

Framing Arab Spring Conflict: A Visual Analysis of Coverage on Five Transnational Arab News Channels

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Abstract

Guided by framing theory, a quantitative content analysis was conducted on news programming from five transnational satellite news channels that broadcast to/from the Arab world—Al Jazeera, Al Jazeera English, Al Arabiya, Alhurra, and BBC Arabic. The project examined if differences exist between the networks, and between two dimensions of a network taxonomy—western and liberal commercial—in how Arab Spring news selection and content was visually framed. A systematic comparative analysis was conducted on visual coverage of the civil unrest in Tunisia, Algeria, Yemen, Egypt, Libya, and Syria. Three entire newscasts from each network airing between December, 2010 and June, 2011, were analyzed. The data from 1,951 shots reveal both similarities and differences in how the networks utilized the human interest and political frames in their Arab Spring coverage. Results revealed no difference in the application of the human interest frame between western and liberal networks. However, the comparison between the individual networks revealed that Alhurra invoked the political frame more often than Al Jazeera and BBC Arabic.

Keywords: *Arab Spring, Arab media, visual framing, Al Jazeera, Al Jazeera English, Alhurra, BBC Arabic, Al Arabiya*

Introduction

In late 2010, a series of popular uprisings against repressive governments spread across the MENA region. The first civil demonstrations, that would later become known as the Arab Spring, were organized in Tunisia on December 18th after a Tunisian fruit vendor set himself on fire to protest his harassment at the hands of police. The wire services quickly picked up on the Tunisian demonstrations that followed. One of the earliest Western reports describing the demonstration came from the Reuters news agency and appeared on December 19, 2010 (“Witnesses Report,” 2010). As the demonstrations spread across Tunisia, the Arab media began to cover the events extensively (Pintak, 2011b).

Over the next few months, the civil unrest spread across the region resulting in demonstrations, strikes, clashes with government officials, violence, and the overthrow of several regimes. Sources disagree on the total number (possibly as high as twenty) of nation states impacted by civil unrest resulting from the Arab Spring. Many of the uprisings that began in 2010 have continued to escalate into civil wars. The most notable demonstrations occurred in Tunisia, Algeria, Yemen, Egypt, Libya, and Syria. This recent political unrest in the Middle East provided an opportunity to examine potential differences in how visuals of the conflicts were presented to their audiences.

Throughout the history of television news, news organizations have made huge expenditures in state-of-the-art technology in order to prioritize visuals in their coverage of important stories. Despite the scientific and anecdotal evidence of their importance, visuals have not received the same level of systematic research attention that has been devoted to the verbal, or textual, news elements (Domke, Perlmutter, & Spratt, 2002; Graber, 1989, 1990; Matthes, 2009). Graber (1989) argues that ignoring visual news elements is detrimental to a complete

understanding of the audiovisual message because the analysis not only loses the meaning contained in the visuals, but also misses the verbal meanings that are modified by the interaction of the visual content.

The penchant for visuals is equally strong among the highly competitive Arab satellite news channels. Systematic analysis of Middle Eastern news visuals is generally performed through cross-cultural comparisons of Arabic-language and English-language media. These studies have provided important insights on a range of topics—disasters (Fahmy & Johnson, 2007), 2009 Gaza conflict (Dobernig, Lobinger, & Wetzstein, 2010); terrorist attacks (Fahmy, 2005a, 2005b), the war in Afghanistan (Fahmy, 2004, 2005a, 2005b), and the War in Iraq (Fahmy & Kim, 2008; Keith, Schwalbe, & Silcock, 2009)—into differences in the framing of print, web-based, and less-often, television news visuals. However, they rarely provide insight into differences in the application of television news frames by Arab news outlets trying to reach the same Arab audience.

A review of the literature reveals a void in both TV visual, and pan-Arab satellite news research. The current study sought to fill these voids by exploring the visuals of five transnational satellite news channels that broadcast to/from the Arab world—Al Jazeera, Al Jazeera English, Al Arabiya, Alhurra, and BBC Arabic—for differences in the application of visual news frames in Arab Spring coverage. This coverage provided an excellent opportunity to explore differences in visual framing because according to Fahmy (2010) these differences should be more apparent as international crises magnify differences in visual news coverage.

Literature Review

Framing

“To frame,” Entman said, “is to select some aspects of a perceived reality and make 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” (1993, p. 52). At the macro-level, frame building is concerned with message producers’ organizing structures, which are used to present complex events and issues, and, in the process give their stories meaning (Kosicki, 2003; Scheufele & Tewksbury, 2007).

Researchers have differed widely on conceptualizations for visual frames, discourse units, and methods for reliably identifying the variety of visual news frames (Matthes, 2009; Semetko & Valkenburg, 2000). Scholars (Entman, 1993; Fahmy, 2004; Fahmy, 2010; Fahmy & Kim, 2008; Ghanem, 1996; Vujakovic, 1998) suggest that the frequency and prominence of visual depictions are key elements of examination in studies of visual framing. Entman refers to frequency as the most powerful framing mechanism because it promotes a particular issue’s importance to the audience. A process Gitlin (1980) referred to as “persistent selection, emphasis, and exclusion” (p. 7).

Findings from several scholars suggest that different media outlets follow different visual strategies in the coverage of conflict events (Dobernig, Lobinger, and Wetzstein, 2010; Fahmy, 2010; Konstantindou, 2008). In addition, scholars (e.g. Matthes, 2009), have identified a diversity of generic and issue-specific frames that have been applied in news content studies, including: conflict, violence, graphic, human interest/human impact, economic consequences, morality, moral-outrage, responsibility, casualty, political strategy, public engagement, public opinion, terrorism, victory, defeat, race/religion/culture, technical, anti-war, pro-war, and self-referential.

Visual Frames

Griffin and Lee (1995) found photographs of the first Gulf War overwhelmingly focused on military technology and virtually ignored the human impact of the war. King and Lester (2005) found pictures in three U.S. newspapers from the first and second gulf wars were pro-military. Fahmy and Kim (2008) explored differences in the coverage of the second Gulf War from *The New York Times* and *The Guardian*. They found numerous differences in the visual coverage of the war. For example, *The New York times* focused on images of the U.S. military and government officials while *The Guardian* ran more photos of material destruction in Iraq. Konstantindou (2008) found that visuals in Greek coverage of the second Gulf War focused on spectacular images of victims. Fahmy (2005a) found that even though many of the images of 9/11 and the War in Afghanistan carried in the Arab-language *Al Hayat* and English-language *The International Herald Tribune (IHT)* transnational newspapers came from western news agencies they were framed differently by these organizations. More specific analysis of Afghan War coverage revealed *Al Hayat* depicted the human suffering and tragedy of the war (human interest frame), while *IHT* presented a more sanitized view (Fahmy, 2010). Fahmy (2010) concluded that the military (Griffin & Lee, 1995; King & Lester, 2005), or technical frame (Fahmy, 2005a, 2010) is more commonly used to portray conflict on western media outlets, and is distinct from the human interest frame.

Human interest frame. Next to the conflict frame, the human impact (Neuman, Just, & Crigler, 1992) or human interest frame is one of the most common frames found in news coverage (Matthes, 2009; Neuman, et al., 1992; Semetko & Valkenburg, 2000). The human interest frame “brings a human face or an emotional angle to the presentation of an event, issue, or problem” (Semetko & Valkenburg, p. 95).

Grabe, Zhou, and Barnett (2001) state that dichotomies, including human interest versus public affairs, are often used to emphasize the differences between standard and sensational news

topics. Although their study was not limited to visuals, Hamdy and Gomaa (2012) found social media posts during the Egyptian uprisings emphasized the human interest frame. Analysis by Semetko and Valkenburg (2000) of European political coverage, found the human interest frame was more common in TV news than in print news media, and also more common on sensationalist news outlets than on traditional news outlets. Brantner, Lobinger, and Wetzstein (2011) explored the differences in visual effects elicited between the dichotomous human interest and political news frames.

Dobernig, Lobinger, and Wetzstein (2010) explored differences in the coverage of the 2009 Gaza crisis in four print news sources and found the Palestinian side was visually represented by individual civilians which provoked a sense of empathy, while the Israeli side was represented by visuals of political or governmental officials portraying statesmanship. These results suggest differing visual framing strategies based on the actors that are presented in the news coverage.

Public affairs frame. In contrast to the human interest frame, the public affairs frame, or political strategy frame (Nisbet and Huges, 2006) emphasizes the actions of presidents, government agencies, political officials and authorities. Haigh (2010) found that the political strategy frame was one of the most common frames used in news coverage of the alternative energy debate. Brantner et al. (2011) found images of Israelis from the 2009 Gaza conflict represented the political frame and emphasized “institutional power and statesmanship” (p. 528).

Hallin, (1994) emphasized that modern American journalism explicitly recognizes political authority, particularly in times of celebration or upheaval. Benson and Hallin (2004) state that in such times newsgathering turns to political authority to define the primary viewpoints on the issues. Their comparative analysis of American and French news media revealed a greater level of “indexing” to the viewpoints of the political elite in American coverage than in French coverage

(p. 19). They also found that reliance on political authority in both American and French coverage had increased between the 1960s and 1990s.

Method

Many of the studies identified in the literature review provide cross-cultural, short-term examinations of major event coverage, through pictures in newspapers or from online news sources. There are virtually no longitudinal content analyses of the visuals contained in satellite newscasts prepared for the same cultural audience. As Graber (2003) notes, “many broad and definitive judgments about the substantive content of mass media are still made without actual content analyses of these media” (p. 140).

Hypotheses

Since the human interest frame has been found more prevalent in coverage on sensational news outlets, and in Arab media portrayals of conflict, it is hypothesized that:

H1: Visuals on the liberal commercial networks will be more likely to emphasize the human-interest frame in coverage of the Arab Spring than western-styled networks.

Conversely, Alhurra as a western-based public diplomacy entity of the U.S. government—which had close ties to some of the regimes targeted in the Arab Spring uprisings (e.g. Egypt)—should be more likely to emphasize statesmanship and political perspectives in Arab Spring coverage. Therefore it is predicted:

H2: Visuals on Alhurra will be more likely to emphasize the political frame in coverage of the Arab Spring than Al Jazeera, Al Jazeera English, BBC Arabic and Al Arabiya.

Content Analysis

A quantitative content analysis, guided by deductive framing, was conducted at two levels: (1) the individual network; and (2) through a two-dimensional taxonomy—western and liberal

commercial—of pan-Arab stations. The five networks were chosen because they represent some of the most widely discussed examples of pan-Arab satellite news networks. Al Jazeera and Al Arabiya routinely garner some of the largest audiences among the pan-Arab news networks (Telhami, 2011). Dajani (2007) stated that Al Arabiya was the first serious rival to Al Jazeera. Alhurra and BBC Arabic are two of the recognized Arabic-language foreign channels. Al Jazeera English was included in the study to provide insight into potential differences between it and its Arabic-language sister station. In addition, these five networks easily fit in the two-dimensional network taxonomy, with Al Jazeera and Al Arabiya representing the liberal commercial dimension, and Alhurra, BBC Arabic, and Al Jazeera English representing the western dimension.

The main characteristic used to determine the taxonomy of each network was commercial status. I borrowed the term liberal commercial from Ayish (2002) and used it to classify Al Jazeera and Al Arabiya since they were both originally conceived as commercial networks. The commercial undertones, and resulting competitiveness of these networks tends to contribute directly to other characteristics found in the liberal model. For example, Hallin (1994) states that the intensely competitive forces associated with television result in media populism. Both, Al Jazeera and Al Arabiya overtly cater programming to the ordinary citizen in an effort to increase viewership, which is a hallmark of populist media.

Alhurra, BBC Arabic, and Al Jazeera English are considered non-commercial international broadcast networks and therefore represent the western style. The term western was originally chosen to classify the western-based Alhurra and BBC Arabic networks. Considering the network's stated mission, it could be argued that AJE more appropriately fits into an entirely different dimension. However, AJE is considered western in this context due to the network's non-

commercial status, intense effort to reach an international audience including the United States, and its attempts to distance itself in subtle ways from its Arabic-language sister station.

Sample

The sample frame consisted of news programming from December 18, 2010, to June 15, 2011. A one-hour late evening newscast was recorded live via satellite from Al Jazeera, Al Arabiya, AJE, and BBC Arabic on each weekday, and many weekends, for the duration of the sample period. Due to differences in each networks' schedule, and the different time zones from which the newscasts originated, all newscasts could not be recorded during the exact same time each day. However, all the newscasts aired within a few hours of each other. The Alhurra broadcasts were recorded from daily archives available on the Alhurra website, since the Alhurra signal is not available via-satellite in the U.S.

The unit of analysis for the sample was the individual image or shot ($n = 6,595$). The description of the individual shot followed the description set forth by Keith, Schwalbe, and Silcock (2009). Using their guidelines, a shot was counted "each time the shot (subject) changed by video editing or, in the case of a pan, each time the subject changed" (p. 7).

The goal was to create a sample that represented longitudinal "normal" or "routine" news coverage, and minimized the impact of a single major news event on the sample. There were several major international news stories during the sample frame. These events generally did not demand the kind of live 24-hour breaking-news style coverage that would have interrupted the normal news cycle. However, some news coverage during the Arab Spring was an exception. During the most intense periods (between approximately January 29, and February 20, 2011) of political unrest in Egypt, and Libya, the international news networks interrupted their normal news

cycles to provide 24-hour, live, breaking-news style coverage. Newscasts from this non-routine news cycle were excluded from the sample.

A nonprobability sample of broadcasts was drawn for three days from the entire sample frame to construct the sample of routine news coverage. A random date generator was used to pull the sample. The selected dates were Wednesday, December 29, 2010; Thursday, January 27, 2011; and Tuesday, June 14, 2011. The programming from all five networks was analyzed for each selected day in the sample. The resulting sample comprised 438 total stories in 15 hours of news programming. Each story from the sample ($n = 438$) was also coded for Arab Spring coverage. Stories were coded Arab Spring if they contained coverage of the uprisings in Algeria, Bahrain, Egypt, Jordan, Libya, Syria, Tunisia, or Yemen. This coding resulted in an Arab Spring sample of 89 stories (22.6%) comprising 1,951 shots (29.6%).

Coding

Each story was coded into one of 16 possible categories that have been outlined in previous studies (Groshek, 2008; Natarajan & Xiaoming, 2003; Weaver, Porter & Evans, 1984): (1) accidents/natural disasters, (2) agriculture, (3) business/economics, (4) crime/criminal justice/law and order, (5) ecology/environment, (6) education, (7) health care, (8) military/national defense, (9) politics, (10) race/religion/culture, (11) social problems/services, (12) sports, (13) technology, (14) war/terrorism, (15) oddities; (16) undecided; and (17) tease.

Each shot was analyzed for the presence of multiple frames (e.g. conflict, human interest, political, sensational elements). In other words, a single shot could simultaneously represent the conflict frame and political frame. This approach to frame extraction is not uncommon. While numerous studies look for the presence of a single primary frame per discourse unit (e.g. Hamdy &

Gomaa, 2012), Matthes (2009) found that 34% of framing studies extracted more than one frame per unit of analysis.

H1 and H2 explored the differences between human interest (H1) and political (H2) frames in visuals from Arab Spring coverage. For all Arab Spring stories the dominant actor in each shot, if identifiable, was coded into one of seven categories similar to those used by Dobernig et al. (2010). The categories were: (1) individual politician; (2) political party/government; (3) authorities/military/police; (4) individual civilian; (5) civilian population; (6) foreign politician/authority; and (7) other. In cases when the dominant actor could not be identified, the shot was coded as “other.” These categories describe the parties portrayed in the visuals. The seven-category indicator for subject of Arab Spring coverage was collapsed into a dichotomous indicator of human interest frames (individual civilians, or civilian population) and political frames (individual politicians, political party/government, military/police/authorities, foreign politician/authority).

Before coding could begin, the author, aided by a research assistant, determined the parameters of each news story and also the in and out (beginning and end) points for each shot. The actual coding was conducted by the author and a second coder. A codebook was developed as a reference for the coders to use to operationalize choices. Training consisted of two separate pre-test samples that were used to develop definitions and clarify agreement issues. After successfully completing pre-testing, with high inter-coder raw percentage agreement, the coding was conducted. For reliability purposes, it was determined that at least 10% of the sample would be double coded, which is the percentage often recommended (Neuendorf, 2002). The reliability scores were calculated using Krippendorff’s alpha—which is a statistical measure of the degree inter-coder agreement. Determination of Arab Spring content had an agreement of 0.97.

Agreement for story was 0.90. Scores for all categories were above the acceptable level of 0.70 identified by Frey, Botan, and Kreps (2000).

Analysis Strategy

Multi-level logistic regression models were used to analyze the hypotheses. Multilevel regression was needed for analyzing the data since this sample was based on nested sources of variability. The unit of analysis, the shot, is nested within stories giving the data a multilevel, or hierarchical, structure. To ignore the structure of this data and collapse the data across the shots or to analyze the data without consideration for the multilevel structure could lead to an increase in either alpha (false positive) or beta (false negative) errors (Hox, 2002). Logistic regression, a variation of ordinary regression, was used because the dependent variable was binary. The binary variable usually represents the presence or absence of the visual feature under investigation. Historically, the most common methods for fitting hierarchical regression models are based on likelihood estimation methods. Iterative generalized least squares (IGLS) is one such model fitting method that has been popularized because of its computational speed and efficiency. For the current study the Bayesian method, Markov chain Monte Carlo (MCMC), was used for fitting all multilevel models. Ultimately, MCMC should provide a more precise estimation. This increased level of precision is practically the case for the hypotheses that tested a binary outcome variable (Rasbash, Steele, Browne, & Goldstein, 2009).

Results

H1 predicted liberal commercial networks would emphasize the human interest frame more than western networks. A logistic multi-level (shots nested within stories) regression model—with a dummy coded taxonomy featuring western-styled networks as the reference category, and controls for story type—was utilized. Shot length was not included as a control variable for H1, as

it caused instability in the model (endless iterations) due to the small number of shots in the sample. The seven-category indicator for subject of Arab Spring coverage (politician, government/political party, police/military/authorities, individual civilian, civilian population, foreign authority, other) was collapsed into a dichotomous indicator of the presence or absence of human interest visuals (individual civilians, or civilian population). Results from the model for human interest reveal no statistically significant differences between liberal-commercial ($B = .54$, $SE = .34$, $p = .110$) and western networks. H1 was not supported. (SEE TABLE 1)

H2 predicted visuals representing the political frame in Arab Spring coverage would be more likely to appear on Alhurra than Al Jazeera, Al Jazeera English, BBC Arabic, and Al Arabiya. A logistic multi-level (shots nested within stories) regression model was used to test this hypothesis. The dependent variable was a dichotomous indicator of the presence of political figures (individual politicians, political party/government, military/police/authorities, foreign politician/authority) as the main subject of a shot or not. The analysis controlled for story type (a dichotomous indicator of stories concerning politics, crime, or conflict or not), and shot length in seconds. The five networks were dummy coded with Alhurra as the reference category. The predicted B (logged odds) for each of the four networks is an indicator of the difference between the particular network and Alhurra controlling for the other variables in the model.

An examination of the two control variables in the model (see Table 2) indicates as shot length increased the likelihood of political framing significantly decreased ($B = .03$, $SE = .01$, $p = .012$). For the story type control variable, the business/technology story type significantly predicted political framing ($B = -3.34$, $SE = 1.68$, $p = .046$). This means the political frame was less likely to be found in business/technology stories when compared to the reference category (politics/crime story type). Turning to the hypothesized predictions, only Al Jazeera ($B = -2.12$, $SE = 1.05$, $p =$

.045) and BBC Arabic ($B = -2.27$, $SE = 1.01$, $p = .024$) were significantly less likely to utilize the political frame in their shots of the Arab Spring when compared to Alhurra. H2 is partially supported. (SEE TABLE 2)

Discussion

The current study provides a rare comparison of visual frames among competing pan-Arab news networks. The findings reveal interesting similarities and differences in the application of visual frames between the networks.

First, there were unexpected similarities in the application of the human interest frame. Table 3 illustrates the primary conflict actors broken down by network for all shots. Of these shots, 320 (16.4%) portray politicians, government, authorities, or foreign authorities as the primary conflict actor (political frame), while 1,006 (51.6%) portray individuals, or groups of civilians (human interest frame) as the primary conflict actor. Findings from the literature review suggested that network taxonomy would influence the application of the human interest frame in Arab Spring conflict coverage. Contrary to the hypothesis, differences in the application of the human interest frame by network taxonomy were not statistically significant. Instead, visual references to civilian actors were found to be relatively constant across all networks. As an example, Alhurra in particular, aired numerous man-on-the-street interviews with Egyptian protestors. Figure 1 illustrates how each networks' coverage of the Arab Spring universally emphasized the civilians involved in the uprisings. (SEE FIGURE 1)

Application of the political frame marks the biggest difference between the networks. visuals representing the political frame were more prevalent on Alhurra than on Al Jazeera and BBC Arabic. Officials—government, politicians, police and military authorities—appeared in 19.8% of the Arab Spring shots used on Alhurra, which was significantly more often than on Al

Jazeera (13.3%) or BBC Arabic (12.3%). These findings correlate with Benson & Hallin's (2004) conclusion that in times of turmoil western new outlets turn to political authority to define the primary viewpoints on the issues. Therefore, Alhurra's use of the political frame seems to reflect its organizational mandate, the U.S. government's interest in the region, and America's close ties to several of the governments targeted by the uprisings. Despite these findings, it is important to note that Alhurra still emphasized the human interest frame (57.7%) more often than the political frame. The author concludes Alhurra's coverage was visually laced with U.S. perspectives on the important issues (political frame) while simultaneously seeking cultural relevance to the pan-Arab audience by embracing the human interest frame.

Surprisingly, Al Arabiya coverage contained the political frame more often (20.9%) than any of the other networks, including Alhurra. Increased coverage of U.S. government officials (e.g., Secretary of State Hillary Clinton), images of government leaders in the affected areas (e.g., Hosni Mubarak), and opposition leaders (e.g., Mohamed ElBaradei) contributed to the findings. Images of foreign authorities were portrayed more evenly on Alhurra, BBC Arabic and Al Arabiya (see Table 3). The western networks presented images of NATO military forces, U.S. and British government officials, and the leaders of neighboring Arab states. These findings suggest that Alhurra and Al Arabiya presented more balanced coverage of the crises by visually presenting a wider view of stakeholders. For Saudi Arabian backed Al Arabiya, the heavy use of the political frame could be less about balance, and more of a reflection of its benefactor's views on political revolution in the region. (SEE TABLE 3)

By contrast, visuals of foreign authorities were noticeably absent from coverage on Al Jazeera and Al Jazeera English. These findings seem to be consistent with other research (e.g., Dobernig, et al., 2010), which found a visual emphasis on civilians could be intended to evoke

sympathy for the protestors. Accusations, by former Al Jazeera correspondent Ali Hashem (2012), that Arab channels adopted some Arab Spring revolutions while avoiding others seem to provide support for this assertion.

Limitations and Future Directions

One of the major limitations to the study involves the size of the sample and content of the sample. From the beginning, the approach of this project was to analyze every single news image from each newscast in the sample. Most visual studies use a more restrictive unit of analysis like individual stories, or shots from specific time-limited selections within a newscast. This approach limits the cumulative impact of images that are repeated multiple times in a single newscast, or over a series of newscasts. Therefore, in order to keep the size of the project manageable, the purposive sample consisted of only three days of programming selected from the sampling frame. The resulting fifteen hours of programming provided thousands of images for the analysis. However, these three days, which excluded the non-routine breaking news coverage from the most contentious days of the Egyptian and Libyan uprisings, do not necessarily provide a representative sample of visuals on pan-Arab satellite TV channels.

Future research should focus on a more detailed visual analysis of Arab Spring coverage that includes the non-routine (breaking news) newscasts from the height of the Egyptian and Libyan uprisings. Such an analysis could also be expanded to include Arab Spring coverage on other networks including state TV outlets (e.g. Egyptian TV) and international commercial broadcasters (e. g. CNN). For example, Pintak (2011a) noted that at times Egyptian TV broadcast panoramic views of the city to avoid showing the conflict taking place in the streets.

There are also a few theory-based limitations associated with the current study. First, a limitation of framing to the current study is the suggestion by media scholars that Western

communication theory does not adequately account for the societal and cultural structures of the Middle East (Hafez, 2001). Second, the study does not explore how the differing application of frames affects public opinion in the Middle East.

Finally, issues related to three of the networks require further elaboration. While all the newscasts were approximately an hour long, BBC Arabic's newscast provided more in-depth news and analysis on a smaller number of stories. This production style led to significantly fewer stories and shots from BBC Arabic for making comparisons. Also, Al Jazeera English was included in the current analysis because of its ties to Arabic Al Jazeera and its growing popularity as an international broadcaster. Placement of Al Jazeera English in the western dimension of the taxonomy may not have been ideal however. The current implication of these similarities is that Al Jazeera English may be closer to the liberal commercial pattern than the western pattern. These similarities suggest a couple of avenues for future research. A more detailed visual analysis could be conducted to explore similarities and differences between Al Jazeera English and Al Jazeera. In addition, more systematic analysis of network structure should guide future categorization of the individual pan-Arab networks. These findings reveal the need for additional systematic analysis of visuals, and the factors shaping transnational Arab media.

References

- Ayish, M. (2002). Political communication on Arab world television: Evolving patterns. *Political Communication, 19*, 137-154.
- Benson, R., & Hallin, D. C. (2004). *How states, markets and globalization shape the news: The French and American national press, 1965-1997*. Proceedings from International Communication Association annual conference, New York.
- Brantner, C., Lobinger, K., & Wetzstein, I. (2011). Effects of visual framing on emotional responses and evaluations of news stories about the Gaza conflict 2009. *Journalism & Mass Communication Quarterly, 88*, 523-540.
- Dajani, J. (2007). The Arab media revolution. *Frontline World*. Retrieved from http://www.pbs.org/frontlineworld/stories/newswar/war_arabmedia.html
- Dobernig, K., Lobinger, K., & Wetzstein, I. (2010). Covering conflict: Differences in visual and verbal news coverage of the Gaza crisis 2009 in four weekly news media. *Journal of Visual Literacy, 29*, 88-105.
- Domke, D., Permuter, D., & Spratt, M. (2002). The primes of our times? An examination of the “power” of visual Images. *Journalism, 3*, 193-221.
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*(4), 51-58.
- Fahmy, S. (2004). *Framing Visual News: The 9/11 attack and the war in Afghanistan in English - and Arabic - language newspapers*. Paper presented at the meeting of International Communication Association, New Orleans, LA.
- Fahmy, S. (2005a). Emerging alternatives or traditional news gates: Which news sources were used to picture the 9/11 attack & Afghan War. *The International Communication Gazette,*

12, 383-400.

Fahmy, S. (2005b). U.S. photojournalists' & photo editors' attitudes and perceptions: visual coverage of 9/11 & the Afghan War. *Visual Communication Quarterly*, 82, 301-317.

Fahmy, S. (2010). Contrasting visual frames of our times: A framing analysis of English- and Arabic-language press coverage of war and terrorism. *The International Communication Gazette*, 72, 695-717.

Fahmy, S. & Johnson, T. J. (2007). Show the truth and let the audience decide: A web-based survey showing support among viewers of al-Jazeera for use of graphic imagery. *Journal of Broadcasting & Electronic Media*, 51, 245-264.

Fahmy, S. & Kim, D. (2008). Picturing the Iraq war: Constructing the image of war in the British and US press. *The International Communication Gazette*, 70, 443-462.

Frey, L., Botan, C., & Kreps, G. (2000). *Investigating communication: An introduction to research methods* (2nd ed.). Needham Heights, MA: Allyn & Bacon.

Ghanem, S. I. (1996). Media coverage of crime and public opinion: An exploration of the second level agenda setting. (Unpublished doctoral dissertation). University of Texas, Austin.

Gitlin, T. (1980). *The whole world is watching: Mass media in the making and unmaking of the new left*. Berkley, CA: University of California Press.

Grabe, M. E., Zhou, S., & Barnett, B. (2001). Explicating sensationalism in television news: Content and the bells and whistles of form. *Journal of Broadcasting & Electronic Media*, 45, 635-655.

Graber, D. A. (1989). Content and meaning. What's it all about? *American Behavioral Scientist*, 33, 142-155.

- Graber, D. A. (1990). Seeing is remembering: How visuals contribute to learning from Television news. *Journal of Communication*, 40(3), 134-156.
- Graber, D. A. (2003). The media and democracy: Beyond myths and stereotypes. *Annual Review of Political Science*, 6, 139-160.
- Griffin, M., & Lee, J. (1995). Picturing the gulf war: Constructing an image of the war in Time, Newsweek, and U.S. News & World Report. *Journalism & Mass Communication Quarterly*, 72(4), 813-825.
- Groshek, J. (2008). Homogenous agendas, disparate frames: CNN and CNN International coverage online. *Journal of Broadcasting & Electronic Media*, 52, 52-68.
- Hafez, K. (2001). Mass media in the Middle East: Patterns of political and societal change. In K. Hafez (Ed.), *Mass media, politics & society in the Middle East* (pp. 1-20). Cresskill, NJ: Hampton Press.
- Haigh, M. M. (2010). Newspapers use three frames to cover alternative energy. *Newspaper Research Journal*, 31(2), 47-62.
- Hallin, D. C. (1994). *We keep America on top of the world: Television journalism and the public sphere*. London: Routledge.
- Hamdy, N., & Goma, E. H. (2012). Framing the Egyptian uprising in Arabic language newspapers and social media. *Journal of Communication*, 62(2), 195-211. Retrieved from doi:10.1111/j.1460-2466.2012.01637.x
- Hashem, A. (2012). The Arab Spring has shaken Arab TV's credibility. *The Guardian*. Retrieved from <http://www.guardian.co.uk/commentisfree/2012/apr/03/arab-spring-arab-tv-credibility>
- Hox, J. (2002). *Multilevel analysis: Techniques and applications*. Mahwah, NJ: Lawrence Erlbaum.

- Keith, S., Schwalbe, C. B., & Silcock, B. W. (2009). Visualizing cross-media coverage: Picturing war across platforms during the U.S.-Led Invasion of Iraq. *Atlantic Journal of Communication, 17*, 1-18.
- King, C. & Lester, P. M. (2005). Photographic coverage during the Persian Gulf and Iraqi wars in three U.S. newspapers. *Journalism & Mass Communication Quarterly, 82*, 623-637.
- Kosicki, G. M. (2003). The media priming effect: News media and considerations affecting political judgments. In J. P. Dillard & M. Pfau (Eds.), *The persuasion handbook: Developments in theory and practice* (pp. 63-81). Thousand Oaks, CA: Sage Publications.
- Konstantinidou, C. (2008). The spectacle of suffering and death: the photographic representation of war in Greek newspapers. *Visual Communication, 7*, 143-169.
- Matthes, J. (2009). What's in a frame? A content analysis of media framing studies in the world's leading journals. *Journalism & Mass Communication Quarterly, 86*(2), 349-367.
- Natarajan, K., & Xiaoming, H. (2003). An Asian voice? A comparative study of Channel News Asia and CNN. *Journal of Communication, 53*, 300-314.
- Neuman, W. R., Just, M. R., & Crigler, A. N. (1992). *Common Knowledge*. Chicago: University of Chicago Press.
- Neuendorf, K. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage Publications.
- Nisbet, M. C., & Huge, M. (2007). Where do science debates come from? Understanding attention cycles and framing. In D. Brossard, J. Shanahan, & C. Nesbitt (Eds.), *The Public, the Media & Agricultural Biotechnology* (pp. 193-230). Cambridge, MA: CABI.
- Pintak, L. (2011a). Arab media revolution spreading change. *CNN*. Retrieved from <http://edition.cnn.com/2011/OPINION/01/29/pintak.arab.media/?hpt=Sbin>
- Pintak, L. (2011b). The Al Jazeera revolution. *Foreign Policy*. Retrieved from

http://www.foreignpolicy.com/articles/2011/02/02/the_al_jazeera_revolution

Rasbash, J., Steele, F., Browne, W. J., & Goldstein, H. (2009). *A user's guide to MLwiN*.

University of Bristol: Centre for Multilevel Modeling.

Riffe, D., Lacy, S., & Fico, F. G. (1998). *Analyzing media messages: Using quantitative content analysis in research*. Mahwah, NJ: Lawrence Erlbaum Associates.

Scheufele, D. A., & Tewksbury, D. (2007). Framing, Agenda Setting, and Priming: The evolution of three media effects models. *Journal of Communication*, 57, 9-20.

Semetko, H. A., & Valkenburg, P. M. (2000). Framing European politics: A content analysis of press and television news. *Journal of Communication*, 50(2), 93-108

Telhami, S. (2011). 2011 Annual Arab public opinion survey. Retrieved from http://www.sadat.umd.edu/ViewsArabs_Oct11_graphs%20FINAL.ppt

Vujakovic, P. (1998). Reading between the lines: using news media materials for geography. *Journal of Geography in Higher Education*, 22, 145-155.

Weaver, J., Porter, C., & Evans, M. (1984). Patterns in foreign news coverage on U.S. network TV: A 10-year analysis. *Journalism Quarterly*, 61, 356-363.

Witnesses report rioting in Tunisian town. (2010, December 19). *Reuters Africa*. Retrieved from <http://af.reuters.com/article/topNews/idAFJJOE6BI06U20101219>

Table 1

Human Interest Visuals in Arab Spring Coverage by Network Taxonomy

Variable	<i>B</i>	<i>S.E.</i>	<i>Z</i>	<i>p</i>
Constant	0.55	0.22	2.50	0.013
Liberal Commercial	0.54	0.34	1.60	0.110
Story Type - Business/Technology	-0.40	0.52	0.78	0.434
Story Type – Humanitarian	1.89	1.37	1.38	0.168
Story Type - Entertainment/Other	0.94	0.50	1.89	0.059

Note. Shots ($n = 1,951$). Stories ($n = 89$). Iterations = 25,000, Burn-in = 1,500. The variance of the constant across stories is 1.47 ($\chi^2 = 15.06$, $df = 1$, $p < .001$).

Table 2

The Political Frame in Arab Spring Coverage Between Networks

Variable	<i>B</i>	<i>S.E.</i>	<i>Z</i>	<i>p</i>
Constant	-2.63	0.61	4.29	<0.001
Al Jazeera	-2.12	1.05	2.01	0.045
Al Jazeera English	-0.33	1.01	0.33	0.743
BBC Arabic	-2.27	1.01	2.26	0.024
Al Arabiya	0.23	0.80	0.29	0.776
Shot Length	0.03	0.01	2.50	0.012
Story Type - Business/Technology	-3.34	1.68	1.99	0.046
Story Type – Humanitarian	-0.50	2.44	0.20	0.839
Story Type - Entertainment/Other	-0.58	1.03	0.56	0.574

Note: Shots ($n = 1,951$). Stories ($n = 89$). Iterations = 100,000, Burn = 5,000. The variance of the constant across stories is 5.18 ($\chi^2 = 10.55$, $df = 1$, $p < .001$).

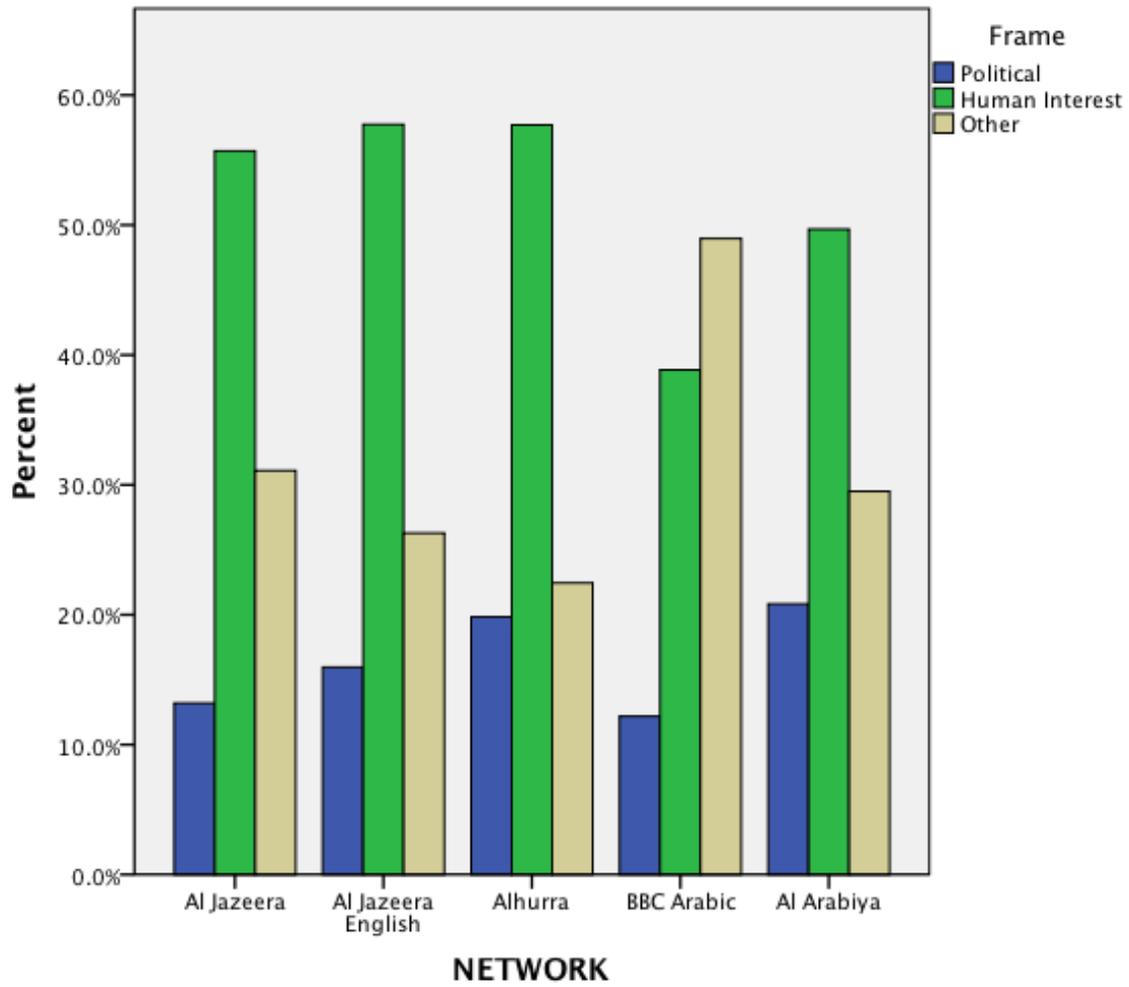


Figure 1. Frequency of political and human interest frame in Arab Spring coverage

Table 3
Frequency of Primary Conflict Actor Visuals by Network

Actor	Network					Total
	Al Jazeera	AJE	Alhurra	BBC Arabic	Al Arabiya	
Politician	14 (2.8%)	14 (6.6%)	22 (5.7%)	8 (2.1%)	23 (5.0%)	81 (4.2%)
Government	10 (2.0%)	7 (3.3%)	9 (2.3%)	1 (0.3%)	5 (1.1%)	32 (1.6%)
Police/Military	43 (8.5%)	13 (6.1%)	30 (7.8%)	20 (5.2%)	53 (11.5%)	159 (8.1%)
Individual	23 (4.5%)	11 (5.2%)	60 (15.7%)	18 (4.7%)	44 (9.5%)	156 (8.0%)
Civilians	260 (51.2%)	112 (52.6%)	161 (42.0%)	132 (34.2%)	185 (40.1%)	850 (43.6%)
Foreign Authority	0 (0.0%)	0 (0.0%)	15 (3.9%)	18 (4.7%)	15 (3.3%)	48 (2.5%)
Other	158 (31.1%)	56 (26.3%)	86 (22.5%)	189 (49.0%)	136 (29.5%)	625 (32.0%)
Total	508 (100.0%)	213 (100.0%)	383 (100.0%)	386 (100.0%)	461 (100.0%)	1951 (100.0%)

Note. The primary conflict actor, if recognizable, was coded for every shot.