and citizen bloggers in the lead and the main body of the post. The reason for this may be the type of crises we analyzed and the interest of each blogger type; the revolution and the terrorist attacks were political events. Etling et al., (2010) found that the largest number of blogs in the Arabic blogosphere consist mostly of political content that engages the public in the political movements, critiques the political regime and protests against human rights violations. And Sheehy and Ji (2011) also found that 43.7% of bloggers with professional journalism backgrounds write about the government, and only 22.8% of bloggers with economic and other backgrounds write about politics. The researchers said the "variance may reflect differing philosophies of the purpose of journalism and blogging by authors with and without traditional journalistic backgrounds." Reflecting the longstanding role of the press … journalists often frame stories in the context of government and other powerful institutions exercising their control and influence" (p. 9). In the coverage of the civil unrest crisis, both types of bloggers covered the conflict between pro- and anti-government, especially the behaviors of the police. In the coverage of the terrorist attack, the bloggers talked about conflict between a terrorist group and the government. Both topics are connected to each other.

Odden (2014) said that "the more relevant readers of your blog content, the more opportunities to attract, engage and convert those readers…" (para. 1). Bloggers write about the issues that are more pertinent to their readers. Since they born, Arab people

read political news to follow up on news about political crises. The Arab World's communities are more interested in reading political news because they faced many political crises: Gulf War, Iraq War, Israel-Palestine conflict, etc. Large portions of Arab blog readers are political activists, journalists, and politically influential elites (Lynch, 2007). Thus, it is logical to cover the political topics more than any other topics.

On the other hand, the researcher found a significant interaction between two types of bloggers in using the topic that got the most space in the lead. Journalist bloggers are more likely to put the topic that got the most space in the first paragraph than citizen bloggers. The lead is a main component of the story and contains a summary of the topic and what is the story about. This goes back to the rules that the journalists have in news reporting and writing, and their education in journalism and media-related fields. Journalists write news every day, and doing the same thing every day makes the person better at it. Thus, they are much better than citizen bloggers in making the main topic in the post in the lead paragraph. Fifty-two percent of bloggers consider themselves journalists (Iacono & Skerik, 2010). This study could help in explaining that the bloggers who do put the main topic in the lead know the importance of the lead, and so, consider themselves journalists.

Sources

Journalists (30.6%) are using sources more than citizen bloggers do (24%). The researcher explained that by justifying that journalist bloggers will go to the available sources they used when they work(ed) in the media. Citizen bloggers have more difficulty with sources, which require them more time to find. The researcher found a significant difference between the journalist bloggers and the citizen bloggers in using

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scientists. The researcher explains that by suggesting that journalist bloggers use sources that they used in their careers. Moreover, prior studies showed that journalists are using official sources more than bloggers when they cover crises (Cornfield, Carson, Kalis, & Simon, 2004; Liu, 2010; Lowery, 2006). Official sources refer to the sources that are able to establish an interpretation about things (e.g., government, scientists) (Hall et al., 1978).

The research did not find any differences between types of bloggers in using governmental sources. However, a previous researcher found that online newspaper journalists cite official sources (e.g., government) more than citizen journalists (Carpenter, 2007). The researcher found that the journalist bloggers are using media (online and offline) and document sources more than citizen bloggers do. Because this is their field, journalist bloggers know much about the media sites that can provide information on a crisis. And journalists who use these sources often hope that these media sources will cooperate with them in the future. In addition, using documents is a way to be objective and not biased in journalism reporting.

Modalities

The researcher found differences between the journalist bloggers and citizen bloggers in which modality they use. Citizen bloggers were more likely to use images in their posts than journalist bloggers, while journalists are more likely to use video than citizen bloggers. Prior research found that the modalities of media (e.g., picture, video) affect the human memory (Hoogeveen, 1997; VanDijck, 2007). The brain processes visual content differently than text. Typically, visual content, whether it is moving (e.g., video) or not (e.g., image), has much more emotional impact than text. The dual-coding theory (DCT) suggests that the content that has two modalities will have more outcomes

than the content using one modality, and the one that has visual content has a "better chance of dual coding and enhance better recall" than non-visual content (David, 1998, p. 184; Sundar 2000).

Bloggers are more likely to use visuals to show the details of a crisis. They say "a picture is worth a 1,000 words," therefore, a video that has many pictures is more important and worth infinite words. Text requires the ability to read and time, so using visual tools is easier to send messages to the readers than sending textual messages. The cue-summation theory assumes that the textual content with an image provides more learning cues than the content without image.

Video is more interesting to watch than looking at frozen picture. The journalist bloggers may know that the video is worth more than a picture, so they put videos on their blogs to be more social and make the readers be more engaged and interactive, which are the main goals of blogging. In addition, the journalist blogger may have previous experience from their work as journalist in how to upload videos on the Internet.

The greatest number of videos were about the civil unrest (27 posts, 6.1%), then came the natural disaster (13 posts, 2.9%), just because bloggers had a camera in the place of crisis and tried to show the magnitude of the crises. In Egypt, many bloggers were blogging from the Tahrir Square, where people demonstrated.

The goals of using hyperlinks in the posts are to refer to the main source of the information to encourage the readers to go to the primary source, "increase the authority of a posted story," achieve transparency, sharing information, increase the number of readers, get more replies of the post, and to be more reliable by citing the main sources of

information (Gao, 2011; Gillmor, 2006, p. 119; Deuze, 2003; Sheehy & Ji, 2011). Singer (2005) found that 85% of journalist bloggers provide the hyperlinks extensively to refer to their main news sources, which are mainly media sites and related materials. This dissertation found that journalist bloggers are using hyperlinks more than citizen. Their journalism experience taught them to cite the sources. In addition, using hyperlinks indicators an ability to use new media technologies, and it "reflect differing sourcing philosophies of bloggers" (Sheehy & Ji, 2011, p. 9). While, a limited use of hyperlinks can show a limited knowledge in using this technology (Gao, 2011). As mentioned before, journalist bloggers were using media sources more than citizen bloggers. To cite these certain media sources, journalists used hyperlinks that went directly to the story, and they often hope that these sources reciprocate and cite them in the future (Wall, 2005; Blood, 2002). Referring to these sources is a kind of praise between journalists.

In general, using modalities is a very important aspect that has been exploited by journalists and citizen bloggers in the coverage of crises. Both know the importance of using modalities in gathering more readers and building the trustworthiness with their communities.

CHAPTER 6: Conclusion

This chapter focuses on three sections: The implications of the study, the limitations facing the study, and finally, suggestions for future work. The research extends the understanding of how different types of writers framed crises, by looking at who was responsible for the crisis, using a human face in the coverage, showing the conflict between parties, using moral messages and showing the economic impacts.

Framing studies discuss two levels of frames: media and individual frames. Media frames are found in the media content, but individual frames are in people's heads, and how they interpret and make sense of news and categorize them in groups (Kinder & Sander, 1990; Scheufele, 1999). This dissertation provides the framing literature with two types of individual frames, journalists and citizen bloggers. Bloggers express what is in their heads by posting on blogs. The pervious knowledge and personal characteristics can make differences in the interpretation of news among people. In this study, journalist and citizen bloggers are the individuals who select some aspects of the crisis and make them more salient in a post. The differences between the two types of bloggers in creating individual frames, and using topics, sources, and modalities to cover crises show that there are different levels of individual frames; this may relate to professional norms and work routines the journalist bloggers learned from their career as journalists.

Implications

In sum, this dissertation helps the public (e.g., blog readers, students, journalism educator, crisis managers) to know more about journalist bloggers and citizen bloggers, and know how each type of bloggers write about crises in a positive and negative way. For example, the study provides the journalism educator with how different types of

blogger use a lead, and what are the main topics, sources, and modalities used in the stories. In addition, it will help the general public who have limited time with a summary of who is a journalist and who is not. In addition, the paper helps identify the parameters and boundaries of journalist bloggers.

Knowing which type of blogger, journalist or citizen, is using more sources is a good indicator of credibility. In journalism, using sources in a story, especially related to the topic, shows the importance of the story, and in the ability of the author to provide information.

The results of this dissertation help society with these questions: What happened? Who is responsible? Why did it happen? And how it happened? After people, political and media researchers, governments, and organizations find answers to these questions, they can understand a crisis and predict the answers of future crises.

This dissertation is a guide for governments and public relation agencies to see how each type framed and used sources during crises. For example, governments could use the type of frame that uses media sources to send messages to the audiences. The results of this study will also help public relation agencies in designing strategies to face crises and crisis management by knowing the responsibility framing-acceptance or denial of an event (Hallahan, 1999). In addition, it helps these agencies know the type of blogger to send messages to reach a particular audience in a specific crisis. During a natural disaster for example, the public relations agencies focus on sending their messages through citizen bloggers because they are more likely to write about this crisis than journalists.

Knowing which type of bloggers is using different modalities also has benefits for those in the media and businesses. For example, the camera manufacturers can provide citizen bloggers (the type who used pictures more) free cameras to take better pictures and promote their cameras to blog readers.

Limitations

Like any study, this research had several limitations including difficulties in finding who is a journalist blogger and who is a citizen blogger. All journalist bloggers in the sample of this study were using their real name, and wrote a short biography about themselves to convey a sense of credibility and transparency (Wall, 2005). While most of citizen bloggers in the sample did not have a short bio that refer if they worked as journalists or not, Thus, the researcher emailed citizen bloggers and received responses from most. After that, the researcher searched through Google, Twitter, and Facebook and confirmed that the remaining citizen bloggers were not journalists. However, some of the citizen bloggers did not disclose that they were journalists. It is very significant to have a separate blog directory that has only journalist bloggers, which will help governments, organizations, media, PR agencies, bloggers, activists, and readers to be more specific about to what type of blogs they want to read.

Another limitation was in finding posts about the terrorist attacks and flooding in Sinai. The majority of blog posts were about the Egyptian revolution because it was a famous crisis not only in Egypt, but also in the whole world.

Another limitation was deciding not to code the content of videos from the analysis, which may have included different messages and frames. Videos transmit a

huge amount of information that entices the blog readers to see or read more about a crisis. In addition, these videos may tell more about the frames used especially in those that affect the emotions of readers, such as the human-interest and morality frames.

Using content analysis to find the differences between types of bloggers in coverage crisis is a limitation. This method only describes the content of posts. Further research can interview bloggers to explore their attitudes toward choosing the topics, sources, and modalities and why they choose it.

The data of this study were collected from 33 journalist blogs and 33 citizen blogs in Egypt. This number of blogs may not be enough to generalize the results on all of journalist and citizen blogs around the world.

In addition, the Egyptian bloggers may have different characteristics than other bloggers around the world. Responsibility and freedom of expression laws, and arresting bloggers in Egypt made some bloggers wary of publishing against the government, which limits the generalizability of results to a wider population.

Another limitation of this study was the fluency in a language. In Egypt, people are mainly using Arabic because it is the mother language. However, we found several posts written in English and other languages with translation in Arabic. The bloggers who wrote in this language might not be fluent in English that may affect the results of this study.

The lack of available data about the differences between the journalist and citizen bloggers may affect the generalizability of the data of this dissertation. However, this study can help future research by providing a benchmark.

Future Research

There is much more work to do to find the differences between the journalist and citizen bloggers. The natural disaster and the terrorist attack crises were one-shot events, while the revolution was a continuous crisis. Future studies could look at the comparison between types of bloggers in the coverage of two continuous crises or sudden crises to make sure that the duration does not make a difference. In addition, the researcher could examine economic crises, such as air transportation. Future studies could also examine different types of stories that are not about crises to see if the results are consistent with the results of this dissertation.

During the coding process, the researcher noticed that the sites of journalist bloggers were more sophisticated in design and more consistent in adding more content, as their news organizations invest their online resources and staff to make the journalist blogger's page visually appealing and drive visits. Future studies could compare the designs of journalist blogs and their news organization websites to see how much these news organizations affect the journalists' personal blogs. In addition, researchers can interview the bloggers to see how they chose their site design.

Future studies could also look at additional factors that can make the differences between the journalist bloggers and citizen bloggers more clear in the coverage of a crisis, such as the length of the posts and engagement with the audiences. The researchers could analyze the content of blog posts of a crisis to see if the bloggers are answering the main news reporting questions: Who? What? Why? How? In addition, the researcher could examine the differences between a journalist associated with a news organization

and another who is not associated with a news organization to see how current or old experience in journalism may affect journalist bloggers.

Content of the picture is very important. Future researchers could analyze the content of the pictures about crises because there were a large number of pictures posted by journalist and citizen bloggers. For example, analyzing the written messages, "info-graphic messages," is significant. Other future research could examine the kind of people who are in the pictures, and if they are politicians or public people. This could show the importance of the people in the pictures to each type of blogger. Moreover, examining the kind and content of documents bloggers use could help us to answer the questions of What happened? Who is responsible? Why did it happen? And how it happened?

Lastly, the researcher could look at media framing of similar crises that occurred at different times, and see if the passage of time could change the frame of the same crisis, such as the overthrow of Mohammad Hosni Mubarak on Jan. 25, 2011, and Mohamed Morsi on July 3, 2013. Future studies could examine coverage of the same crises by journalist and citizen bloggers from different countries. For example, blogs by Egyptian and American bloggers could be examined to determine if cultures affect the framing of the posts.

Summary

Journalist and citizen blogs are democratic spaces that allow professionals and non-professionals to express their emotions and feelings toward the main news in the media. Journalists and citizens themselves own their bogs, and they write what they want to express without gatekeeping. Media audiences are creating individual frames by

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analyzing and interpreting the main news on the mainstream media, and categorize them

in groups (Kinder & Sander, 1990; Scheufele, 1999). Journalist and citizen bloggers are

media audiences who create individual frames differently without limitation or

gatekeeping.

APPENDICES

APPENDIX A

Inter-coder Reliabilities

Table 8: Inter-coder Reliabilities of Study Variables

Variable	% Agreement	Scott's Pi	Krippendorff's Alpha	% Agreement	Scott's Pi	Krippendorff's Alpha
	Stage 1			*Stage 2*		
Attrib_1	85	0.69	0.69	92.5	0.85	0.85
Attrib_2	90	0.80	0.81	92.5	0.85	0.85
Attrib_3	92.5	0.85	0.85	97.5	0.95	0.95
Attrib_4	95	0.86	0.86	100	1	1
Attrib_5	95	0.87	0.88	92.5	0.85	0.85
Human_1	95	0.89	0.89	97.5	0.91	0.91
Human_2	100	1	1	100	1	1
Human_3	85	0.69	0.70	97.5	0.95	0.95
Human_4	90	0.77	0.77	95	0.89	0.89
Human_5	97.5	0.95	0.95	97.5	0.94	0.94
Conf_1	90	0.76	0.76	95	0.90	0.90
Conf_2	85	0.66	0.66	95	0.87	0.88
Conf_3	92.5	0.84	0.84	97.5	0.94	0.94
Conf_4	92.5	0.72	0.73	95	0.86	0.86
Conf_5	90	0.76	0.76	97.5	0.94	0.94
Moral_1	97.5	0.79	0.79	92.5	0.75	0.76
Moral_2	95	0.77	0.77	100	1	1
moral_3	92.5	0.83	0.80	100	1	1
Moral_4	90	0.80	0.80	100	1	1
Moral_5	85	0.66	0.66	97.5	0.91	0.91
Eco_1	100	1	1	100	1	1
Eco_2	97.5	0.92	0.92	100	1	1
Eco_3	97.5	0.87	0.88	100	1	1
Eco_4	97.5	0.87	0.88	100	1	1
Eco_5	97.5	-0.01	0	95	0.77	0.77
Topic_FirstMentioned_Eco	100	undefined*	undefined*	100	1	1
Topic_FirstMentioned_Politics	92.5	0.72	0.72	97.5	0.95	0.95
Topic_FirstMentioned_Violence	92.5	0.85	0.85	100	1	1
Topic_FirstMentioned_Enviro	100	1	1	100	1	1
Topic_FirstMentioned_HumRights	100	1	1	100	1	1

Table 8 (cont'd)

Topic_FirstMentioned_Military	95	-0.02	-0.01	100	1	1
Topic_Space_Eco	100	undefined*	undefined*	100	1	1
Topic_Space_Politics	90	0.77	0.77	97.5	0.95	0.95
Topic_Space_Viol	87.5	0.74	0.75	100	1	1
Topic_Space_Enviro	97.5	0.91	0.91	100	1	1
Topic_Space_HumanRight	97.5	0.65	0.66	100	1	1
Topic_Space_Milit	100	1	1	100	1	1
MainTopic_FirstParagraph	100	1	1	100	1	1
UsingSource	97.5	0.94	0.94	97.5	0.95	0.95
Source_Gov	100	1	1	97.5	0.93	0.93
Source_Gov_Officials	100	1	1	95	0.85	0.85
Source_Gov_PR	100	undefined*	undefined*	100	1	1
Source_Gov_Story	97.5	-0.01	0	100	undefined*	undefined*
Source_Gov_Website	100	1	1	100	1	1
Source_Media	100	1	1	100	1	1
Source_Media_Online	100	1	1	100	1	1
Source_Media_Offline	100	undefined*	undefined*	100	1	1
source_Science	100	1	1	100	undefined*	undefined*
Source_Business	95	0.72	0.73	100	undefined*	undefined*
Source_NGO	97.5	0.95	0.95	100	undefined*	undefined*
Source_Doc	100	1	1	100	undefined*	undefined*
Source_Eyewitness	95	0.87	0.87	97.5	0.92	0.92
Modality_Text	100	undefined*	undefined*	100	undefined*	undefined*
Modality_Image	92.5	0.83	0.83	100	1	1
Modality_Image_Profrssional	87.5	0.74	0.74	100	1	1

Table 8 (cont'd)

Modality_Image_WhiteBlack	92.5	0.85	0.85	100	undefined*	undefined*
Modality_Image_infoGraphic	92.5	0.8379 47333	0.839972991	100	1	1
Modality_Image_People	97.5	-0.01	0	97.5	0.93	0.93
Modality_Video	97.5	0.95	0.95	100	1	1
Modality_Audio	95	0.89	0.89	100	undefined*	undefined*
Modality_hyperlinks	100	1	1	95	0.80	0.81
Modality_hLink_FirstLinkContain	95	0.87	0.88	95	0.81	0.82
Modality_Link_WhereTakeU	100	1	1	95	0.80	0.81

undefined* The variable only has zero values, and dividing any number by zero in impossible. Thus, we get undefined results.

APPENDIX B

Frequencies and Percentages of the Frames Questions

Table 9: Frequencies and Percentages of the Frames

Frame	Frequency	Percent	Frequency	Percent
	Citizen		JRN	
Attribution of responsibility				
The post suggests that some level of government has the ability to alleviate the problem/issue.	111	25.2%	78	17.7%
The post suggests that some level of the government is responsible for the issue/problem.	153	34.7%	129	29.3%
The post suggests that an individual or group of people is responsible for the problem/issue.	120	27.2%	107	24.3%
The post suggests that an institution or organization is responsible for the problem/issue.	70	15.9%	37	8.4%
The post suggests a reason(s) or solution(s) to the problem/issue.	83	18.8%	116	26.3%
Human-interest				
The post provides a personal example or put a "human face" on the issue.	139	31.5%	99	22.4%
The post employs adjectives or personal vignettes that generate feelings of outrage, empathy-caring, sympathy, or compassion.	139	31.5%	103	23.4%
The post emphasizes how individuals and groups are affected by the issue/problem.	147	33.3%	92	20.9%
The post go into the private or personal lives of the actors.	68	15.4%	47	10.7%
The post contains visual information (image) that might generate feelings of outrage, empathy-caring, sympathy, or compassion.	107	24.3%	39	8.8%
Conflict				
The post reflects disagreement between parties/-individuals-groups-countries	173	39.2%	164	37.2%
One party-individual-group-country reproaches another.	144	32.7%	155	35.1%
The post refers to two or more sides of the problem or issue.	99	22.4%	162	36.7%
	32	7.7%	62	14.1%

Table 9 (cont'd)

The post refers to two or more sides of the problem or issue.				
The post refers to consequences of disagreement two or more sides.	61	13.8%	87	19.7%
Morality				
The post contains a moral message.	54	12.2%	35	7.9%
The post makes reference to morality, God, or other religious tents.	20	4.5%	33	7.5%
The post contains any action or words against humanity.	17	3.9%	52	11.8%
The post refers to a group of people or individual against law.	24	5.4%	54	12.2%
The post offers specific social behavior prescriptions.	42	9.5%	49	11.1%
Economic consequences				
The post mentions the current or future financial losses or gains.	28	6.3%	18	4.1%
The post mentions of costs/degree of expense involved.	23	5.2%	16	3.6%
There is a reference to any economic consequences of pursuing or not pursuing a crisis.	24	5.4%	18	4.1%
The post refers to any financial assistance to overcome the crisis.	16	3.6%	10	2.3%
The post links this crisis to other events that caused financial losses or gains.	8	1.8%	6	1.4%

n=441

APPENDIX C

Protocol

Study Protocol

Dear Coder,

This is a content analysis protocol for assessing the content of blog posts about several types of crises by journalists and citizen bloggers. The researcher has selected three types of crises in Egypt: a natural disaster, a terrorist attack and an instance of civil unrest.

The sample of blog posts was selected by taking a random blog posts about a specific crisis during a specific two-week period. You must check the date of the blog post to confirm that the post is within these periods. Please follow the coding instructions when filling out the coding sheets.

Data Processing Procedures

Accessing/Storing Content

The researcher created random lists of blog posts about the three crises. The researcher will provide each coder with a folder that includes pdf. files of the 50% of the blog posts and the same number of coding sheets.

Processing/Preparation of Content

Please follow each of the following steps to analyze the blog posts.

1. Read the blog post to help you answer the coding sheet questions.

2. Read the blog post to help you answer the frames questions. Each frame has five questions that you can answer either by "Yes" or "No."

3. Read the blog post to help you to determine the main topic of the post, and the

first topic mentioned in the posts. The lead or abstract of the story usually has the main topic that got the most space in the story. For example: economy, politics, violence, environment, human rights, military and other. Topics not falling into those categories are considered "other."

4. Read the blog post to help you determine the source of information used.

5. Read the blog post to determine the format of the post. For example, if the post has a picture, please choose "Yes."

Coding Procedures

1. For the reliability of the sample, look at the date of the blog post to confirm that it is within the crisis period.

2. The coders will read the conceptual and operational definitions each time they code a post.

3. The coders will read the blog post, which includes the title and the data under the title and the date. Video and audio files included in posts will be viewed/listened to them because they may have information that could help in the coding.

4. The coders will identify the frame, the topic, the source, and the modality used by reading the blog post.

5. The coders will enter the data on code sheets prepared by the researcher.

Conceptual and Operational Definitions of the Variables

Blog entries are called posts, and can include text, hyperlinks, images, videos or other types of multimedia. In this study, the coder will look at all the information of the post, which includes the title, content (text, videos, photos, etc.) and post date.

I. Conceptual Definitions

Crises in Egypt

The researcher will analyze blogger coverage of three crises: 1) A civil unrest (Revolution), which started in Cairo on January 25, 2011. At least 846 people were killed and more than 6,400 injured (BBC News, 2011). 2) A terrorist attack, which took place on the Egyptian–Israeli border in the Sinai Peninsula on August 5, 2012. Sixteen Egyptian soldiers were killed on the Egyptian military base. 3) A natural disaster (Flooding), which occurred in several areas of Egypt, including the Sinai and city of Aswan on January 17, 2010. Flooding killed 15 people, destroyed 40 homes, caused 57 electrical towers to collapse, and hundreds were ordered to leave their homes.

Crises Frames

This study focuses on five frames:

1) The **conflict** frame "emphasizes conflict between individuals, groups, or institutions as a means of capturing audience interest" (Semetko & Valkenburg, 2000, p. 95). In this frame, a news story is presented as a discussion or debate between people, parties, groups, or governments.

2) The **human-interest** frame "brings a human face or an emotional angle to the presentation of an event, issue, or problem" (p. 95).

3) The **morality** frame appeared when writer used quotations or cited what others said and were objective and *unbiased* in writing the news report (Neuman, Just & Crigler, 1992).

4) The **economic consequences** frame presents when a problem results in negative consequences for people and society (An & Gower, 2009).

5) The **attribution of responsibility** frame is when the writer puts the responsibility

of a problem or crisis on the government, institution, or other individuals

(Semetko &Valkenburg, 2000).

The **topic** of the blog post is what the post is about, i.e. politics, violence, environment, human rights, military, economy or other. This study examines:

- The topic that mentioned first: look at the first topic mentioned in the post.

- The one that got the most space: Look at the main topic.

II. Operational Definitions

V1. Blog post date: The date the post is written in English posts is located in the upper left side and in Arabic in the upper right side. Some posts you can find the date in the end of the story. Please confirm that all dates are within these periods (two weeks): civil unrest or the Revolution from January 25 to February 11, 2011; Sinai terror attack from August 5 to 19, 2012; natural disaster or flooding from January 17 to 30, 2010. Please use this example to write the date: (100117) (YearMonthDay).

V 2. Language(s) used in the blog post: The languages used in the blog posts could be Arabic or English. The post that has two languages at the same time considers as a mixed. Please exclude any hashtag (#revilution).

V3. Crises Types: The coder could look at either the date or the content of the blog post. For example, if the blog post is dated between January 25 and February 11, 2011, it will be civil unrest or the Egyptian Revolution.

V4. Framing Items:

In this section, there are five frames and each frame has five questions. The researcher depends on the Semetko and Valkenburg (2000, p.100) scale**.**

A) Answering the following five questions identifies an **attribution of**

responsibility frame:

4/A/1. The post suggests that some level of government has the ability to alleviate the problem/issue.

A "yes" is assigned when the blog posts implies that the government has the ability to *reduce the risks of a crisis. For example, Mubarak's overthrow may reduce the bloodshed and number of deaths in the demonstrations. Government includes level of the government (e.g., military, ministry), or mentioning names of ministers and politicians, such as Habib el-Adly, and Ahmed Ezz.*

4/A/2. The post suggests that some level of the government is responsible for the issue/problem.

A "yes" is assigned if the blogger blames or assigns responsibility of the crisis to any level of the government. For example, the military were involved in torture and killing.

4/A/3. The post suggests that an individual or group of people in society is responsible for the problem/issue.

A "yes" is assigned if the blogger blames or assigns the responsibility of the crisis to any one person or group other than the Egyptian government, such as the Muslim Brotherhood, terrorists, outlaw, بلطجيه.

4/A/4. The post suggests that an institution or organization is responsible for the problem/issue.

A "yes" is assigned when the blog posts contain any institution or organization that caused the problem. For example, referring to NGOs and other private companies such as construction companies, such as Muslim brotherhoods, Kefaya, or any

terrorist group.

4/A/5. The post suggests a reason(s) or solution(s) to the problem/issue.

A "yes" is assigned when the blog posts contain any reason or solutions to the crisis. *For example, watching weather forecast during winter helps people to stay safe and predict flooding.*

B) The following five questions help identify a **human-interest frame:**

4/B/1 The post provides a personal example or put a "human face" on the issue.

A "yes" is assigned when the blog posts contain content about human rights, and by giving examples of human stories. An example is displaying pictures of the dead and injured demonstrators.

4/B/2. The post employs adjectives or personal vignettes that generate feelings of outrage, empathy-caring, sympathy, or compassion.

A "yes" is assigned when the blog posts contain statements or quotes that cause readers to feel outrage, empathy-caring, sympathy, or compassion. An example, of this would be a source stating that the injured people were crying and asked for help.

4/B/3. The post emphasizes how individuals and groups are affected by the issue/problem.

A "yes" is assigned when the blog posts present people affected by the crisis, such as people being killed, injured, gang-*raped*, or robbed. Any results that may affect people also assigned "yes", such as damaged people's houses.

4/B/4. The post has details of the private or personal lives of the actors.

A "yes" is assigned when the blog posts contain a personal story of people involved in the crisis, such as talking about a demonstrator who was the victim of a gang-*rape*.

4/B/5. The post contains visual information that might generate feelings of outrage, empathy-caring, sympathy, or compassion.

- A "yes" is assigned when the blog posts contain images, video, audio, or a list to pictures, video, audio that may evoke emotion. An example is a blog post containing an embedded video of soldiers who were killed in the Egyptian-Israeli border terrorist attack. Any object that might generate feelings is assigned "yes", such as showing a children backpack in the flood, or a burning car in the terrorist attack area.

C) Answering the following four questions identifies a **conflict** frame:

4/C/1. The post reflects disagreement between parties/individuals/governments.

A "yes" is assigned when the blog posts contain statements that question or deny a person, party or government or describe actions that indicate disagreement, such as a protest or an opposition. A "yes" is also assigned when a word refers to a person/group who is against another, such as a blogger against a party, or deniers and naysayers. Some words that could show conflict are attacking and hitting.

4/C/2. The post refers to one party/individual/government's reproach of another.

A "yes" is assigned when a negative adjective is used to refer to a person/group, such as "bad," or when a person, party, or government is pointed out to have participated in a mistake or misconduct. A "yes" is also assigned when a verb, such condemn or attack, is used to express blame on a person, party, or government.

4/C/3. The post refers to two or more sides or viewpoints of the problem or issue.

A "yes" is assigned if two or more different points of view are cited or described. For example, "Muslim brotherhoods and the government blame each other for the

killing."

4/C/4. The post refers to winners and losers.

A "yes" is assigned if the blog posts mention any losers or winners.

4/C/5. Does the post refer to consequences of disagreement two or more sides?

A "yes" is assigned if the blog posts mention any results of the disagreement between two parties. For example, the result of fighting between pro- and anti-Mubarak today was 12 deaths.

D) Answering the following three questions identifies a **morality frame:**

4/D/1. The post contains any moral message.

A "yes" is assigned if the blog post makes mention of the need to respect and understand other people or their political and *religious* views. In addition, asking for help considers as a moral message.

4/D/2. The post makes reference to morality, God, and other religious tenets.

A "yes" is assigned if the blog posts mention words or phrases such as moral, God, respect, understand others/religion, etc.

4/D/3. The post offers specific social behavioral prescriptions.

A "yes" is assigned if the blogger offers advice on how to deal with a crisis. The action is written in the post. Examples of this are stay home, and avoid the low places during rainfall.

4/D/4. The post contains any action or behavior against humanity.

A "yes" is assigned if the post shows any action against humanity such as killing, hitting, or arresting.

4/D/5. The post refers to a group of people or individual against law.

A "yes" is assigned if the post shows a group of people or individual behave against law, such as blocking the street, or fighting with a policeman, ضد بلطجه الناس. Any behavior against people is assigned "yes".

E) The following three questions help identify an **economic consequences frame**

4/E/1. The post mentions current or future financial losses or gains.

A "yes" is assigned if the blog post contains a NUMBER of losses or gains related to the crisis. For example, the estimated cost of losses due to flooding reached to Egyptian £8 *million.*

4/E/2 The post mentions costs/degree of expense involved.

A "yes" is assigned if the blog post contains any cost (NUMBER) involved in the crisis. For example, £8 million *pounds to* repair *the streets damaged in the demonstrations.*

4/E/3. The post mentions the economic consequences of pursuing or not pursuing a course of action.

A "yes" is assigned if the blog post contains any mention of any economic consequences if the crisis continues. For example, losses will double if rain continues falling tomorrow.

4/E/4. The post refers to any financial assistance to overcome the crisis.

A "yes" is assigned if the blogger mention any financial assistance to overcome the crisis such as American financial aid, or aid for those affected by flooding.

4/E/5. The post links this crisis to other events that caused financial losses or gains.

A "yes" is assigned if the blogger mention that this crisis is related to other crisis or event that caused financial losses or gains. For example, this flood will help in

growing rice.

V5. Blog Post Topics: This study examines two types of topics:

5/1. The topic that mentioned first (ONLY PICK THE **FIRST** ONE): The coder should look at the topic that mentioned first in the post.

5/2. The one that got the most space (ONLY PICK THE **FIRST** ONE): The coder should look at the main topic that the post is about. You should read the whole article to figure out the main topic.

5/3 The man topic has mentioned in the first paragraph.

Is the topic about (Yes/No):

    a) Economy: The blog post is about unemployment, agriculture, economic losses, etc.

    b) Politics: The blog post is about Mubarak, government, constitution, law, elections, etc.

    c) Violence or Terror: The blog post is about the number of people killed or injured by other people, sexual harassment or any violent behavior.

    d) Environment: flooding, changing weather, death or injuries by natural causes.

    e) Human rights: The blog post information about women's rights, prisoner's rights, healthcare, education rights or other types of human rights.

    f) Military: The blog post includes information about troops, soldiers, bombs, tanks, weapons, guns, or any military equipment.

    g) Other: The topic does not fit in any of the above categories, such as technology.

V6. Information Sources:

A source is a person, organization or document that is used as a provider of

information by the bloggers. Some bloggers use quotes or paraphrase information gathered from sources in posts. Different words are used to attribute information to the sources, such as "said," "claimed," or other words referring to the source, such as "confirmed," "thinks," or "suggests". Determine if the blogger used a source.

6/1. Government: Such as a government official, president, minister, government PR, government website.

6/2. Media sources: Online or offline media

6/2/a. Online Media: online newspapers, blogs, youtube, social media.

6/2/b. Offline Media: Radio, TV, printed newspapers, and magazine.

6/3. Science source: Any person/website can provide information depending on the science (academes weather experts, academics).

6/4. Business source: Any person/website can provide information about business (business experts, shareholders, manufacturers).

6/5. Non-Governmental Organizations: Such as a Egyptian Organization for Human Rights or other organization not related to the government.

6/6. Document sources: Such as using a book, novel, Quran, Bible (the source that has papers).

6/7. Public/ eyewitness sources: Individuals watched the crisis (eyewitness).

6/8. Other: Not include the previous sources.

V7. Blog Post modality/format:

Please ignore the title of the blog post when coding the format.

7/1. Text: a post that only contains text, sentences, or words. *All posts must have text. If you found a post that does not has text please keep it blank.*

7/2. Image: if the post contains an image in addition to text.

If YES

7/2/a. professional: you can figure out this from the quality and the resolution, color, and size of the image (if a person took the image by phone, then it is not professional).

7/2/b. Black and white: Not colored, only black and white.

7/2/c. info-graphic: image includes words (written words).

7/2/d. people/faces: image has human head or face.

7/3. Video: if the post contains a video in addition to text.

7/4. Audio: if the post contains an audio file in addition to text.

7/5. Hyperlink: The post includes an URL or link.

7/3/a. count the number of hyperlinks.

7/3/b. The first hyperlink contains:

1) Story: any article or website that contain information.

2) Picture: Only hyperlink of picture. Usually, the link ends with ".jpg".

3) Video: The link has only video such as a video on YouTube.

4) Other: if the link contains other than the above three content.

7/3/c. the first link takes you to:

1) Media (Online newspaper, blogs, YouTube, social media)

2) Official website: Governmental websites, NOGs websites

3) Image only

4) Other: if the link takes you to other than the above three websites.

APPENDIX D

Code Sheet

Study Code Sheet

Post #: …………..

Coder #:   **1**   **2**

V1. Blog post date: (Year, Month, Date)

------/-----/------

V 2. Language(s) used in the blog post:
    (1) Arabic   (0) English   (2) Mixed

V3. Type of crisis:

1. Civil unrest: Egyptian Revolution 2011

2. Terrorist attack: Sinai terror attack 2012

3. Natural disaster: Flooding in Egypt 2010

V4. Framing Items

A) Attribution of responsibility frame
1. The post suggests that some level of government has the ability to alleviate the problem/issue.

(1) Yes   (0) No

2. The post suggests that some level of the government is responsible for the issue/problem.

(1) Yes   (0) No

3. The post suggests that an individual or group of people is responsible for the problem/issue.

(1) Yes   (0) No

4. The post suggests that an institution or organization is responsible for the problem/issue.

(1) Yes   (0) No

5. The post suggests a reason(s) or solution(s) to the problem/issue.

(1) Yes   (0) No

B) Human-interest frame

1. The post provides a personal example or put a "human face" on the issue.

(1) Yes   (0) No

2. The post employs adjectives or personal vignettes that generate feelings of outrage, empathy-caring, sympathy, or compassion.

(1) Yes   (0) No

3. The post emphasizes how individuals and groups are affected by the issue/problem.

(1) Yes   (0) No

4. The post go into the private or personal lives of the actors.

(1) Yes   (0) No

5. The post contains visual information (image) that might generate feelings of outrage, empathy-caring, sympathy, or compassion.

(1) Yes   (0) No

C) Conflict frame

1. The post reflects disagreement between parties/-individuals-groups-countries.

(1) Yes   (0) No

2. One party-individual-group-country reproaches another.

(1) Yes   (0) No

3. The post refers to two or more sides of the problem or issue.

(1) Yes   (0) No

4. The post refers to winners or losers.

(1) Yes   (0) No

5. The post refers to consequences of disagreement two or more sides.

(1) Yes   (0) No

D) *Morality frame*

1. The post contains a moral message.

(1) Yes   (0) No

2. The post makes reference to morality, God, or other religious tents.

(1) Yes   (0) No

3. The post contains any action or words against humanity.

(1) Yes   (0) No

4. The post refers to a group of people or individual against law.

(1) Yes   (0) No

5. The post offers specific social behavior prescriptions.

(1) Yes   (0) No

E) *Economic consequences frame*

1. The post mentions the current or future financial losses or gains.

(1) Yes   (0) No

2. The post mentions of costs/degree of expense involved.

(1) Yes   (0) No

3. There is a reference to any economic consequences of pursuing or not pursuing a crisis.

(1) Yes   (0) No

4. The post refers to any financial assistance to overcome the crisis.

(1) Yes   (0) No

5. The post links this crisis to other events that caused financial losses or gains.

(1) Yes   (0) No

V5. Topic of blog post

5/1. The first topic mentioned in the post:

    a) Economic

(1) Yes   (0) No

    b) Politics

(1) Yes   (0) No

    c) Violence or Terror

(1) Yes   (0) No

    d) Environment

(1) Yes   (0) No

    e) Human rights

(1) Yes   (0) No

    f) Military

(1) Yes   (0) No

    g) Other, please list …………………

5/2. The topic that got the most space:

    a) Economic

(1) Yes   (0) No

    b) Politics

(1) Yes   (0) No

    c) Violence or Terror

(1) Yes   (0) No

    d) Environment

(1) Yes   (0) No

    e) Human rights

(1) Yes   (0) No

    f) Military

(1) Yes   (0) No

    g) Other, please list …………………

5/3. The topic got the most space mentioned in the first paragraph:

(1) Yes   (0) No

V6. Using a source of information:
(1) Yes   (0) No

If YES,

Type of sources:

6/1. **Government**

(1) Yes   (0) No

If YES, count the number of government sources?...........

If YES,

A government official

(1) Yes(0) No

A government PR

(1) Yes(0) No

A government story

(1) Yes(0) No

A government Website

(1) Yes(0) No

6/2. **Media sources**

(1) Yes   (0) No

If YES, count the number of the media sources?.......

6/3. **Science sources**

(1) Yes   (0) No

If YES, count the number of the *science* sources?.......

6/4. ***Business* sources**

(1) Yes   (0) No

If YES, count the number of the *business* sources?.......

6/5. *Non-governmental organization* **sources**

 (1) Yes   (0) No

                        If YES, count the number of the *NGO* sources?…….

6/6. **Document sources**

 (1) Yes   (0) No

                        If YES, count the number of the document sources?…….

6/7. **Public/ eyewitness sources**

 (1) Yes   (0) No

                        If YES, count the number of the eyewitness sources?…….

6/8. **Other** sources, please write……………

V7. Modality/format of blog post:

1. Text

(1) Yes   (0) No

2. Image

(1) Yes   (0) No

   If YES, Please look at the FIRST one

                        a. The picture look professional.

                        (1) Yes   (0) No

                        b. The picture is a black and white.

                        (1) Yes   (0) No

                        c. The picture is info-graphic.

                        (1) Yes   (0) No

                        d. The picture has people/faces.

                        (1) Yes   (0) No

3. Video

(1) Yes   (0) No

4. Audio

(1) Yes   (0) No

5. Hyperlink(s)

(1) Yes   (0) No

If YES,

a. Quant hyperlinks……….

b. The first hyperlink contains:

(1) Story

(2) Picture

(3)Video

(4) Other…………

c. The first hyperlink takes you:

(1) Media (Online newspaper/Radio/TV, Social media, another blog, same blog)

(2) Official website (government, organizations)

(3) Image only

(4) Other……………

APPENDIX E

List of Journalist Bloggers

Journalist Bloggers

1. Abd Al Salam Ismail –http://selectionsfromfacebook.blogspot.com/2012/06/blog-post_7141.html
2. Abd Alraheem Agha- http://abdoagha.blogspot.com/
3. Abdel Moneim Mahmoud - Ana Ikhwan (http://ana-ikhwan.blogspot.com/)
4. Abdel-Rahman Hussein - http://sibilantegypt.com/
5. Abeer Suliman- http://yawmiyat3aness.blogspot.com
6. Amira Al-tahawi –Kashf- http://kashfun.blogspot.com/2012/08/sinai_9.html
7. Amr Ezzat- http://amr-ezzat.blogspot.com/, http://mabadali.blogspot.com/
8. Ayman Amer - http://aymanamerprees.blogspot.com/
9. Bassem Sabri An Arab Citizen- http://anarabcitizen.blogspot.com/
10. Dalia Ziada- Dalia Ziada http://daliaziada.blogspot.com/
11. Fahmy Howeidy- http://fahmyhoweidy.blogspot.com/
12. Hossam El-Hamalawy- 3arabawy (http://www.arabawy.org/blog/)
13. Ismail Alexandrani- ismailalex.blogspot.com
14. Kamal Sultan- http://kamalsultan.blogspot.com/, http://albaaselaraby.blogspot.com/2014/07/blog-post_30.html
15. Khaled Diab- http://chronikler.com/
16. Marwa Rakha- http://marwarakha.blogspot.com/, http://marwarakha.com/?cat=7
17. Mohamed El Dahshan- Tweeter 100 top Arab http://eldahshan.com/page/6/
18. Mohamed G. Beshir - Gemyhood 's Blog- http://www.gemyhood.com/
19. Mohammed Maree- http://egytimes.org/
20. Nadia El Awady- http://nadiaelawady.wordpress.com
21. Nawara Negm - Gabhet El Tahyees El Shaabeya (http://tahyyes.blogspot.com/)
22. Rawan El Ehimi: http://rowanelshimi.wordpress.com/ ,http://rowanelshimi.org/about/
23. Sabah Hamamo: Masrawyya http://masrawyya.blogspot.com/2013/01/blog-post_22.html
24. Salah Hijazi - http://netonradio.blogspot.com/2010/01/blog-post_9728.html
25. Sarah El Deeb- http://bigstory.ap.org/content/sarah-el-deeb?page=5
26. Sarah Marea Carr- http://inanities.org/about/
27. Tarek Shalaby- http://tarekshalaby.com/tag/jan25/
28. Wael Abbas' blog -Misr Digital – (misrdigital.blogspirit.com)
29. Wael Eskandar- http://blog.notesfromtheunderground.net/
30. Yasser Thabet- Qabl Al-Tofan (http://yasser-best.blogspot.com)
31. Zeinobia - http://egyptianchronicles.blogspot.com
32. Amr El-qazaz: http://lesa-3aish.blogspot.com
33. http://egyoffline.blogspot.com

APPENDIX F

List of Citizen Bloggers

Citizen Bloggers

1. http://2albmait.blogspot.com
2. http://3malamatan.blogspot.com/
3. http://ahmedtoson.blogspot.com/
4. http://myfingerprint.blogspot.com
5. http://shagarellemoun.blogspot.com/
6. http://alms1962.blogspot.com
7. http://kahwa-sada.blogspot.com
8. http://arabeblognet.blogspot.com
9. http://blog.omaralshal.com
10. http://lokmetaesh.blogspot.com
11. http://egyworkers.blogspot.com
12. http://freemenbut.blogspot.com/
13. http://ibnbahya.blogspot.com
14. http://dactoor.blogspot.com/
15. http://khaled-ibrahim.blogspot.com/
16. http://hallawa.blogspot.com
17. http://abomalik3.blogspot.com/
18. http://ma3t.blogspot.com
19. http://mhg1962.wordpress.com/
20. http://moftasa.net/node
21. http://nervana1.org/about/
22. http://khatab38.blogspot.com
23. http://resbikt.blogspot.com
24. http://sareerqalm.blogspot.com
25. http://sinainews.wordpress.com
26. http://sirgoslabyrinth.wordpress.com/
27. http://sinaiphoto.blogspot.com
28. http://egyptmonocle.com
29. http://trtr3888.blogspot.com
30. http://theegyptiansilentmajority.blogspot.com/
31. http://المعلمين.blogspot.com/
32. http://nostalagia.blogspot.com
33. http://30masara.wordpress.com

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