

**The Great East Japan Disaster, 2011 and the Regional Newspaper:  
Transitions from News to Newspaper Columns and the Creation of Public Memory****Anthony S. Rausch**

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*This paper examines post-disaster local newspaper coverage associated with the Great East Japan Disaster of March 2011. On the basis of a long-term examination of several Tōhoku disaster area newspapers, the research identifies in the coverage of the disaster a transition from multiple ‘news’ themes to a variety of thematic frames that are presented in long-term newspaper columns. The research uses a database keyword trend to establish a ‘news-based’ newspaper coverage baseline, with framing analysis identifying newspaper columns as the mode frame of longer-term disaster coverage in the local newspapers thereafter. On this basis, the specific thematic frames of these columns of three disaster area newspapers are examined. The research finds that while the newspaper columns of local newspapers reflect the specific disaster-related issues of their areas, there also emerged a column that frames the disaster more optimistically, positioning the disaster as a point of new beginning for Japan and thereby constituting a form of real-time public memory creation. The research contributes to better understanding of both local media response to large-scale disasters based on the case for Japan and proposes a new understanding of the newspaper, in the form of newspaper columns, in disaster journalism, that of public memory construction.*

**Keywords:** Great East Japan Disaster, Local newspaper, News framing analysis.**Introduction**

The media has a two-sided relationship relative to disasters— of natural or human origin. On the one hand, media can have influence ahead of a potential disaster, whether through highlighting questionable policy or the need for regulation, or by supplying timely, if not emergency, information vital for disaster preparation just before an

impending disaster. On the other hand, the media also functions in the aftermath of disasters, seen at one level as being informational, disseminating news and information about the disaster itself and various response and recovery efforts. At another level, this post-disaster function emerges in the manner in which the media frames a disaster, thereby contributing to a complex combination of public risk consciousness and disaster-related issue amplification or attenuation.

This paper illuminates post-disaster media trends and emergent frames in local newspapers in Japan through an examination of local newspaper coverage of the Great East Japan Earthquake of 11 March 2011. After providing contextualization of how the print media approaches coverage of disaster events in general, this article adopts a news framing analytical framework to examine post-disaster coverage of the disaster by three disaster area newspapers: the *Fukushima Minpō* of Fukushima Prefecture, the *Kahoku Shimpō* of Miyagi Prefecture, and the *Tōōnippō* of Aomori Prefecture. The results show a decline in the frequency of ‘mentions’ that the event received as a news item over a three to five month post-event period, after which there was a transition in coverage to multiple cases of long-term thematic newspaper columns, the specific character of which will be outlined in detail herein. Such a downward trend regarding the disaster as a news item is to be expected. Similarly, the framing of the disaster-related columns in the local newspapers reflected, understandably, the local issue focus that emerged out of the event—the tsunami for the Miyagi newspaper versus the nuclear accident for Fukushima. However, while Aomori was relatively unaffected by either the earthquake/tsunami or the nuclear power plant disaster, the *Tōōnippō* case presented a framing of the nuclear disaster through a newspaper column in a highly analytical manner, focusing on the potential of technology and policy to accommodate the reality of geologic science and local governance in the area of nuclear power generation. Finally, a long-term column originating with Kyodo News Service adopted a highly optimistic frame, presenting multi-thematic content that superseded any specific geographic dimension of the disaster. This column can be viewed as a means of establishing a public memory of the disaster event in the near real-time, the implications of which will be discussed. As such, the present research contributes to better understanding of the media response to large-scale disasters and proposes a new understanding of newspaper columns, that of the construction of public memory.

### **Background: Disasters and the Media**

The media’s relationship with disasters would ideally be undertaken in a manner such that disaster can be averted (as in disasters of human origin) or the damage lessened (as in natural disasters). However, the reality is that the work of the media as it relates to disasters is usually most evident in the post-disaster reporting, where as Wenham (1994) pointed out, the focus is usually on the post-event human-interest aspect of disaster. This

post-disaster dominance is also seen in the five phases of disaster reporting outlined by Vultee and Wilkins (2004): warning, impact, immediate post impact, recovery and mitigation. The first two speak to the disaster itself, with the remaining three reflecting the range of focus in the near, and longer-term, periods after a disaster. Indeed, the literature regarding newspapers in disaster reporting identifies several research themes that reflect such post-event coverage. While objective reporting of disaster-related facts dominates in the immediate aftermath, research has identified and examined the emergence and effect of media hype and assignation of responsibility and culpability, the role of media in reporting on short-term recovery and policy debates that extend to a longer term, and the presence of manipulation of content in order to support a specific agenda or position.

Taking up the content and implications of these studies in greater depth, one key area of disaster journalism has concerned media hype and the resulting social amplification of disaster risk consciousness. Vasterman, Yzermans and Dirkzwager (2005) examined the role of the media in a post-disaster period focusing specifically on disaster area residents' consciousness regarding disaster-related health issues. They found that over-reporting of post-event health risks led to unnecessary fear and anxiety, while also contributing to confusion over endemic health problems and those truly related to their case study disaster. This case reveals the potential for the emergence of media hype in the aftermath of a disaster event, as the coverage of the event is pushed forward by self-reinforcing processes within the media itself. During the hype, the media generates content by reporting on comparable incidents, by reinterpreting incidents in the past and by evaluating details of the events and the performances of those involved, and, perhaps most significantly, by reacting to society's reaction to each succeeding news wave. If there is an ongoing element of risk that is part of the disaster, the hype will usually result in social amplification of that risk (Pidgeon, Kasperson and Slovic, 2003).

Additional near-term processes that emerge in the media coverage of a disaster are narrative building and agenda setting. As the media reports on a disaster, the coverage comes to integrate sequentially and thematically the separate events that comprise a disaster, yielding a broad narrative structure. In some cases, this emerges simply through the reporting of sequential information of the disaster and its aftermath; in others, the narrative emerges through intentional patterns of coverage. Complicating this narrative pattern is agenda setting, in which a variety of social agents—the government, a range of business ventures, citizen interest organizations, and the media itself—engage in a struggle to define what happened and why. The goal of these agents is to frame the event, propagating a specific depiction, interpretation and evaluation of the event, and a response that corresponds to their respective political, policy, safety, informational and enterprise viewpoints and objectives (Entman 1993). In this regard, personal versus institutional perspectives in how a disaster is framed yield differing portrayals of responsibility respective to local and national actors (Vultee 2009). To the degree that

these agents use the media, this leads the coverage away from mere information dissemination and toward the social construction of themes and issues related to disaster events in both general and with high specificity. Quite distinct from news, which is characterized on the basis of, and criticized for, its adherence to (or lack thereof) objectivity, impartiality, and neutrality (Anderson 1997), the frames that are created provide structure and give meaning to objective and impartial facts, a process by which people develop a viewpoint on an issue or alter their thinking about an issue (Chong and Druckman 2007). As one example, Yin and Wang (2010) found frames evident in the reporting in China's post-disaster media discourse, replacing rationality with myth as part of a national and international public relations campaign to highlight governance capabilities. In a similar manner, Svitak (2010) found substantial differences in the *New York Times* coverage of earthquakes in Haiti and Chile. Specifically, his study found that over 50 percent of the *New York Times* news content of the disaster was given over to content focusing on death and injury as opposed to just 20 percent on the response efforts, the narrative of the Haiti earthquake was clearly one of chaos and death. This is contrasted by the narrative that emerged of the Chilean earthquake as a sadly inefficient response, where 40 percent of the total coverage focused on the response efforts, with another 40 percent on crime, as opposed to much lower figures for death. While the actual death figures for the Haiti earthquake were much higher than for the Chile earthquake, the narratives that were created neglected the fact that the Chilean earthquake was drastically more powerful than the Haitian earthquake and that one of the main reasons for the high number of Haitian fatalities had to do with the state of the respective country's infrastructure—an element of the narrative that was largely ignored in the Haiti narrative, but highlighted in the Chilean.

Another element of this framing reveals the implications of sectoral distinctions on response and recovery in the near-term post-disaster period. Depending on the character of the disaster, a range of resources will have been destroyed, with the initial disruption of services giving way varying recovery periods and introspection and debate about the appropriate pattern of rebuilding. Research by Miles and Morse (2007) showed that post-Hurricane Katrina media coverage gave priority to risk perception and the post-disaster recovery of various forms of capital—natural, human, social and built—based on cultural, social, political and technical biases present in the media of interest. They found a focus on built capital, which emphasized a timely restoration of services through rebuilding; human capital, which focused on notions of equal distribution of resources for this recovery; and social capital, which focused on identifying institutions that support individuals in the event of a disaster. In other words, the media provided both general frames of recovery while also offering frames of introspection regarding the provision of support as it related to future disasters and the equitable distribution of recovery resources. However, they also noted a lack of media focus attributed to natural capital,

which would focus on the natural structures that provide ecosystem contributions to tropical storm protection and would potentially reduce future disaster impacts.

Finally, and at what can be considered the longest viewpoint of disaster journalism, disasters are events that generate myriad societal expectations, among them remembrances and commemorations of some sort. While information regarding annual observances and the planning and execution of monuments are the usual patterns of such journalistic commemoration, an overall process of memory establishment and sustenance is fundamental to such social practices and tangible displays. The role of journalism in the realm of memory construction necessitates consideration of what constitutes disaster memory and the accordant processes as they relate to journalism. While various terms regarding group memory patterns have been advanced, Casey (2004) provides one of the clearest categorizations to date. Memories originate at an individual level, in individual memory, but are compounded through interaction as social memory, collective memory and public memory. Social memory is the memory held in common by those bound by some affiliation, either kinship ties, geographical proximity or by engagement in a common project. The essential point of social memory is that the memory is shared by those who are related to one another prior to the memory event, which provides for an element of commonality of memory experience. Collective memory is the circumstance in which different persons, not necessarily known to each other, recall the same event each in his or her own way and with his or her viewpoint, but collectively in a social sense. The point of collective memory is the commonality of content, rather than commonality of experience. Finally, public memory is that which signifies a memory that is in the public, where discussion and debate of the memory is made possible and where the memory that is being discussed and debated serves an encircling, but malleable horizon.

Turning to public memory construction, Luthje (2009) conceptualized the interconnected agents, among them the media, that create the collective memory of a regional disaster. The research identified two memory careers that yield remembrance of the event: awareness and discovery. Awareness, defined as a continuous assignment of relevance by media to an event, begins with the event itself and continues through the event's total memory career, which ends when the media ceases to focus on the event. By contrast, discovery is a remembrance whereby a previously unimportant event is re-discovered through ascription of relevance at some point after the event. Luthje cites Eulmann and Stadelmaier (2009) in outlining the specific media processes involved in the creation of such memory careers, which include knowledge and public opinion creation and dissemination, and initiation and impetus for resulting action. As media and audience interact in the construction of what Welzer (2001) refers to as social memory, memory careers are created and sustained. In turn, this initiates follow-up actions in various social settings, whether these be conversations in social groups, memory commemoration activities by interested parties, and informed mitigation, or governmental response and

adaptation strategies. Kitch (2008) outlined the importance of noting that journalism works to construct memory across time and space as memory stories are disseminated through various forms of journalistic prose that are received by audiences as news. Zelizer (2008) concurs, pointing out that journalistic form invites memory and indulges memory, ultimately creating memory. The focus of the present research is on one form through which these disaster memories are created.

The reality of such journalistic outcomes as related to a disaster highlights the importance of such journalism processes as gatekeeping. While overgeneralization of different media, and media at different geographic and institutional levels, is a risk, comprehensive models are invaluable for identifying important gatekeeping factors, even when looking at how media approached complex events and issues, as is the case herein with the focus on disasters. Livingston and Bennett's (2003; see also Bennett 2004) multi-gated model of news gathering identifies six defining elements (decision basis, information gathering and organizing, journalist role, conception of public, press-government relations, and gatekeeping norm) that vary across four gatekeeping principles (reporter driven, organizationally driven, economically driven, and technologically driven). The model outlines both the tensions among these factors in isolation as well as the variable and overlapping character of gatekeeping as it is realized in reality; while certain approaches may be advantageous for some events and in some market strategies, rarely is just one principle or one element alone brought to bear on the selection and presentation of content for news.

The research outlined above suggests multiple viewpoints that can be brought to consideration of disaster journalism. Disaster journalism may begin with a straightforward reporting of the chronological progression of objective facts related to the event. However, it also represents socially-constructivist narratives of various affected groups, it portrays competing agendas assigning cause and blame, and it illuminates debates regarding public policy setting to respond to the event itself as well as to mitigate future events. In this regard however, it has been shown that mass media cover disasters for shorter periods of time than they do other issues and that the focus is largely on the current impact of disasters rather than on any longer term themes (Houston et al. 2012), implying a limited role for journalism in memory creation. This also translates to research undertaken on disaster journalism largely adopting a short-term view. Therefore, an important but heretofore under-recognized characteristic of disaster journalism research is the value of a long-term multi-dimensional view, a view that identifies transitions to coverage through frames that create and propagate a public memory of the event. Such a long-term view requires consideration of coverage of the event on the order of months, if not years, and demands a more holistic approach to viewing the media presentation of the event. Such a view makes possible identification of the transformation from established themes and issues into new themes and issues through reframing, largely through the emergence of emphasis frames (rather than equivalency frames), those that offer

qualitatively different yet equally relevant viewpoints that influence how readers view an issue (Chong and Druckman 2007). As will be outlined in the methodology section, recognition of this reframing is made possible by identification of multiple modes of presentation with a single medium—in the case herein, in the form of long-running thematic columns within newspapers that differ quantitatively from traditional newspaper articles. As will be shown, these serial columns also differ from opinion columns and have a clear thematic element that defines the content over the episodic period that any particular column is carried. As such, these columns exhibit theme focus, theme continuity, and theme consistency—the essential elements of an influential long-term frame—often over several months and tens of sequential individual columns within a single broader column theme. It is in this combination of thematic focus, continuity and consistency that the newspaper column as an element of disaster journalism functions in the construction of public memory of the event.

### **The Present Case Study: Event and Methodology**

The Great East Japan Earthquake of 2011 can be viewed as three separate, but inter-related incidents—the earthquake, the resulting tsunami, and the nuclear power plant catastrophe that ensued thereafter. The earthquake occurred off the eastern coast of northern Japan at 14.46 JST on Friday, March 11, 2011 and was one of the five most powerful earthquakes in modern history. The earthquake triggered enormously destructive tsunami waves, reaching heights of up to 40 meters and traveling as far inland as ten kilometers in some locations (Buerk 2011). In addition to the loss of life and destruction of infrastructure, the tsunami caused a number of nuclear accidents, the most significant the meltdown at three reactors in the Fukushima Nuclear Power Plant complex, necessitating the establishment of evacuation zones affecting hundreds of thousands of residents. The Japanese National Police Agency has confirmed 15,882 deaths, 6,142 injuries, and 2,668 people missing across eighteen prefectures, but concentrated on the three coastal prefectures of Fukushima, Miyagi, and Iwate, which—along with three other prefectures (Aomori, Akita and Yamagata)—constitute the Tōhoku Region of East Japan (National Police Agency of Japan n.d). The earthquake and tsunami destroyed hundreds of thousands of structures, large and small, commercial and residential, and caused massive wide-scale damage to coastal municipalities, roads, railways and other infrastructure. Over four million households lost electricity for several days and 1.5 million were left without water (NPR 2011). Early estimates place insured losses from the earthquake alone at US\$14.5 to \$34.6 billion (Hennessy-Fiske 2011). The nuclear plant catastrophe led to the evacuation of a large area surrounding the power plant site itself and resulting in radiation release into the nearby Pacific Ocean and into the air.

The majority of media-related research that has emerged relating to the 3.11 disaster has focused on social media, an admission that this individual form of communication was more effective than traditional media in terms of post-event information dissemination directly after the earthquake and tsunami. With regard to the print media specifically, the most notable “newspaper story” is that of the six reporters of the *Ishinomaki Hibi Shimbun*, their facility destroyed in the disaster, diligently posting hand-copied issues of the newspaper at sites where residents gathered for six days after the disaster. As for broader newspaper related research, Tkach-Kawasaki (2012) compared major Japanese newspaper websites with international news websites and Rausch (2012a) looked at the six-month coverage by one local newspaper. However, virtually no research has examined local newspaper coverage over a long-term post-event period, for a period up to a year. Against the structural background of the Japanese newspaper industry—five major national newspapers, the Kyodo News Service, and what, for sake of simplicity, can be referred to as prefectural newspapers—the present research focuses on the reporting and representation of the Great East Japan Earthquake by three such prefectural newspapers of the disaster area: the *Fukushima Minpō* of Fukushima Prefecture, the *Kahoku Shimpō* of Miyagi Prefecture, and the *Tōōnippō* of Aomori Prefecture. These three newspapers can be expected to reveal a contrast of views, as much of the tsunami damage associated with the earthquake was on the coastal areas of Miyagi whereas the nuclear power facility disaster played out primarily in Fukushima. Contrasting these two highly affected areas, Aomori was minimally affected by the triple disaster, and as such, can provide a viewpoint that is regional and local (i.e., not national or in another district of Japan), yet not immediate to the earthquake, tsunami or nuclear accident.

The research adopts a multi-faceted approach, starting with a numerical “one-year keyword trend” based on the *Tōōnippō* newspaper database, before turning to the frames found in the disaster-themed columns of the three newspapers along with a nationally-syndicated column. In a methodology that followed that of Miles and Morse (2007) and Barnes et al (2008), keywords were searched in the *Tōōnippō* newspaper database (registration required; Japanese only). This method is also reflected in a short examination of Japan’s post-disaster vocabulary showing that the Japanese terms for “self-restraint” and “reconstruction-recovery” both reached their peak appearance in five main Japanese newspapers in the first week of April, after having increased over the four-week period directly after the earthquake (Ichise 2011). After this peak, the frequency of references to self-restraint fell off sharply, while reconstruction-recovery continued to be used by the media in a consistent pattern through to the end of the examination period in mid-July. Ichise makes an elite agenda-setting interpretation in attributing this to the media adopting various positions espoused by political leaders in the immediate aftermath on the one hand, even though the symbolic importance of respectful restraint as espoused by these media elites contradicted the economic need for recovery activities as offered by others. On the other hand, she also sees a cultural influence at work,



contending that in the use of the “restraint” vocabulary, the media was reflecting persistent Japanese ethnic characteristics which both called for conformity, in the form of restraint, along with the unspoken specter of condemnation should one ignore the calls for restraint.

In terms of the keyword database search in the present research, the Japanese term *higashi nihon daishinsai* (Great East Japan Disaster) was used as the primary keyword, with various terms added to identify the range and strength of certain combinative notions. The added terms included aid, recovery, damage, economy, lifestyle, tourism and policy. An overall time period (12 March 2011 to 31 March 2012; 385 days) was used to establish a baseline for the frequency of keywords, which is contrasted by frequencies over the initial 12 March to 31 March period followed by frequencies for each month. The second component of the research methodology was a focus on the framing of the event on the basis of newspaper columns that focused directly on the earthquake carried by the three newspapers at periodic points after the disaster. News framing analysis, as outlined by Nisbet (2010), suggests that media frames—modes of presentation that serve to organize abundant or complex content—both resonate with the existing schema that readers use and while also generating new schema, thereby strengthening existing connections and creating new connections between current events and broader underlying concepts (Scheufele 1999; Scheufele and Tewksbury 2007). The methodology of Van Gorp (2010) outlines how examination of source material can identify frames on the basis of mode presentation, schema presentation, and specific content presentation, an approach used by Rausch (2011, 2012b) to identify localized ‘revitalization journalism’ through long-running, thematic columns in the Aomori Prefectural *Tōnippō* newspaper. “Columns” in this research represent a specific type of presentation mode, defined and identified on the basis of being a long-running column of content organized on an identified theme. A “column” as viewed for this research is essentially a series of individual columns within a thematic title that identifies the general content of the overall column, with each separate individual column in the sequence, usually numbered, carrying a specific sub-theme related to the larger theme (see Figure 1). As shown, the column title is *Aomori Thinks about the 3.11 Disaster—Lessons from Fukushima*, within which there are six sub-sections (five shown), each with its own sub-title and consisting of multiple columns. Most columns are one-sixth of a news page, have an eye-catching logo, and are carried at regular intervals for a set period of time (e.g. everyday for one week; every Tuesday for two months) in the same place within the newspaper (e.g. upper left corner of page 18). Most of the columns are written by newspaper staff; in other cases, an unaffiliated group may prepare the content. In the present research, the unit of analysis is the newspaper columns that emerged after the disaster event constituting the presentation mode, with the schema reflected in the thematic title of any single column series constituting the interpretive frame. The titles of the column subsections—the framing of the specific columns—can be viewed as a

significant element in the social construction of the post-disaster consciousness surrounding the event.

Figure 1. Example of a Serial Column



Note 1: From Aomori Prefecture *Tōōnippō* newspaper: see Table 4 for details.

Note 2: “3.11 大震災青森考 フクシマの教訓” is the column title (Aomori Thinks about the 3.11 Disaster Lessons from Fukushima); “第2部、第3部、...” are the sub-sections (Section 1, Section 2, ...) within the column, each with specific titles per the content; each sub-section is numbered below the sub-section title (e.g. 2, 2, 1, 7, 1).

## The One-Year Keyword Trends

First of all, the primary term Great East Japan Disaster (*higashi nihon daishinsai*) yielded 5200 hits for the *Tōōnippō* newspaper over the base period (12 March 2011 to 31 March 2012). This translates into an overall average of approximately 14 references to the disaster per daily newspaper for the entire period. For the immediate post-earthquake period, from March 12 to the end of that month, 765 “Great East Japan Disaster” references emerged, equaling 38 references per day (see Table 1). By April, this fell to 26, by May and June to around 18, by July and August around 11 and by September to nine references per newspaper day. The one-year anniversary (March 2012) saw the daily references rise to 12 per day.

Rausch: Regional Newspaper in Post-Disaster Coverage

Table 1. *Tōdōnippō* Newspaper: Key Word Combinations

	20113.11~ 20123.31	3.12~ 3.30	4 April	5 May	6 Jun	7 July	8 Aug	9 Sept	10 Oct	11 Nov	12 Dec	1 Jan	2 Feb	3 Mar
<b>Great East Japan Disaster</b>	<b>5200</b> <b>14/day</b>	<b>765</b> <b>38/d</b>	<b>767</b> <b>26/d</b>	<b>563</b> <b>18/d</b>	<b>510</b> <b>17/d</b>	<b>429</b> <b>14/d</b>	349 11/d	282 9/d	254 8/d	299 10/d	301 10/d	206 7/d	205 7/d	358 12/d
+ aid (shien)	<b>1727</b> <b>4.5/d</b>	<b>273</b> <b>14/d</b>	<b>274</b> <b>9.1/d</b>	<b>211</b> <b>7.0/d</b>	<b>171</b> <b>5.7/d</b>	130 4.2/d	105 3.5/d	81	96	102	103	56	69	99 3.2/d
+ recovery (fukko)	1485 3.9/d	<b>107</b> <b>5.4/d</b>	<b>211</b> <b>7.0/d</b>	<b>192</b> <b>6.2/d</b>	<b>131</b> <b>4.4/d</b>	<b>120</b> <b>3.9/d</b>	<b>122</b> <b>3.9/d</b>	95 3.2/d	73	87	100	73	70	116 3.7/d
+ damage (higai)	1303 3.4/d	<b>253</b> <b>13/d</b>	<b>215</b> <b>7.0/d</b>	<b>137</b> <b>4.0/d</b>	<b>123</b> <b>4.1/d</b>	100 3.3/d	67	56	61	51	75	51	43	90 2.9/d
+ economy (keizai)	771 2.0/d	29 1.5/d	<b>114</b> <b>3.8/d</b>	<b>96</b> <b>3.1/d</b>	<b>88</b> <b>2.9/d</b>	<b>72</b> <b>2.3/d</b>	52 1.7/d	50	32	63	45	46	38	52 1.7/d
+ lifestyle (seikatsu)	741 1.9/d	<b>191</b> <b>9.5/d</b>	<b>139</b> <b>4.6/d</b>	<b>75</b> <b>2.4/d</b>	<b>75</b> <b>2.4/d</b>	40 1.3/d	30	30	18	24	35	34	22	49 1.6/d
+ tourism (kanko)	600 1.6/d	<b>62</b> <b>3.1/d</b>	<b>108</b> <b>3.6/d</b>	<b>74</b> <b>2.4/d</b>	<b>64</b> <b>2.1/d</b>	<b>52</b> <b>1.7/d</b>	34 1.1/d	30	31	32	34	25	23	35 1.1/d
+ policy (seisaku)	603 1.6/d	<b>43</b> <b>2.2/d</b>	<b>98</b> <b>3.3/d</b>	<b>73</b> <b>2.4/d</b>	<b>68</b> <b>2.3/d</b>	39 1.3/d	48 1.5/d	40	38	46	48	21	18	40 1.3/d

Note:  $n$  = total number of references per time period.

Source: *Tōdōnippō* newspaper database; *Tōdōnippō* website.

As evident in Table 1, two broad trends emerged. First, the crossover points at which references went from being above the average for the year-long period versus being below occurred across June, July and August. What this indicates is that, as a news item, the event was above its average trend for the year for April, May, June, July and August, after which the number of references declined to be below the average for the research term. As will be shown, this five-month post-disaster period is the point at which many of the newspaper columns dedicated to the event introduced in the next section were begun. The second trend concerns the themes that were associated with the disaster, with a high frequency combination being associated with “aid,” at 4.5 references per day overall, followed by relatively high associations with “recovery” (3.9 references per day) and “damage” (3.4 references per day) overall. Naturally, the levels for aid and damage were higher than recovery during the period directly after the disaster itself (14 and 13 references/day versus 5.4 for March, with a similar pattern for April), after which aid and recovery were generally higher for each monthly period thereafter. While terminological—and thus thematic—overlap is inherent in this assessment, this one-year view serves to identify the trends and the content of the coverage of the disaster as news.

### **Newspaper Columns as Framing: The Three Newspapers**

As reported by Rausch (2012a), the *Tōōnippō* presented a case of narrative framing in a series of special newspaper sections titled *Tōhoku Take Off—Lively Japan Meeting*. The first two, *Six Months After*, carried in mid-September, reflected, first, descriptions of the disaster, followed by a focus on the level of destruction affecting industry and fisheries. This was followed by reporting on several locations throughout the larger Tōhoku Region, but with a focus exclusively on local residents’ initial response, thereby building a human-interest narrative. The next three *Tōhoku Take Off—Lively Japan Meeting* representations revealed a transition from recognition and acceptance of the disaster to the recovery efforts, again based on residents’ stories in the six Tōhoku prefectures. This is followed by a focus on the volunteer support that had been brought to the disaster areas, countered by the difficulty of the recovery efforts and the slow progress, all presented alongside accompanying human-interest articles that were upbeat, highlighting interviewees working to restart businesses or support the recovery of industries.

As for the disaster-related columns of the three newspapers—the *Fukushima Minpō* of Fukushima Prefecture, the *Kahoku Shimpō* of Miyagi Prefecture, and the *Tōōnippō* of Aomori Prefecture—the framing that emerged in the serial columns understandably presented three very different views of the disaster and both its implications and the way forward. In the case of the *Fukushima Minpō*, based on the newspaper homepage and as shown in Table 2, there have been 16 column titles related to the disaster. Of the 16 columns, eight focused specifically on the nuclear reactor failure and the aftermath directly as evidenced by the column title and contents, with these accounting numerically

for just over 70 percent of the total number of columns. However, this 70 percent portion reflected one column comprising just under 80 percent of the columns on the reactor disaster (*The Accident at the Fukushima First Plant*; 1684 columns).

**Table 2. *Fukushima Minpō* Columns**

Column title	Column start date	Number of columns
<i>The Accident at the Fukushima First Plant</i>	March 2011	<b>1684</b>
Reporting from the Disaster Area	March 2011	15
Radiation: Q&A about Radiation and Living Things	April 2011	42
Column: Life Now	April 2011	346
3.11 Disaster: Cross Section	July 2011	283
Column: Nuclear Power and the Great Separation	July 2011	48
3.11 Disaster: Investigation	October 2011	35
3.11 Disaster: Fukushima and Nuclear Power	October 2011	132
Column: Recovery 2012	January 2012	89
You Won't be Forgotten	March 2012	77
The Chernobyl Nuclear Accident: Lessons for Fukushima	*	5
Seven Months after the Disaster	October 2011	30
Eight Months after the Disaster	November 2011	24
Nine Months after the Disaster	December 2011	21
Ten Months after the Disaster	January 2012	11
3.11: One Year On	March 2012	39
Number of column titles: 16	Number of columns: 2881	

Note: as of 2 October 2012; \* start date not recorded; column titles translated by author.

Source: *Fukushima Minpō* website, undated.

For the *Kahoku Shimpō* of Miyagi Prefecture, while the number of column titles mirrored the figures for the *Fukushima Minpō* (see Table 3), the number of actual columns was both fewer while also being more evenly spread across themes, which is to say there was no single theme that dominated as *The Accident at the Fukushima First Plant* column did for the Fukushima case. As such, the dominant framing for the *Kahoku Shimpō* was more dispersed, with the largest theme by percentage, focusing on testimonies of the event (*Testimony—Focus: The 3.11 Disaster*), accounting for approximately one third (327 columns). Another quarter of the total number of columns could be categorized as focusing on recovery, but this percentage block was comprised of ten different column titles. Other themes included refugee facilities, volunteer efforts, therapeutic activities, and memories of the disaster and the deceased. Another characteristic of two of the *Kahoku Shimpō* columns was the degree to which a general theme (*Course of Recovery* and *Living from now with the Disaster*) was subdivided into specific sub-themes, five focusing on recovery in the former case (72 columns), and eleven on individual viewpoints in the latter (79 columns). This constitutes a frame within a frame structure, contributing to a powerful continuity and consistency of theme within which tremendous and highly specific detail is provided. A final element was the degree to which both individuals were used as sources for columns, seen in 29

interviews in the case of the *Hometown Recovery* column, and the fates of towns was followed through the one-year period, as in the *Course of Recovery* columns.

**Table 3. *Kahoku Shimpō* Columns**

Column title	Start date	Theme	Column numbers
Support	Mar. 2011	recovery	102
Hometown Recovery: Hearing from the Mayor	Apr. 2011	recovery	12 complete
Hometown Recovery: Hearing from Supporters			29 complete
Testimony—Focus: The 3.11 Disaster	May 2011	event	<b>327</b>
Connect: Step Forward	May 2011	recovery	17 complete
From Now: Disaster Area Support	May 2011	recovery	13 complete
Refugee Facilities Now	May 2011	disaster	70 complete
Perspectives on the Recovery	June 2011	recovery	6 complete
Beginning the Work: Recovery Plan	June 2011	recovery	5 complete
Course of Recovery	June 2011		
1 <sup>st</sup> series: damaged towns, 3-months after		event	14
2 <sup>nd</sup> series: from local governments		recovery	10
3 <sup>rd</sup> series: discussions about recovery plans		recovery	14
4 <sup>th</sup> series: inspections and recovery plans		recovery	19
5 <sup>th</sup> series: damaged towns, 1-year after		recovery	15
			total 72 complete
Living from now with the Disaster	Sept. 2011		
1 <sup>st</sup> series: jobs		recovery	9
2 <sup>nd</sup> series: orphans		recovery	7
3 <sup>rd</sup> series: temporary living		recovery	10
4 <sup>th</sup> series: various 'homes'		recovery	8
5 <sup>th</sup> series: heart and spirit		recovery	5
6 <sup>th</sup> series: strength		recovery	10
7 <sup>th</sup> series: gaps		recovery	7
8 <sup>th</sup> series: region		recovery	6
9 <sup>th</sup> series: crossroads		recovery	7
10 <sup>th</sup> series: 18 years old, spring		recovery	5
11 <sup>th</sup> series: entrusting to		recovery	5
			total 79 complete
3.11 Memories: You won't be forgotten	Sept. 2011	event	34
Disaster Progress Report: Half-year on	Sept. 2011	recovery	16 complete
Rebuilding: Tidings from the Disaster Area	Oct. 2011	recovery	60
Rebuild Sendai: Human Design	Jan. 2012	recovery	30
Volunteers and the Disaster	Apr. 2012	recovery	28 complete
The Disaster in Sendai: That Day	*	event	32 complete
The Tsunami: Therapeutic Drawings	*	event	75 complete
Memories of the Disaster	*	event	26 complete
Documentary of the Disaster	*	event	22 complete
Number of column titles: 19	Total number of columns: 1055		

Note: Data as of 2 October 2012; \* start date not recorded; column titles translated by author; *complete* indicates the column was finished at the time of the research; others were continuing. Source: *Kahoku Shimpō* website, undated.

Finally, in the case of the *Tōōnippō* of Aomori Prefecture, there were notably fewer columns focusing specifically on the disaster. According to the *Tōōnippō* website, there were four columns related specifically to the 3.11 disaster: *Thinking of Aomori and 3.11*:

*Views of Heart and Life* (14 columns), *3.11 Lessons for Hachinohe (City)* (six columns), *The Fragile Lifeline* (six columns), and *Aomori One Year On* (nine columns). However, beginning with a column run from July 2011, there was a more extensive column dedicated to questions relevant to Aomori that emerged out of the Fukushima nuclear power facility disaster: *Aomori Thinks about the 3.11 Disaster—Lessons from Fukushima*. The column consisted of the six sub-sections as shown in Table 4, with from three to eight columns for each. What emerges from analysis of the contents of these six sections was a picture of a column transitioning from the “reality” of the catastrophe, to framings of “policy,” “technology” and “governance,” constituting a highly analytical and forward-looking treatment of the event—essentially coming to speak to the issues relevant to policy development.

**Table 4: *Tōnippō* ‘Lessons from Fukushima’ Columns**

Section title	Start Date: July, 2011	Thematic frame	Columns
1. Going to the Site		Reality	1~5
2. TEPCO Management Regrets		Policy	1~5
3. Nuclear Energy that can Withstand Tsunami		Technology	1~3
4. Objections of the Neighbors		Local governance	1~8
5. Asking about the Safety of Prefectural Nuclear Facilities		Technology/policy	1~7
6. Geological Fault Problem		Technology/policy	1~3
End Date: February 2012			31

Source: *Tōnippō* website, undated; column titles translated by author.

Finally, there were three other series columns carried in the Aomori newspaper but which were representative of non-place based themes: *New Japan Happiness* (six sections: 5 January 2012 to 5 December 2012), *Disaster and Literature* (51 columns, completed 6 August 2012), and *Earthquakes and Comics* (four columns, 13-17 September 2012). The latter two, while less prominent than former, reveal a framing which connects the event to other influential social frames, namely literature and manga (Japanese comic books). More prominent, however, in terms of both volume (the number of columns) and breadth (the range of issues taken up), was the *New Japan Happiness* column. Descriptive data for the six sections that have been published to date is given in Table 5. The series is attributed to Kyodo News Service and, according to a Kyodo spokesperson, is carried in from 20 to 30 newspapers nationally. The six sections that have been published have been authored by six different journalists, with place associations reflecting disaster site areas such as Miyagi, Iwate, and Fukushima Prefectures, as well as one section that makes connections to Kobe on the basis of the Hanshin-Awaji Earthquake of 1995 and various sites to which disaster site residents have evacuated. As shown, the disaster-related themes seem to have little to do with “new happiness,” covering, in order: (1) the orphaning of children that accompanied the tsunami fatalities (20 columns); (2) the places that were destroyed by the tsunami and left without residents due to the nuclear power plant disaster (15 columns); (3) the fear

regarding radiation that accompanied the plant disaster (23 columns); (4) the realities of evacuation from the disaster areas for the evacuees residing elsewhere (13 columns); (5) the longer-term and continuing effects of the disaster, in a column section titled “scars” (22 columns); and (6) the new reality of local towns and nuclear power generation (12 columns).

**Table 5 ‘New Japan Happiness’ Columns**

	Start date	Number of columns	End date
Section One: Orphans ( <i>dai ichi bu: ijitachi</i> )	5 January 2012	20	24 January 2012
Section Two: Hometowns ( <i>dai ni bu: kokyō yo</i> )	14 February 2012	15	28 February 2012
Section Three: Unease over Radiation ( <i>dai san bu: hibaku fuan</i> )	1 April 2012	23	1 May 2012
Section Four: From Exile ( <i>dai yon bu: ikyō kara</i> )	29 May 2012	13	17 June 2012
Section Five: Scars ( <i>dai go bu: kizuato</i> )	11 September 2012	22	12 October 2012
Section Six: Towns and Nuclear Power ( <i>dai roku bu: machi to genpatsu</i> )	19 November 2012	12	5 December 2012
Summary	5 January 2012	105	5 December 2012

Source: Kyodo News Service; column titles translated by author.

## Discussion

The research herein has looked at local newspaper coverage of the one-year period following the Great East Japan Earthquake of March 2011, tracking the keyword trends and examining disaster-related long-running newspaper columns of three disaster-area local newspapers. The conclusions of Rausch (2012a) speak to the function of the newspaper in terms of general disaster coverage as presented in the background section of this paper, reflecting a newspaper fulfilling its multiple social functions—among them a social utility function, a disaster narrative function, and policy information dissemination. The present research focuses specifically on serial columns as a newspaper journalism style and the long-term treatment of the disaster through such columns—highlighting first, the transition of newspaper coverage from treating the disaster as “news” to coverage in the form of serial columns, and second focusing on the specific content of these ‘post-news’ serial columns.

That this transition occurred at a period of from three to six months after the disaster (June, July, August) on an overall time frame of a year reflects the reality of news; any event or issue eventually becomes sufficiently covered as news, while new events and new issues emerge that demand the news space taken up by the original issue. Summer 2011 in Japan saw torrential rains throughout southern Japan and ongoing uncertainty about the newly elected Social Democratic Party as just two of the events and issues that



came to supersede the earthquake. However, the transition from status as news to being presented in a different format in a newspaper also signals a change in the way the content comes to be viewed. In the present case, the emergence of the newspaper coverage of the earthquake disaster through newspaper columns is significant not just on the basis of the explicit signaling created by this framing, but also by virtue of the thematic range that came to be accommodated by the columns coupled with the continuity and consistency for each that was enforced by the column format. The columns ultimately accommodated a wide range of views about the disaster that were not “news”, including such divergent topics and functions as providing therapeutic support to victims, giving voice to affected residents, outlining various perspectives on recovery, and disseminating analysis of contributing causes and information that should guide appropriate future policy. In addition, the use of the column as a primary mode of framing also ensured continuity and consistency in the presentation of these specific themes. These two characteristics of the framing of the disaster through columns—a range of diverse topics, each presented with consistency and continuity—are evident in the number of columns (16 column titles for the *Fukushima Minpō* and 19 column titles for the *Kahoku Shimpō*) and in the 150-plus separate columns in just two column titles of the *Kahoku Shimpō*.

Regarding the content of the columns, while it is understandable that the *Fukushima Minpō* and the *Kahoku Shimpō* would concentrate on themes relevant to their specific post-disaster circumstance, the *Tōōnippō* presents a different case through two different columns. Although being relatively unaffected by the earthquake or nuclear disaster, the *Tōōnippō* was host to a detailed assessment of the future of the nuclear power industry, in the form of the *Lessons from Fukushima* column. Building on the idea of serial columns as signaling content that is not news *per se*, the *Lessons from Fukushima* columns served as policy-related informational-educational content for residents of Aomori Prefecture, home to three nuclear power related facilities—two nuclear energy power plants and a nuclear waste reprocessing facility. Finally, that a column taking up such tragic issues as the circumstance of post-disaster orphans, the general unease over radiation exposure, the realities of resident evacuation and the long-lasting effects of such a such a disaster should have as its moniker *New Japan Happiness* is revealing in its framing and, presumably, indicative a new interpretation to serial columns in their treatment of the 3.11 disaster. Such optimistic framing over such a long term—six column themes totaling over 100 separate columns carried by approximately 20-30 papers across Japan (according to a spokesperson for Kyodo News)—peaks to the potential for column framing in the process of public memory creation, in the form of the awareness component of the 3.11 memory career.

The present research thus concludes by considering the process and implications of the columns, contrasting the general columns with the specific case of the *New Japan Happiness* column. First of all, the general columns carried by the three local papers are

specifically local; they are produced locally, focus on local themes and are intended for a local audience. The *New Japan Happiness* column is, however, produced by a national news consolidation entity and, while focusing primarily on the disaster site and disaster-related issues, is distributed through newspapers throughout Japan. Viewing the columns, both the general columns and the *New Japan Happiness* column, in terms of Livingston and Bennett's (2003) multi-gated gatekeeper model reveals less about any tension and conflict of the four gatekeeping ideals than an overlapping of the defining elements that constitute each. As for the "decision basis," the columns reflect both a reporter driven process that is organizationally controlled with editorial standards, but which, while not technologically-driven, still has elements of immediacy as the post-disaster period unfolds and information fidelity on the basis of prioritization of local voices. The "information gathering and organizing" element reflects an investigatory approach through use of personal sources whereas the "journalistic role" is more record keeper (as opposed to watchdog) and transmitter (as opposed to content provider). The "conception of the public" that is reflected in the columns holds readers as engaged citizens with writers working in the public interest as well as being social monitors. Whatever voyeuristic elements that are inherent in looking at the lives and fates of disaster victims that emerge are well contextualized within the overarching theme of the disaster. Finally, the "gatekeeping norm" that would seem to be at work reflects a combinative "independence-eyewitness" amalgamation—the journalists set the themes, whereas the local resident sources determine the details. Livingston and Bennett's conclusions were that event-driven news is an increasingly dominating reality in modern news focus and dissemination, where framing represents the struggle of determining the meaning of the events that thus constitute the news. The implications of the use of columns in event-driven news, in this case a natural disaster, are that the columns allow for multiple framing as a function of the multiple gatekeeping norms that are brought to the process of their production.

The second implication of the use of columns in response to a disaster is that regarding public memory. In an edited work on social memory in Japan, Ben-Ari, Van Bremen and Hui (2005) offer that Japan has an extensive and consistent preoccupation with the past and with memories from the past. This, they contend, is a result of cultural experiences with large-scale crisis, a search for a distinctive cultural identity, the opportunities of economic success to make it possible, a desire to avoid loss of memory as living memories fade over time, and the importance of place in Japanese consciousness. Taking up disasters specifically, a work included in the Ben-Ari et al. book examines preservation of the memories of the January 1995 Hanshin-Awaji (Kobe, Japan) earthquake, in the form of "memory volunteers," who orally recount the event and add subjective moral lessons (Thang 2005). While not written to reflect on media processes, the work highlights the de-politicization of the event that takes place through such oral memories, whereby responsibility for the scale of the disaster that could be

leveled at a government not equipped to deal with such a catastrophe is replaced with a lesson of hope to be taken from the event; the disaster resulted in the emergence of unprecedented numbers of individual volunteers and the systemization of the non-profit sector in Japan. That noted, this construct of public memory (what they term “social memory”) manifests itself principally in commemoration, but commemorations which are often based in narratives created and disseminated by a variety of memory agents, among them journalists and newspapers. The practice of columns as described in this present research could be surmised to be a part of this work of journalism as memory agents, in a form that initially establishes and thereafter sustains event awareness. The general columns, those carried by the local papers and taking up the local issues that emerged out of the disaster, represent the first step of a public memory career for the event at the local level. In the case of the *New Japan Happiness* column, the influence is not only wider, both in terms of content and geographical extent, but also in terms of establishing such a tragic event as a starting point for “new Japan happiness.”

While the research herein has focused on the transition in the journalistic treatment of Japan’s 3.11 disaster from news item to serial columns and the character and content of such columns, a question that begs more research concerns the function, manifest and latent, of these columns. I have offered a longer-term view, a view that extends beyond immediate post-event “news coverage”, together with the topic range and flexibility together with thematic consistency and continuity as the manifest characteristics of columns that mark them as distinct from news articles. In addition to this, I propose a latent function in the establishment and near-term development of the 3.11 public memory through these disaster-related columns. As to the outcome of this function, only time will tell what memories are kept and what are lost.

## References

- Anderson, Alison. 1997. *Media, Culture, and the Environment*. New Brunswick, N.J.: Rutgers University Press.
- Barnes, Michael D., Carl L. Hanson, Len M.B. Novilla, Aaron T. Meacham, Emily McIntyre, and Brittany C. Erickson. 2008. “Analysis of Media Agenda Setting During and After Hurricane Katrina: Implications for Emergency Preparedness, Disaster Response, and Disaster Policy.” *American Journal of Public Health* 98 (4): 604-610.
- Ben-Ari, Eyal, Jan Van Bremen, and Tsu Yun Hui. 2005. “Memory, Scholarship and the Study of Japan.” Pp. 1-19 in *Perspectives on Social Memory in Japan*, edited by Tsu Yun Hui, Jan Van Bremen, and Eyal Ben-Ari. Kent, United Kingdom: Global Oriental.

- Bennett, W. Lance. 2004. "Gatekeeping and press-government relations: A multi-gated model of news construction." Pp. 283-313 in *Handbook of Political Communication Research*, edited by Lynda Lee Kaid. Mahwah, NJ: Erlbaum.
- Buerk, Roland. 2011. "Japan Earthquake: Tsunami Hits North-east." *BBC News*. Available at <http://www.bbc.co.uk/news/world-asia-pacific-12709598>. Retrieved on March 11, 2011.
- Casey, Edward S. 2004. "Public Memory in Place and Time." Pp. 17-44 in *Framing Public Memory*, edited by Kendall Phillips. Tuscaloosa, Alabama: University of Alabama Press.
- Chong, Dennis and James N. Druckman. 2007. "Framing Theory." *Annual Review of Political Science* 10: 103-126.
- Entman, Robert. M. 1993. "Framing: Towards Clarification of a Fractured Paradigm." *Journal of Communication* 41: 6-27.
- Eulmann, Marc Jan and Martin Stadelmeier (eds.). 2009. *Media Governance and Medienregulierung*. Berlin: Vorwärts.
- Hennessy-Fiske, Molly. 2011. "Japan Earthquake: Insurance Cost for Quake alone Pegged at \$35 Billion, AIR Says." *Los Angeles Times*. Available at <http://articles.latimes.com/2011/mar/13/world/la-fgw-japan-quake-insurance-20110314>. Retrieved on March 13, 2011.
- Houston, J. Brian, Betty Pfefferbaum and Cathy Ellen Rosenholtz. 2012. "Disaster News: Framing and Frame Changing in Coverage of Major U.S. Natural Disasters, 2000-2010." *Journalism and Mass Communication Quarterly* 89(4): 606-623.
- Ichise, Akemi. 2011. "Japan's Post-Disaster Vocabulary." *Frontline* (September 2011), Article ID 2226. Available at [www.ipra.org/print.asp?articleid=2226](http://www.ipra.org/print.asp?articleid=2226). Retrieved on October 10, 2011.
- Kitch, Carolyn. 2008. "Placing Journalism inside Memory—and Memory Studies." *Memory Studies* 1(3): 311-320.
- Livingston, Steven and W. Lance Bennett. 2003. "Gatekeeping, Indexing, and Live-Event News: Is Technology Altering the Construction of News?" *Political Communication* 20: 363-380.
- Luthje, Corinna. 2009. "Conceptualizing the interconnected agents of collective memory: The transforming perception of a regional geohazard between mediated discourse and conversation." Paper presented to ECREA Philosophy of Communication Conference, 9-11 December. Available at [www.wiso.uni-hamburg.de/fileadmin/sowi/journalistik/PDFs/CLuthje-London-021209.pdf](http://www.wiso.uni-hamburg.de/fileadmin/sowi/journalistik/PDFs/CLuthje-London-021209.pdf). Retrieved on Nov. 15, 2012.
- Miles, Brian and Stephanie Morse. 2007. "The Role of News Media in Natural Disaster Risk and Recovery." *Ecological Economics* 63: 365-373.
- NPR Staff and Wires. 2011. "Millions of Stricken Japanese Lack Water, Food, Heat." *National Public Radio*. Available at <http://www.npr.org/2011/03/18/134527591/millions-of-stricken-japanese-lack-water-food-heat>. Retrieved on Nov. 15, 2012.

- National Police Agency of Japan. n.d. Damage Situation and Police Countermeasures. Emergency Disaster Countermeasures Headquarters. Available at [www.npa.go.jp/archive/keibi/biki/higaijokyo\\_e.pdf](http://www.npa.go.jp/archive/keibi/biki/higaijokyo_e.pdf). Retrieved on Nov. 15, 2012.
- Nisbet, Matthew C. 2010. "Knowledge into Action: Framing the Debates over Climate Change and Poverty." Pp. 43-83 in *Doing News Framing Analysis: Empirical and Theoretical Perspectives*, edited by Paul D'Angelo and Jim A. Kuypers. New York: Routledge.
- Pidgeon, Nicholas F., Roger K. Kasperson, and Paul Slovic. 2003. *The Social Amplification of Risk*. Cambridge: Cambridge University Press.
- Rausch, Anthony S. 2011. "Revitalization Journalism in Rural Japanese Newspapers: A Case Study of the Tōōnippō Newspaper and Aomori Prefecture." *Journal of International and Advanced Japanese Studies* 3: 1-14.
- , 2012a. "Framing a Catastrophe: Portrayal of the 3.11 Disaster by a Local Japanese Newspaper." *Electronic Journal of Contemporary Japanese Studies*. Available at [www.japanesestudies.org.uk/discussionpapers/2012/Rausch.html](http://www.japanesestudies.org.uk/discussionpapers/2012/Rausch.html). Retrieved on Nov. 15, 2012.
- , 2012b. *Japan's Local Newspapers: Chihoshi and Revitalization Journalism*. London, U.K.: Routledge.
- Scheufele, Dietram A. 1999. "Framing as a Theory of Media Effects." *Journal of Communication* 49(1): 103-122.
- Scheufele, Dietram A. and David Tewksbury. 2007. "Framing, Agenda-setting, and Priming: The Evolution of Three Media Effect Models." *Journal of Communication* 57: 9-20.
- Svitak, Tyler. 2010. *Chile vs. Haiti: How Did the Media Frame the Earthquakes in Haiti and Chile?* University of Delaware Disaster Research Center: Final Project Report #55.
- Thang, Leng Leng. 2005. "Preserving the Memories of Terror: Kobe Earthquake Survivors as 'Memory Volunteers'." Pp. 191-203 in *Perspectives on Social Memory in Japan*, edited by Tsu Yun Hui, Jan Van Bremen, and Eyal Ben-Ari. Kent, United Kingdom: Global Oriental.
- Tkach-Kawasaki, Leslie. 2012. "March 11, 2011 online: comparing Japanese newspaper websites with international news websites." Pp. 109-123 in *Natural Disaster and Nuclear Crisis in Japan: Responses and Recovery after Japan's 3/11*, edited by Jeff Kingston. London, U.K.: Routledge.
- Van Gorp, Baldwin. 2010. "Strategies to Take Subjectivity out of Framing Analysis." Pp. 84-109 in *Doing News Framing Analysis: Empirical and Theoretical Perspectives*, edited by in Paul D'Angelo and Jim A. Kuypers. New York: Routledge.
- Vasterman, Peter, Joris C. Yzermans, and Anja, J.E. Dirkzwager. 2005. "The Role of the Media and Media Hypes in the Aftermath of Disasters." *Epidemiologic Reviews* 27: 107-114.

- Vultee, Fred. 2009. "News Frames of Mitigation and Responsibility After Hurricane Katrina." *International Journal of Mass Emergencies and Disasters* 27 (2): 103-126.
- Vultee, Fred and Lee Wilkins. 2004. "News as a Public Service: Thinking Through Coverage of Disasters and Terrorism." *White Paper: Disasters and Terrorism*. Available at <http://disasterreporting.missouri.edu/resources/pubs/news.pdf>. Retrieved on Oct. 7, 2011.
- Welzer, Harald. 2001. "Das soziale Gedachtnis." Pp. 9-21 in *Das soziale Gedachtnis*, edited by Harald Welzer. Hamburg: Geschichte, Erinnerung, Tradierung.
- Wenham, Brian. 1994. "The Media and Disasters: Building a Better Understanding." *International Disaster Communication: Harnessing the Power of Communication to Avert Disasters and Save Lives*. Washington, D.C., The Annenberg Washington Program. Available at [www.annenberg.northwestern.edu/pubs/disas/disas6.htm](http://www.annenberg.northwestern.edu/pubs/disas/disas6.htm). Retrieved on Nov. 15, 2012.
- Yin, Liangen and Haiyan Wang. 2010. "People-centered Myth: Representation of the Wenchuan Earthquake in China Daily." *Discourse and Communication* 4(4): 383-398.
- Zelizer, Barbie. 2008. "Why Memory's Work on Journalism does not Reflect Journalism's Work on Memory." *Memory Studies* 1(1): 79-87.