



## How to Measure Professional Journalistic Standards in Television News Coverage of Disasters? 27-F Earthquake in Chile

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### Introduction

At 3:34 a.m. on February 27, 2010, an earthquake measuring 8.8 degrees on the Richter scale struck central Chile—the second strongest earthquake in Chile’s history. For millions of people, it was their last weekend of summer vacation. The earthquake was followed by a tsunami that devastated the coast of the center-south of Chile and generated alerts in more than 50 countries around the Pacific Ocean. It was the biggest catastrophe the country had faced in the past 25 years. Even though Chile has a seismic culture (De la Llera, 2011; Lagos, 2011), the phenomenon challenged the institutions in charge (government, emergency offices, etc.), which were pushed to the limits of their human and technical capacities.

The earthquake became an opportunity for Chilean and Latin American scholars to analyze the country’s resources and protocols for facing disasters, and to develop strategies to deal with future crises. Research that supports this article seeks to contribute to this analysis by examining the role of journalism—mainly in the area of television—in the crisis, as the earthquake led to professional routines being altered and revealed a number of procedural deficiencies.

The earthquake was at 3:34 am, and I was at the TV station at 3:50. Some people were already there. . . . Our mobile units were not operational. Then we started to send people to the street, with the few cameras we had to make tape-delayed reports. . . . The mobile unit we had for the Festival of Viña<sup>2</sup> was operational, so we were able quickly be live. Communications were cut, so . . . we knew nothing of what was going on!<sup>3</sup>

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<sup>2</sup> The Viña del Mar International Song Festival has been held annually during February since 1960 in a city located 134 kilometers from Santiago. It is considered the most important musical event in South America.

<sup>3</sup> Interview by the research team in July 2011.

This statement comes from the editor of an over-the-air television station with a national scope and describes the chaos experienced by the media early in the morning on February 27, 2010. The lack of logistical protocols, the dearth of official information, and cut roads and communication infrastructure were the first obstacles that journalists and editors had to confront. Other purely professional challenges associated with the selection and treatment of information and images quickly became apparent. This study seeks to reflect on these challenges.

This article presents a content analysis instrument designed to examine the work done by the press departments of television channels in the coverage of the 27F earthquake. Its objective is to diagnose which professional criteria were present in the coverage and which were absent.

When the media faces a disaster of great magnitude, the coverage tests the professional skills, resources, and protocols of members of the media as well as their ability to respond to citizens' needs in order to reduce their vulnerability through the delivery of timely, truthful, and contextualized information. This is the premise underlying the design and selection of variables used in this study.

### **Theoretical Framework** ***The Role of Journalism in Disasters***

Potter and Ricchiardi (2006) stated that a disaster is "a critical event that alters the regular order of things" and clarified that "for journalists, a disaster is the kind of breaking news that deserves extensive coverage" (p. 8). Included in their definition are critical events such as natural phenomena, massive accidents, chemical emergencies, and terrorism, among others.

Because disasters are usually unforeseen, sudden, dangerous, and even unexplained (Lozano, 2006), they often affect a wide range of sectors. Green (2005) proposed that cataloging an event as a catastrophe— independent of its magnitude and of the stability and preparation of a country's institutions— always assumes the breakdown of several different levels of society: "It's not the natural hazard itself that kills, it's the social and political decisions which place people in the face of the hazard or increase their vulnerability" (P. Green, personal communication, February 18, 2013).

Examples of catastrophes are man-made disasters such as the attack on the World Trade Center on September 11, 2001 (Zelizer & Allan, 2004), the bombing of the Madrid metro on March 11, 2004 (Crovi & Lozano, 2005; Moya & Morales-Marente, 2005), and the attack on the London transport system that occurred on July 7, 2005 (Lowrey et al., 2007; Ost, Granhag, Udell, & Roos af Hjelmsäter, 2008). Natural disasters that rank as catastrophes include hurricanes Katrina and Rita (Barnes et al., 2008; Kates, Colten, Laska, & Leatherman, 2006; Littlefield & Quenette, 2007; Malhotra & Kuo, 2012; Zawahri, 2007), the Haiti earthquake in 2010 (Chouliaraki, 2010; Petersen, 2011), the tsunami in Indonesia in 2004 (Morgan et al., 2006), and the earthquake in Chile in 2010 (García & Mardones, 2010, Leiva & Quintana, 2010).

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When chaos prevails and the population feels suddenly vulnerable, journalism plays a relevant role in helping to overcome the uncertainty caused by the crisis (Lowrey et al., 2007), and journalists are also meant to be collaborators in allowing an affected community to return to normality (Hindman & Coyle, 1999). Zelizer and Allan (2004) asserted that "journalism plays a key role in moving whole populations from trauma to recovery precisely through questions related to identity" (p. 2). Stolzenburg (2007) stated that

one elementary pillar of disaster mitigation and response is the management of relevant information. The Pan-American Health Organization (PAHO) points out that the efficiency of humanitarian response and the number of lives saved is directly related to the ability of an organization to compile, analyze, and distribute information. (p. 8)

The importance of the media in the context of a crisis has also spread to other areas. The idea that journalists are an important part of a generalized effort to prepare local communities to face the dangers associated with natural disasters (Burkhart, 1991) has intensified. It also has been established that coverage of natural disasters can influence the foreign policy agendas of non-affected governments and intensify the arrival of international aid by making the humanitarian needs of affected populations more visible (Olsen, Carstensen, & Høyen, 2003).

In the case of Latin America and the Caribbean, several studies have shown that countries in this area are much more vulnerable and less resilient than developed countries (ECLAC, 2003, 2005; PAHO, 2009). Hence, it is important to establish mitigation plans to help make Latin America and the Caribbean more disaster resistant (Stolzenburg, 2007).

### ***Journalistic Challenges***

The first barriers that news departments must overcome are logistical problems: a dearth of people and equipment, a lack of energy, cuts in communication, risk of exposure to disease, and a lack of food, among others (Noguera Vivo, 2005; Potter & Ricchiardi, 2006). Another obstacle is that professionals must deal with their own emotional states. When facing disasters in their own territories, journalists not only act as witnesses to traumatic events (Himmelstein & Faithorn, 2010) but can also be victims of the tragedy. They may not have the psychological structures to deal with resulting anxiety and stress (Colón, 2011; Freedy, Saladin, Kilpatrick, Resnick, & Saunders, 1994; Himmelstein & Faithorn, 2010; Zelizer & Allan, 2004).

Disasters, whether natural or man-made, professionally challenge journalists to access and disseminate information as soon as possible in a context in which disorder and lack of information can impede the correct data flow (Crovi & Lozano, 2005; Littlefield & Quenette, 2007; Lozano, 2006). Therefore, at risk is the fulfillment of their social role to inform in a timely and truthful manner, with confirmed, processed, and contextualized data (Burkhart, 1991; Pellegrini, Puente, Porath, Mujica, & Grassau, 2011; Puente, Pellegrini, & Grassau, 2012).

The literature in the field, when addressing journalistic objectivity (Noguera Vivo, 2005), emphasizes that coverage of disasters can involve problems that range from improvisation in the first hours,

little scientific rigor, inaccurate graphics, excessive attention to the anecdotal, and alarmism (Brusi, Alfaro, & González, 2008).

The relationship between journalists and victims is perhaps the main source of difficulties. The Columbia University Dart Center for Journalism and Trauma explains that journalists' interaction with people who are in a state of shock or stressed by an event may complicate the collection of reliable data, therefore making it difficult to produce informative work (Hight & Smyth, 2003). Others point out that the way sources are treated tends to reinforce stereotypes (Oyanedel & Alarcón, 2010), puts information about suffering at the forefront of coverage (Noguera Vivo, 2006), and often violates the privacy of those affected (Lozano, 2006), all of which can contribute to the audience's misunderstanding of the information delivered by the media (Lowrey et al., 2007).

Critics have suggested that a disaster usually receives descriptive, inaccurate news coverage in which instead of gathering the facts about causes and consequences, journalists give preference to metaphors and images (Oyanedel & Alarcón, 2010), mix the objective with testimonial, and give a dramatic action approach to the events (Chouliarakis, 2010). These criticisms are accompanied by the recommendation that journalists should not only narrate facts as they observe them but also look back at as well as predict the consequences of events (Green, 2013; Stolzenburg, 2007).

The careless use of frames can also become an ethical problem, because how a news story about a crisis or a disaster is framed can change people's perception of how "the crisis will affect them, how they should think, and what they should do" (Seeger, Sellnow, & Ulmer, 2003, p. 71).

These deficiencies are particularly relevant when audiences are in a state of shock that blurs the boundaries between news and crisis. They approach television as consumers, expecting that it will give them information to help get things in order and stabilize the situation (Doane, 1990; Benjamin, 1989). Hence, critical approaches to news production are important, such as that described by Bernardo and Pelliser (2010), which "involves analysis and interpretation of the complex nature of reality, rather than favoring the economic logic of the spectacular treatment of facts" (p. 103).

Finally, the literature on the subject emphasizes the urgency of reviewing professional practices as a way to develop strategies of mitigation, preparedness, response, and recovery (Green, 2013; Stolzenburg, 2007) at all levels of society. Zelizer and Allan (2004) emphasized this topic from the point of view of journalism by reflecting on the breakdowns that 9/11 provoked in journalism routines and how

. . . it dresses the mantle of public consciousness with an urgency to think more creatively, cogently, and critically about what journalism in this new century might look like. Only then can we begin to consider the steps necessary to ensure that trauma remains a contained rather than rampant influence on journalism, as it and the events it covers move toward new contexts, new cultures, and new understandings of how the world might look different than it does today. (p. 22)

### ***Chilean Television on 27F***

Television coverage of the earthquake on February 27, 2010, was chosen as the subject of the current research because it conforms to the characteristics shown by the literature. This event imposed the challenge of requiring journalists to work in the context of a disaster of great magnitude and complexity, in which institutions were tested, and in which television became one of the main information sources connecting victims with support (CNTV, 2010).

Despite the earthquake's magnitude—which placed it among the 10 strongest earthquakes in history—and the huge opportunity it offers to review and reflect on how institutions and the media work, this event has as of yet received little attention from Chilean academia. The few existing research studies on the subject focused mainly on the role of information and communication technologies (ICTs) (Barros, 2010), especially Facebook and Twitter (with hashtags as #27F, #terremotochile or #fuerzachile) (Mendoza, Poblete, & Castillo, 2010; Sáez & Peña, 2012), viewing it as “the first natural disaster event in the Chilean context that will have records of the use of online social networks applications services, focused, to account for what was happening in real time” (Sáez & Peña, 2012, p. 75).

In the area of purely journalistic work, agencies such as Chile's National Television Council (CNTV by its Spanish acronym) and the Media Ethics Council (CEM by its Spanish acronym) showed the relevance of the media's role, especially television, during the hours and days after the earthquake, when uncertainty and vulnerability overwhelmed the entire country. They offered insights into the major mistakes that were made (CEM, 2010; CNTV, 2010).

Some of the findings of the study conducted by CNTV—which included content analysis, phone surveys, focus groups, and interviews with key informants (CNTV, 2010; Souza & Martínez, 2011)—revealed that for a week, 97.8% of the news content focused exclusively on the disaster; that only on the fifth day were new formats incorporated into the programming; that although most of the transmission was on-site, the highest percentage of transmitted images was delayed (65.9%); and that the main transmission formats were developing news (76.8%), followed distantly by interviews (7.9%).

Regarding sources, CNTV (2010) concluded that construction of the news stories focused more on citizens' testimonies and opinions than on expert information: “The testimony and the feelings of an individual are transformed more than in an item of information, in an element that articulates and supports the journalistic story but from the mere description of the event shown” (p. 18).

Interviews and focus groups in that study showed that the audience associated coverage with concepts such as “exaggeration,” “manipulation,” and “sensationalism,” questioned the continuous repetition of some content, and remembered mainly images of suffering, destruction, and looting, particularly associated with the physical effects of the earthquake and tsunami and the human drama (CNTV, 2010). Journalists, meanwhile, acknowledged that their work lacked an overall perspective on the events, while

editors confirmed that the emergency prevented further analysis and content filtering, with that responsibility often handed directly to the teams on the ground (CNTV, 2010; Puente, Pellegrini, & Grassau, 2012).

Also, the CEM expressed concern about journalists' lack of awareness of professional principles—such as the prevalence of an informative role over solidarity, care, or judgments—that tend to lose their accuracy during disasters (CEM, 2010). This lack of awareness drew attention to the formal aspects of journalistic work:

This Council considers unacceptable that a person, who as a result of an earthquake or a fire loses a home or family members, is asked on how he or she feels. That question leads only to obtaining a close-up of a woman or a man crying and unable to respond, which is, strictly speaking, an offense to his or her dignity. The practice of accompanying images of destruction or accidents with off-camera comments made with voice inflections seeking to deepen the feeling of drama is equally reproachful. (CEM, 2010, p. 74)

### **Methods**

The content analysis instrument, which mainly focuses on professional standards, was based on a literature review of journalism and crisis/disaster management and journalistic routines. Twenty in-depth interviews were conducted with directors, editors, and journalists from the four largest national over-the-air television stations in Chile—three private stations, Canal 13, Chilevisión, and Mega, plus Television Nacional de Chile (TVN), the only publicly-owned network station, funded through advertising and without major state subsidies (Fuenzalida, 2000)—that broadcast during the first few hours following the 2010 earthquake (Puente, Pellegrini, & Grassau, 2012).

The interviews were conducted from April to December 2011 by the research team at a location chosen by the subjects. In most cases, the interviews lasted at least 40 minutes. The sample included 16 journalists, two editors, and two media directors. They were all college educated and received no compensation. Two open-ended questionnaires were created: one with 21 questions for journalists and another with 27 questions for editors and directors. The questionnaires included questions such as What were the conditions in which you performed your work? Had the channels made any preparations for dealing with such events? What happens to journalists when they are exposed to a disaster? What journalistic and editorial challenges did this kind of coverage pose?

### ***Design of the Instrument***

Exploratory work established four main professional challenges in the coverage of major disasters:

1. Dearth of information
2. Dearth of sources, especially authorities and experts
3. Difficulties in reporting highly tragic stories
4. Need for support for the victims

An operational definition was also developed to establish a guideline for selecting variables: ***Informative coverage of disasters*** is what news departments (in this case, television) carry out when reporting on phenomena of high social significance, which as a result of their magnitude break down the role of institutions, interfere with journalistic routines, and force professionals to work under intense pressure, uncertainty, and personal and social vulnerability.

To design and select variables, professional standards were listed and differentiated between (a) those that should be especially taken into account in cases<sup>4</sup> in which special conditions of trauma and misinformation are experienced by both the audience and the practitioners, and (b) those that, due to the previously mentioned challenges, could be considered of low priority, irrelevant, or inapplicable in a disaster situation (mainly those associated with formal and aesthetic requirements, which due to technical precariousness lose value in presence of more immediate inquiries)

Second, audiovisual content analysis methodologies were reviewed to determine what standards that they measured were applicable:

1. *Journalism Added Value* (VAP<sup>5</sup>-UC): methodology that seeks to detect quality-information criteria in news. Six of its more than 50 variables were selected (Pellegrini et al., 2011).
2. *Editorial focus*: analysis instrument for television news images to establish the central idea communicated by a story or a picture. The variable Textual Editorial Focus, which aims to establish "who does what in every information unit" (Liepins, Porath, & Puente, 2010; Puente & Marinello, 2006), was selected.
3. *Foreign TV News around the World*: methodology for content analysis of international TV news. Of its more than 80 variables, 14 were selected (those associated with sensationalism and ethical criteria [Porath & Mujica, 2010]).
4. *Methodology to evaluate audience perception of television coverage of the 2010 earthquake by CNTV*: combination of qualitative and quantitative methodologies that sought to determine the most remembered and criticized aspects of that coverage. These methodology variables were not selected, but some of their aspects were considered for the creation of new variables (Souza & Martínez, 2011).

Following a content analysis, a coded sheet and its respective codebook were designed. The first version of the instrument was put through a reliability test with 10 coders. They attended a three-day training period, after which they separately coded the same edition of a newscast (February 28, 2010, on

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4 Very significant to this work was the advice given to the team by Professor Tom Goodnight, University of Southern California, during his stay in Chile.

5 Spanish acronym for Valor Agregado Periodístico (Journalism Added Value).

TVN). The reliability test results showed that Cohen's *kappa* coefficient was 0.8 or higher for half of the nominal and ordinal variables for which this coefficient could be estimated. The rest of the nominal variables showed reliability over 0.9 in all cases. Additionally, two-thirds of the ratio variables show Krippendorff's alphas above 0.7. These results suggest a high degree of internal validity.

## Results

The final version of the coded content analysis sheet and its codebook comprised 45 variables divided into the following categories: 7 identification variables, 3 descriptions of information unit variables, 22 variables that allow analysis of audiovisual treatment, and 13 variables that allow analysis of news treatment.

The research team classified professional standards according to the four professional challenges previously synthesized (see Table 1).

First, variables capable of measuring the ability of journalists to face the dearth of information that tends to occur especially in the first hours after a disaster were developed. They aimed to evaluate the capacity of the media and journalists in (a) selecting and delivering confirmed data (including potentially verifiable data, exclusive material, and presence in significant places); (b) processing data and images that take into account the event's dimensions (selection of information in headlines, use of archive material, use of different frames, definition of the editorial focus, and specification of the relevance of each topic); and (c) developing a thematic hierarchy in the news budget (that shows the different aspects of the event without bias).

Second, regarding the dearth of sources, the skill of journalists and the media in finding appropriate sources for each story was measured (selection of different types of sources, presence of relevant actors and their various roles), and their ability to maintain a balance of sources among those who have authority, direct experience, and knowledge of the event (number and balance of sources).

Regarding the third challenge (abundance of tragic stories), the treatment that the media gives to intimacy and the pain and dignity of the persons involved was analyzed through the selection and editing of images (use of sensational audiovisual resources and identity protection resources). How carefully language and tone were used in journalistic narratives (emotional tone, traces of speculation or opinion, use of qualifying adjectives, sensational audiovisual resources, and use of graphics) was also taken into account.

Finally, to analyze the way in which the media faces the challenge of performing its work for a population that needs support, the capacity of the anchor man/woman to differentiate between information and the roles of support, company, or authority was assessed.

Table 1 summarizes the attributes associated with each of the above variables.



**Table 1. Standards and Indicators That Are Addressed During a Disaster.**

Challenge Faced	Standards Measured	Variables	Attributes
Dearth of information	Ability to select and deliver data	Verifiable data	Average and density of verifiable data
		Exclusive material	Presence/Absence
		Place of occurrence	Region of the country in which the information took place
	Ability to process data and images	Headlines	Presence/Absence
		Archive material	Presence/Absence
		Framing	Descriptive/informative Conflict Allocation of responsibilities Human interest Social cost/benefit Economic cost/benefit
		Editorial focus	Subject, main idea, and complement of every information unit
		Relevance by consequence	Individual, local, national, multinational
	Skills and creativity to develop a balanced news budget	Thematic hierarchy	List of topics by subject area (such as earthquake, tsunami, housing and public buildings, transportation and public sites, communication and media, education, health, supplies and services, security, pollution and environment, victims, affected and missing persons, protection, collaboration, support and international solidarity, technology, and others)
	Dearth of sources	Ability to detect and to access appropriate sources	Type of sources
Actors and roles			Presence of specific actors (president, armed forces, ministers, Emergency Officers (ONEMI), Alert Officers (SHOA), congressmen and judges.). Roles assumed by these actors (such as to make decisions, deliver data, support or share the pain, establish fault and clarify responsibilities, deliver opinions)

	Ability to balance sources.	Number of sources	Average, proportion, and density of sources
Difficulties in reporting highly tragic stories	Respect for privacy and pain	Impact resources	Presence of: -Bloody and wounded persons -Human bodies or body parts -Crying people -Violent actions
	Concern for dignity		Identity protection Voice or image blur
	Concern for language and tone	Emotional tone	Positive, negative, neutral, mixed
		Narrative basis	Opinion, speculation
		Qualifying adjectives and adverbs	Average and density
		Editing resources	-Music -Slow motion -Soft focus -Color changes
			Image reiteration in the same or different stories
	Graphic resources	Application: -Graphics -Tables -Infographics -Photographs -Images of documents or paragraphs -Animations -Maps -Logos	
Support of victims	Ability to differentiate between roles	Professional roles	- Anchorman/woman role: Non-existent, passive, active (with opinion, interacting with sources and journalists) - Journalist's role: informative, supportive, etc.

### Discussion

The earthquake that occurred in Chile on February 27, 2010 was a unique opportunity to reflect on the strategies that Chilean institutions have developed over the last 25 years to respond to such events, and to test these strategies in different areas. In the case of journalism, the earthquake was an exceptional event that no news department could avoid, one that set the news agenda of all media for weeks, but that also evidenced the media's lack of preparation for facing a disaster of such magnitude.

Examining how Chilean television journalism delivered the information on the earthquake and tsunami and its consequences was a first step toward taking measures that will contribute to journalists' doing a better job in similar situations in the future. The content analysis instrument presented in this article was designed to contribute to this task.

Disaster coverage represents a break in newsroom routines and presents a series of challenges that can hinder the work of news professionals. To address these challenges—related to the dearth of information, the lack of appropriate sources, the abundance of tragic stories, and the need for support for victims—the media and its journalists should take steps to maximize their capabilities.

The type of analysis that is possible with the proposed instrument allows for the recognition of which of those capabilities or standards functioned properly and which were deficient during the event coverage. This recognition is necessary, because awareness of the deficiencies is the first step to overcoming them.

This diagnosis is the first phase of the study, which seeks to develop a protocol for journalism that can provide the tools that will help news departments anticipate what is coming. Moreover, their journalistic coverage requires a complete cycle that includes preparedness, response, mitigation, and recovery.

Although the instrument was developed for the analysis of a specific case in the area of television news, it can be adapted to examine other media and other forms of critical events of great magnitude (those that set the media agenda for several days, causing a break in the daily routine of journalists), such as major accidents or terrorist attacks. Thus, it is hoped that the instrument will contribute to the international literature by offering researchers and communications professionals a methodological tool that serves to describe, evaluate, and efficiently draw conclusions about the media's reporting during a time of crisis.

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