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Journalism Studies

Publication details, including instructions for authors and subscription information: <u>http://www.tandfonline.com/loi/rjos20</u>

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María Teresa Mercado Published online: 05 Jan 2012.

To cite this article: María Teresa Mercado (2012) MEDIA REPRESENTATIONS OF CLIMATE CHANGE IN THE ARGENTINEAN PRESS, Journalism Studies, 13:2, 193-209, DOI: <u>10.1080/1461670X.2011.646397</u>

To link to this article: <u>http://dx.doi.org/10.1080/1461670X.2011.646397</u>

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MEDIA REPRESENTATIONS OF CLIMATE CHANGE IN THE ARGENTINEAN PRESS

María Teresa Mercado

The media play an essential role in the construction of social reality and consequently knowledge of what is reported in the media is essential to understanding social attitudes towards significant issues such as climate change. The assumption here is that more and/or better information fosters a clearer understanding of ecological issues, environmental awareness in society, and contributes to a transformation of values, attitudes and behavior. Few authors focus on the role of journalism in the mass communication of climate change in Latin American countries; however, these countries are very important in international negotiations because they possess most of the natural reserves to be protected at this crucial time, the "post-Kyoto" stage. For these reasons, Argentina is chosen as the focus of this study.

KEYWORDS Argentina; climate change; environmental journalism; framing theory; media

Introduction

All international treaties emphasize the importance of communication, access to information, education and training, and public awareness in achieving a sustainable society. In the Earth Summit held in Rio de Janeiro in 1992, an explicit appeal was made to the media to become involved in information work for the preservation of the environment and in changing public attitudes. Although from the professional perspective the main role of journalists and the media is to inform, not to educate or change attitudes, the selection and reporting of information—in short, journalistic interpretation—has some undoubted influence on the perceptions of citizens especially when it concerns a field with which citizens have little or no direct contact (Nelkin, 1990).

Areas unrelated to journalism, like environmental education, also signal the importance of communication media in this work. As Novo argued,

there is an awareness of the enormous potential not only informative, but also educational of audio-visual or written messages; the mass dissemination of news of major environmental impact should lead media professionals to exercise extreme sensitivity and care when carrying out their work, in such a way that they are able to convey the seriousness of environmental problems to the general public without falling into scaremongering or lazy anecdotes, while at the same time presenting options and alternatives to help resolve the crisis. (2003, p. 222)

The complexity of environmental problems, both in the clarification of causes and the explanation of consequences, demands a responsible attitude from reporters: an indepth journalism based on thorough documentation, background narrative, consequences and actors involved, analysis of environmental facts and, finally, the situation of events in their proper contexts. For the reporter Víctor Bachetta (2002),



environmental journalism is one of the most extensive and complex genres of journalism, with five points to consider: it is investigative journalism, it is a form of science journalism, it is educative journalism, it is aware of the need to fulfil a specific social responsibility, and it must be exercised with professionalism, objectivity and responsibility but without confusing this with environmental activism.

In short, environmental protection has become a universal goal and climate change is the central issue. Today, the economic crisis since 2008 has driven down the news value of climate change at a time when "according to the consideration of scientists, the problem does not lie in the finding of irreversible climate change, but in the implementation of global policies mitigating environmental degradation" (Díaz Nosty, 2009).

Research Context

There has been a steady increase in the coverage of climate change in the media: from less than 700 references in Western Europe and North American English-language newspapers in 1988 to 7500 by 2006. In the United Kingdom, coverage quadrupled in quality newspapers in 2006 across the three years since 2003, prompted by among other things, Al Gore's successful documentary and the release of the "Stern Review" (Boykoff and Roberts, 2007, p. 6).

One of the main approaches to researching climate change reports in Western media, especially in US newspapers across the 1990s, focused on how climate sceptics achieved a special place in media reports to offer arguments counter to the prevailing view of scientists who posited the existence of anthropogenic climate change. Some journalistic norms and traditions, specifically the journalistic commitment to balanced coverage, inadvertently promote sceptics' access to the media. Reporting differing views in the interests of journalistic neutrality, served to amplify the voice of a minority denying human responsibility for climate change in the prestige press (Boykoff and Boykoff, 2004). In this case, the coverage of climate change as a conflict between two opposing positions, despite the increasing consensus among climate scientists on global warming, undermined knowledge, as in many issues related to science.

Faced with the scientific uncertainty generated by US and British media, the issue expanded beyond the scientific field in other European countries and became anchored in international relations. The two antagonists are now the European Union, leader in the fight to mitigate the effects of climate change, and the United States, which continues to hinder international negotiation (Brossard et al., 2004, p. 364; Olausson, 2009, pp. 425–6).

Another key aspect has been the focus on "catastrophe" in media messages. European research suggests that reporting tends to be alarmist, steeped in the language of fear, catastrophe and disaster (Anderson, 2009, p. 174). In the German press since the mid-1980s, for example, "the media ignored scientific complexities and uncertainties and transformed them into a sequence of events leading to catastrophe and requiring immediate action" (Weingart et al., 2000, p. 280). Since 2000, journalists have increasingly made links between dramatic weather events (such as floods and heat waves) and global climate change (Carvalho and Burgess, 2005). According to Ladle et al. (2005, p. 231), "the careful, measured language of science is not well suited to the sound-bite sensationalism that is the typical mode of communication of most of the contemporary news media".

However, showing that news media are complex, highly differentiated and occupy their own particular market niches (Anderson, 1997), Carvalho (2008, pp. 149–50), in an investigation of the discourse on climate change in Portuguese media between 2003 and 2007, concludes that scaremongering does not define the coverage of climate change in the press. The same does not happen on television, for example, mainly because of the tendency to show images of natural disasters when reporting climate change.

Boykoff and Roberts (2007), in their analysis of United Nations climate change coverage in 40 English-language newspapers in 13 countries across five continents, highlight the clear need for the analysis to be extended to other countries. The only Latin American country analyzed in their study was Honduras. Recently, Gordon et al. (2010) have analyzed newspaper coverage and the presence of frames, solutions, and conflicts surrounding the global warming issue in the Mexican newspaper *Reforma*. This is also one of the newspapers chosen by the University of Hamburg to measure media attention to climate change over a 15-year period in 23 countries worldwide as part of the project Global Media Map on Climate Change. The other Spanish-language newspaper included in the sampling is *El País* (Spain). The research shows that media coverage of climate change has slowly increased from 1996, in particular in Western countries after 2004 around the publication of the Intergovernmental Panel on Climate Change (IPCC) report in 2007 and the Copenhagen Summit in 2009 (Schäfer et al., 2011).

Methodology

This article analyzes the coverage dedicated to climate change in the quality press in Argentina and identifies the news frames employed by journalists, to distinguish between different representations of climate change. The hypothesis is that there exists a media construction of climate change in Argentina distinct from the dominant frames in media reports in industrialized countries.

The technique used is a hybrid of content analysis and qualitative textual analysis to uncover the underlying cognitive context in which climate change information is reported in the Argentinean press. In an early account, Berelson (1952, p. 18) defined quantitative content analysis as "a research technique for the objective, systematic, and quantitative description of the manifest content of communications". Over time, other authors have extended the concept by introducing qualitative analysis. Thus, content analysis allows inferences through systematic and objective identification of specific features within a text:

Content analysis is the set of interpretive procedures of communication products (messages, texts, speeches), based on measurement techniques, sometimes quantitative (statistics based on unit counts), sometimes qualitative (logic based on the combination of categories), which allows the processing of relevant data on the very conditions that have produced those texts. (Piñuel, 2002, p. 7)

In this study, a descriptive content analysis is used to list and quantify aspects such as section, genre, sources and themes in journalistic reports. The results, together with the sustained and critical reading of texts, allows the identification of the cognitive frames of the news, "leading to a strategic selection and presentation of text analyzed as evidence for the general argument" (Fürsich, 2009, p. 240). During the last two decades there has been a steady increase in studies using frames as a basic conceptual tool although it remains "an ambiguous theoretical conceptualization, which refuses to be subsumed together under a unified label" (Vicente and López, 2009, p. 15). Most agree, however, that framing theory implies that information content not only sets the public agenda, but also implicitly forms a way of thinking about certain issues through news frames (Igartua and Humanes, 2004). But while we assume that these frames do affect the public perception (De Vreese, 2003) and the media are powerful agents in the framing processes of social discourses (Sádaba, 2001, p. 152), the analysis here stops ahead of considering the more controversial consideration of the impact of media messages. This study focuses solely on media coverage and the analysis of frames.

The framing of an issue promotes a particular definition of a theme, selecting some aspects of a perceived reality and making them more prominent in the text, delivering serious or non-serious keys to situations or framing the story in one or another section that favors one or another social reading. The framing perspective recognizes the ability of a text to define a situation or issue and establish the terms of debate (Tankard, 2001, p. 96). To frame, according to Entman (1993, p. 52), 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". Gitlin (1980) identifies some typical framing strategies: the overuse of officials as sources, the trivializing actions of opposition groups, the focus on events instead of larger issues, and an emphasis on one side of the argument. For Scheufele (1999, p. 112) the factors that influence how journalists frame issues include: social norms and values, organizational pressures, pressures from interest groups, journalistic methods and the ideological orientation of journalists.

Journalists may also present news using easy-to-understand interpretive packages or frames to reduce the complexity of issues for their readers/audiences. In addition to reducing complexity, however, these frames also serve as interpretive shortcuts for audience members, leading them to make attributions of responsibility or other judgments, based on different frames or interpretations offered by mass media for the same factual content (Kim et al., 2002, p. 8).

Similarities between framing and agenda setting by McCombs and Shaw (1972) have been discussed since several researches began to explore a second-level agenda setting or attribute agenda setting that examines the influence of attribute salience, or the properties, qualities and characteristics that describe objects or people in the news and the tone of those attributes (Wu and Coleman, 2009, p. 776). Thus, the transmission of the relevance of issues is the traditional agenda effect, at a first level, while the transmission of the relevance of attributes constitutes a second level (McCombs et al., 1997).

In this project, the goal is the identification of the frames as the organizing idea for news content through selection, emphasis, exclusion and elaboration; to cite Kim et al. (2002, p. 10), the "terminological or semantic differences" in how an issue is described in the media. This interpretive package or "generic frame" was defined by Semetko and Valkenburg (2000, p. 95), who found three such generic frames in the analysis of news coverage of the media representations of European political leaders and their actions: conflict, human interest and economic consequences.

In order to undertake a content analysis, the extent of the sample must first be determined which, in this case, potentially includes all articles with references to climate change in the Argentinean press. Since this sample would be unmanageably large, a representative sample of the quality press comprising the two leading newspapers in Argentina which constitute the major actors in setting the agenda were selected for study: *Clarín* and *La Nación*.

Clarín was founded in 1954 and according to the Instituto de Verificación de Circulaciones (IVC), sold an average 528,000 copies daily between 1991 and 2001, but by June 2010 these figures had fallen to 300,837 copies on Monday to Saturday and 634,376 on Sundays. *La Nación* was founded in 1870 by Bartolome Mitre, a soldier, journalist, writer and politician, who was president of Argentina. Its circulation is much lower than that of *Clarín*: in June 2010, 152,433 copies on Monday to Saturday and 280,720 on Sundays. Historically it is considered to be politically conservative, economically liberal, and Catholic (Pizarro, 2008, pp. 77–80).

The analysis period is the year from October 1, 2009 to September 30, 2010 to include the coverage before, during and after the Copenhagen Summit in December 2009. The units of analysis, identified via a keyword search (including the terms "climate change" and "global warming") in the archives of the online editions of both newspapers, included all news texts and opinion articles. The reading of these allows us to separate opinion articles signed by prominent figures within the international arena that are published in the news pages but not the opinion section. To identify the generic frames we only analyze news, given that the conditions that determine the news frame, as we have seen, do not involve opinion articles that are, for the most part, submitted by external contributors. Also excluded from the sample are letters from readers and references in cultural listings.

A first review of the articles revealed that in many news reports the reference to climate change was an isolated or modest reference, perhaps a brief mention included in an introductory paragraph with no subsequent references. In order to ensure that the sample used to determine the news frame consisted only of relevant articles, news texts were classified and ranked according to the extent to which they focused on climate change.

Reports in which climate change was mentioned briefly as only one of the challenges facing the world today were classified as Type III reports. An example here is a report about Spain assuming the rotating presidency of the European Union, where a journalist at *Clarín* wrote about the tasks for the new President: "Among the priorities— not forgetting issues such as the economic crisis, climate change, energy security and the management of migration flows" (Martín Pérez, *Clarín*, 1 January 2010).

In other reports where climate change features more prominently but is still not the main subject, or is not given more than a paragraph or a question/answer in an interview, the reports are labelled Type II (one topic among many). This type of report usually relates to the environment in general. An example here is an extensive report on the ozone layer: "Now we see that there is a relation between the thinning of the ozone layer and climate change," adds Canziani: "Between 2000 and 2010 an evaluation was initiated of how the ozone hole is responding to the stabilization of CFCs and how it affects climate change, and vice versa" (Camps, *Clarín*, 30 June 2010). Finally, there were news reports in which climate change was the primary focus and information object, the subject of the report and the main theme; these were classified as Type I (main topic).

Entman (1993, p. 52) explained that frames in the news can be examined and identified by the presence or absence of certain keywords, stock phrases, stereotyped images, sources and sentences that provide thematically reinforcing clusters of facts or

judgments. Paying particular attention to headlines, subheads and lead paragraphs, the textual analysis of Type I reports allows identification of "story focus, salient words within texts, background information, discussion of underlying problem and solutions offered" (Kothari, 2010, p. 214) which reveal the frames.

Following Igartua (2006, p. 204), a codebook was compiled that included the following variables in each unit collected: date of publication, section, headline, genre, authorship (signature), sources, thematic categories, type (I, II or III) and generic frame (only news Type I).¹

Results

Across the sample period from October 2009 to October 2010, 196 articles from *Clarín* and 290 from *La Nación* were analyzed; in aggregate a sample of 486 news items. All were included in the quantitative content analysis; a sub-sample of 186 news articles was included in the textual analyses to identify generic frames. We begin with results from the newspaper *Clarín* since it enjoys the higher circulation in Argentina.

Coverage

The 196 reports referencing climate change in *Clarin* reveal a high point in December coinciding with the Fifteenth Conference of the Parties to the United Nations Convention on Climate Change, known as COP15 or the Copenhagen Summit (Figure 1).

Published reports alluding to the summit were published from October. Gustavo Sierra, a special correspondent, was in Denmark to cover events organized by Project Sindycate, bringing together world-renowned intellectuals, journalists and opinion leaders to promote the exchange of ideas and to pressure politicians who had not yet defined

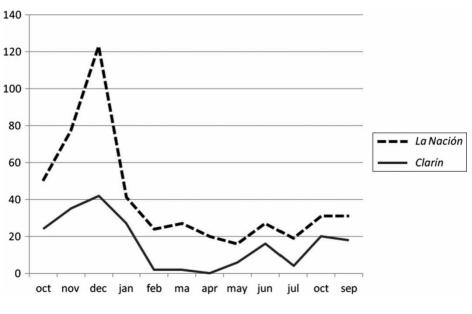


FIGURE 1

Climate change in the Argentinean press, October 2009 to September 2010

their position to support reducing emissions and sign a global climate agreement. The "Sunday Theme" of October 10 is Pollution and Development. Sierra (2009a) files a story titled: "Planet in Danger: the last chance to curb climate change". The mood of the report is dramatic. Authorities negotiate against the clock to end pollution emissions. Two months before the Copenhagen summit there is still no agreement.

The information on previous meetings of COP15 and the statements of politicians begin to monopolize space in the newspaper. On Sunday December 6, the day before the opening of the meeting, the special correspondent says in the headline of his story that the summit will "hopefully" start the next day (Sierra, 2009b). The 12-day summit was closely reported by Sierra who published daily reports except for Friday 18, the closing day. The meeting ends later than expected without agreement. On Sunday, *Clarín* takes stock of the failure.

The impact of COP15 on editorial is felt during the next month. In January we see that the number of journalistic pieces alluding to climate change remains high (27). The fall in February is pronounced: the conference is mentioned only twice. A trend that continues in March intensifies in April, the month in which no article appears in the pages of Clarín. In May there are six references, but not until June does the issue return to editorial salience. Gustavo Sierra is again special correspondent, this time in Berlin, where again the problems of reaching an agreement are manifest among the participating nations in international negotiations. Funding appears to be crucial. During the month of August, Clarín again considers climate change to be a topic of interest in its thematic agenda. The wave of natural disasters (extreme heat and fires in Russia, floods in Pakistan) and the World Meteorological Organization report reveals that 2010 is the warmest year since 1830, which led to climate change being on the front page of the Sunday 22 issue (opening section double page), accompanied by a considerable display of computer graphics. In September, the number of references to the subject remains close to the twenties and it can be assumed that as the next World Conference, COP16, approaches, the references will increase shaping an annual cycle of media interest around the World Conferences.

We can see similar developments in the 290 references to climate change in *La Nación*. From almost the same figure in October (26), with Hugo Caligaris as special correspondent at the Project Sindycate event, references rise to 81 in December, almost double those published in *Clarín*, reflecting the inclusion of articles from other newspapers, op-eds and agency news concerning the summit. In January the failure in Copenhagen reduces the editorial impact (only 14 references compared to 27 in *Clarín*) but in the coming months many more details are published in *Clarín*, especially in March on the WWF campaign Earth Hour. For the remainder of the year the subject has a fairly regular presence in the daily agenda.

Sections and Supplements

First, we distinguish the daily pages from the weekly supplements since their productive routines (selection, prioritization, types of texts, thematic associations and authorship) vary. Consequently, of the 196 references to climate change that appear in the newspaper *Clarin* across the sample period, 159 are located in different sections of the daily pages (81.2 percent) while 37 appear in various specialized weekly supplements (18.8 percent).

Once this distinction is established, those news sections of the paper in which climate change appears can in turn be analyzed. It might be assumed that most reports will be published in the "Society" pages dedicated to the environment. However, in almost 50 percent of cases (78), the references appear in the *international news* section, headed "World" in *Clarín*. It is followed by "Society", which refers to climate change in 39 reports (24.5 percent).

In other news sections such as "Politics" and "Economics", the presence of climate change is much lower at 14 in the former and only two in the latter (8.8 and 1.3 percent, respectively). The opinion pages of the newspaper seem to publish reports about climate change at a remarkable rate: 16.4 percent.

The four supplements of *Clarín* in which climate change appears are the Rural Supplement, Architecture, Shows and Travel. However, it is Rural which has incorporated the topic into its own thematic agenda, with 26 references, 70 percent of the total reports. Entertainment and Architecture share matching numbers; in both supplements five items appear that reference climate change, representing 13.5 percent of total reports. The presence of the subject in Travel is residual: one short mention (2.7 percent).

In *La Nación*, 79 percent of the references (228) are found in the pages of the daily sections and in these, 44 percent of the references found are listed in the Foreign section while another large percentage is made up of those in General Information and Opinion with 14 percent each. The other important area is Science/Health, followed by Economics, with 8.3 percent of the reports, a figure much higher than in *Clarín*.

Three of the ten printed weekly supplements account for 63 percent of the references to climate change: Country, Focus and Community, with 23, 21 and 19 percent, respectively. Also prominent are the references in the supplement Foreign Trade (15 percent). The rest are sporadic: Magazine, Property, DNA Culture, Countries, Motoring and Technology, all with less than 5 percent of references on their pages, except the Magazine with 6.5 percent.

Climate Change as the Subject of Reporting

In *Clarín* the reports focused on climate change (the substantive reports dubbed Type I) account for 50 percent of the 486 articles, while those focused on more general environmental issues (Type II) account for 21.4 percent, and 28.6 percent is classified as Type III. In *La Nación*, 45.9 percent of reports focused on climate change compared to 30 percent of Type II and 24.1 of Type III (70 isolated references in texts) (Table 1).

The content analysis identifies 17 thematic categories: Agricultural Technology, Awareness-raising Activities, Food, Ecological Construction, Scientific Data, Environmental Deterioration, Economic Development, Climatic Phenomena, Impact on Biodiversity,

Climate	change	news
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	Clarín (N = 196) N (%)	La Nación (N = 290) N (%)
Type I (main topic)	98 (50)	133 (45.9)
Type II (one topic more)	42 (21.4)	87 (30)
Type III (only allusion)	56 (28.6)	70 (24.1)

	Clarín (N = 62) N (%)	La Nación (N = 84) N (%)
Awareness-raising Activities	3 (4.8)	15 (17.9)
Climatic Phenomena	2 (3.3)	7 (8.3)
Economic Development	1 (1.6)	5 (6.0)
Environmental Deterioration	5 (8.1)	0
Environmental Measures	4 (6.5)	3 (3.6)
Environmental Protests	2 (3.3)	2 (2.4)
Food	1 (1.6)	2 (2.4)
Health	1 (1.6)	1 (1.2)
International Politics	33 (53.2)	37 (44.0)
Scientific Data	9 (14.5)	11 (13.1)
Women	1 (1.6)	1 (1.2)

TABLE 2

Thematic categories news Type I

Energy Industry, Environmental Measures, Politics in Argentina, US Domestic Policy, Environmental Protests, International Politics, Health and Others.

In *Clarín*, International Politics is the thematic category that most frequently appears in news stories focused on climate change (Type I). Climate change appears to be linked to Climatic Phenomena in 28 Type II items. The second thematic frame is Argentinean Politics (20), while Economic Development and International Relations both have 12 units of analysis coded as Type II. In Type III pieces the determining thematic frame is International Politics with 73.2 percent of the total, an appreciable percentage that shows how climate change has become a matter incorporated into the policy agenda as one of the problems facing humanity.

Both newspapers highlight international negotiations in their climate change agenda, an issue that occupies 53.2 and 44.0 percent of Type I daily pages (opinion articles removed) reports in *Clarín* and *La Nación*, 62 and 84 reports, respectively (Table 2). *La Nación's* second major theme is that of Awareness-raising Activities (17.9 percent), largely reflecting the extensive coverage of the Earth Hour campaign carried out by WWF, while in *Clarín* it is Scientific Data with 14.5 percent of the reports. This is smaller than that of *La Nación* despite Scientific Data occupying third place in the ranking of topics. Environmental Deterioration, the third of the subjects most published in *Clarín* (8.1 per cent), does not appear in *La Nación*, which instead selects more reports on climate phenomena explicitly related to climate change (8.3 percent of cases to *Clarín's* 3.3 percent).

Generic Frames

Four frames are recognized to define and establish the terms of debate in news focused on climate change (Type I) in *Clarín* and *La Nación*: political conflict, risk, environmental sustainability and business opportunity.

The "conflict" frame is apparent in those reports that present a dichotomy or a confrontation between the protagonists of the media event. Nouns such as "controversial", "debate", or even "conflict" are used, as well as verbs such as "demand", "claim" or "defend", and belligerent terms like "war" or "battle".

	Clarín (N = 74) N (%)	<i>La Nación</i> (<i>N</i> = 112) <i>N</i> (%)
Conflict	32 (43.2)	43 (38.4)
Risk	16 (21.7)	16 (14.3)
Sustainability	18 (24.4)	43 (38.4)
Opportunity	8 (10.8)	10 (8.9)

TABLE 3

Generic frames news Type I

The "risk" frame is clear from the presentation of reports in typically catastrophic terms. The focus is placed on the worst predictions of the effects of climate change without any proposals for what action may be taken to prevent it.

The frame we have called "sustainability" appears in those reports that highlight the global environmental crisis and the need to change the situation. Developments in the fight against climate change in different sectors are reported using expert sources with an educative slant.

"Opportunity" shows climate change as a global situation that can be exploited to increase economic development, to do business.

The framework which prevails in the two leading newspapers in Argentina is that of "conflict", with 43.2 percent (*Clarín*) and 38.4 percent (*La Nación*), respectively, of Type I news (daily and supplements pages), in line with its prominence on the international politics agenda, as we have seen (Table 3). But in *La Nación* "sustainability" has the same percentage of published reports (38.4 percent), well above the figure for "risk" (14.3 percent), associated with scaremongering about the effects of climate change or the new data provided by climate scientists. In *Clarín* both frames offer similar percentages: 24.4 percent for "sustainability" and 21.7 for "risk". "Opportunity" with about 10 percent in both newspapers is the less common frame.

Conflict. This generic frame appears in almost half of the reports focused on climate change articles in *Clarín* and *La Nación*. Headlines such as "The Emerging Countries Fight Back and Demand More Efforts from the Rich" (Avignolo, *Clarín*, 11 December 2009) or "Battle Between Sceptics and Alarmists on the Internet" (*La Nación*, 10 December 2009) exemplify the "conflict" frame that surrounds items related to international negotiations.

In relation to the position of Argentina, special correspondent Gustavo Sierra (*Clarín*, 10 October 2009a) explained the positions of countries or groups of countries in international negotiations, concluding that "everyone is committed to somehow reducing carbon dioxide that their industries and people release into the air, but nobody is willing to implement measures that would involve the expenditure of billions of dollars if the 'other' does not do so first." Referring to Brazil, one of the actors to appear prominently in the press in Argentina and one of the biggest polluters of the world from deforestation and the burning of forests to create cattle grazing land, Sierra writes about the Brazilian bid to stop logging in the Amazon by 70 percent over the next 10 years, as long as the developed countries provide economic compensation for the losses this implies. "And here the issue of compensation enters the equation: how much money would the developed countries be willing to give to those countries which are still developing in order for them to stop polluting as the former have done until now in order to maintain growth?" (Sierra, *Clarín*, 10 October 2009a). In the same vein is "Ecuador, Ready to Renounce Petroleum if the World Pays" (Restivo, *Clarín*, 22 November 2009).

In an interview (Sierra, *Clarín*, 9 December 2009b), the then Director of Environmental Affairs, said that Argentina sought "greater ease of access to international funds", and spoke of the "environmental debt that countries which develop by polluting have with the rest".

In *Clarín*, we can see a perspective in the reports of the Copenhagen Summit by Gustavo Sierra, which is different to the European view; more so than in the statements of Argentinean politicians. In an article on December 10, 2009, for example, when a Danish draft was circulating at the summit, the correspondent of the Spanish daily newspaper *El País*, Rafael Méndez, wrote:

The Danish draft stating that emissions should be peaking in 2020 raised the ire of the developing countries. The spokesman of these poor nations, the always-dramatic Sudanese Lumumba Stanislaus Kaw Di Aping, said that this would mean death for Africa. The chief negotiator of the European Commission, Artur Runge-Metzer, joked about his statements: "He lives in New York."

In contrast to the Spanish correspondent, Gustavo Sierra, the Argentine correspondent described these proposals as "unacceptable".

The size of the industrial restructuring fund for poor countries is derisory...The disappointment is so great among the delegates from the least developed countries that in the corridors of the summit there is already talk of "carbon-century colonialism". They directly accuse the powerful of trying to force an agreement that would maintain the enormous inequalities that exist in today's world. (Sierra, *Clarín*, 10 December 2009c)

Di Aping is not dramatic:

The president of the Group of 77, to which Argentina belongs, the Sudanese Lumumba Stanislaus Di-Aping, said that what those who wrote the document want is "to procure 60% of the globe's atmosphere for the richest 20%". And the Brazilian negotiator Sergio Serra said the document "does not include the position of 90% of the world." (Sierra, *Clarín*, 10 December 2009c)

These nuances are not in *La Nación* as most of their pieces about the summit, and in general their International pages, draw on information from international agencies.

Risk. In *La Nación* the "risk" frame is associated with scientific reports on the effects of climate change ("An impact that has already resulted in floods and droughts ... As the twenty-first century progresses, the global picture could become increasingly bleak", García Oviedo, *La Nación*, 6 December 2009a) but especially the weather phenomena thematic frame: "2009 saw the worst weather in 50 years. This year there were natural disasters like floods, tornadoes, record temperatures and a severe deepening of drought" (Gallo, *La Nación*, 23 November 2009). All this under the heading of climate change.

The headline and the lead of the report "The Planet in Danger; last chance to stop climate change" (Sierra, *Clarín*, 10 October 2009a) illustrates the alarmist approach, dramatic, incorporating the news value of proximity. The opening of the text describes the impact of climate change in Argentina without specifying under what circumstances it would really take place:

Half of the city of Buenos Aires under water. Most populations of the humid Pampa disappeared under huge salt lakes. The Northwest plunged into a permanent drought. "El Chocón" without water for years. Electricity generation by hydropower reduced to

less than half. What ensued was massive migration to the Andes of Patagonia in search of water. And this was only in Argentina. The rest of the world would be even worse. Half the world population would have nothing to drink. The other half, little to eat. And this is not an apocalyptic film.

Laura García Oviedo ("The Weather Would Result in Huge Losses in Latin America", *La Nación*, 17 December 2009b) wrote about the report submitted by the Economic Commission for Latin America and the Caribbean (ECLAC) in Copenhagen, which suggested an "immense" impact on economic activity, populations and ecosystems if urgent measures are not taken against climate change. Among the panellists was the Argentine Environment Secretary, Homero Bibiloni, who showed pictures of flooding and personalised the damage caused by the growing frequency and intensity of this kind of event. Bibiloni emphasized the catastrophic aspects, adding the human interest, and noted the Argentinean position, the same one adopted by the rest of the developed countries: industrialised nations have a "historical environmental debt to be paid", primarily with funding to implement various measures against global warming.

Sustainability. A clear example of the "sustainability" frame is the report of the journalist Sybila Camps "Uphill Battle to Capture the Chemicals That Harm the Planet" (*Clarín*, 29 November 2009): "With the environmental imbalance already in place, science steps up efforts to mitigate the effects. One of the ways is to catch and store gases that are causing the rising temperatures."

This detailed report published one Sunday, regardless of political events or publications of reports, with various national and international expert sources, starts from the idea outlined in the introduction that the exponential growth in fossil fuel use caused "an ecological imbalance on a global scale: global warming, caused by increased greenhouse gases (GHG) emitted by 80% of these fuels. Now it is up to science and technology to contribute to clearing up the mess."

In *La Nación* (17 December 2009), we find for example the report of Laura Corradini, correspondent in France, entitled "Faced With a Change of Lifestyle", which talks, among other things, about how humanity should adopt clean energy. The journalist writes that whatever the outcome of the climate summit in Copenhagen, "human beings will have to change their habits and invent new forms of consumption if they want to continue living, breathing and feeding on the planet."

Opportunity. "Opportunity" is the frame that does not appear in the *Clarín* daily and is only detected in a job-related report in the Economy section of *La Nación* (Raquel Saralegui, 16 October 2009, "Still, With Moderate Wind"), which outlines the potential workforce that would be created by a renewable energy industry. It should be pointed out that this frame is very important in Rural and Countryside supplements of the two newspapers, two supplements that define the image of Argentina in the world given that they reflect the interests and concerns of its main productive sector. In Rural, the reports focused on climate change are mainly related to the subjects of Economic Development and Agricultural Technology (27.3 percent each). However, most important is that in 63.6 percent of cases, the approach is that of "opportunity": "Facing the Challenges of the Future" (Persoglia, *Clarín*, 30 January 2010), "Argentina Should Play a Strategic Role" (Huergo, *Clarín*, 24 October 2009), "Carbon Is Good Business" (Neffren, *Clarín*, 20 August

2010) or "Change... Everything Changes" (Moreno, *Clarín*, 19 June 2010), in which, in a report on the impact of climate change on agriculture in Argentina, local specialist Graciela Magrin says there may be benefits to the country.

In *La Nación*, the Agricultural Technology thematic frame is still more prominent (88.9 percent of Type I pieces) and also the attribute "opportunity", 77.8 percent of cases. "The Countryside, the Challenge of Halting Climate Change" (Sanmartino, 19 December 2009b); "The World Offers Argentina an Opportunity" (Seifert, *La Nación*, 11 September 2009); "The Only Solution Is a Global Response", in a world where, according to Minister of Agriculture for New Zealand, food-producing countries have a future (Sanmartino, *La Nación*, 31 October 2009a).

Conclusions

Climate change is reported in Argentinean media in terms of the international political agenda and forms a cycle of annual media interest around the conferences on climate change hosted by the United Nations. Thus, information on climate change is an international issue for the press in Argentina and also for the Argentinean people as reflected in the Ibárometro survey published on December 30, 2009. According to this survey, the main desire of Argentineans for the world in 2010 was to end hunger and poverty (35.1 percent of respondents), and after that, the hope that solutions to pollution and global warming will be found (25.3 percent).

Our analysis reveal that in the Argentinean quality press climate change information is found mainly in the International section of newspapers instead of in Society (Science or more specifically the Environment) as might be anticipated. Therefore, the generic frame that appears most frequently is that of "conflict", which is associated with the various conflicting positions in international negotiations. The conflict does not appear in scientific debate about whether or not anthropogenic climate change exists. The antagonists are not scientists and sceptics since in no articles are the IPCC reports questioned; the Argentinean press does not present the level of scientific uncertainty that has been magnified by the media in other industrialized countries.

From the Argentinean perspective the confrontation is clearly between industrialized and developing countries. "They have a primary responsibility to reduce their emissions, an obligation to provide public funds to facilitate genuine mitigation," said the Argentinean Foreign Minister. While in the European press, "they" are the other industrialized countries that ratified the Kyoto Protocol and are not as involved as "we", the Europeans, in combating climate change; in contrast, in the press in Argentina "they" very widely means all developed countries. This goes at least for *Clarín*, through the chronicles of its special correspondent at the summit on climate change that shows this different approach to that of the European or North American. But this media construction is not found in *La Nación* as most of their pieces about the summit, and in the International pages in general, come from international agencies.

However, the "we" as Latin American countries does not appear as clearly defined as in Europe. Rarely is it mentioned that Argentina belongs to the Group of 77; nor is the role of Argentina well defined. Although the WWF Living Planet Report 2010 places Argentina among the 10 nations that make up more than 60 percent of the Earth's capacity to provide environmental services of global importance such as food production and carbon dioxide uptake, Argentina resembles more a spectator than an actor. The official position calls for a settling of the "environmental debt", but the fight against climate change is not a matter of priority on the political agenda in Argentina, at least seen from the perspective of the Argentinean quality press.

The oft-criticized emphasis on catastrophe associated with environmental journalism appears in about 25 percent of the articles and nearly always relates to scientific reports or in relation to extreme weather events. More news falls under "sustainability", which is predominant in environmental reporting that promotes "eco-literacy", environmental education through information on environmental issues released by the media (Fernández Parrat, 2006, p. 52). This is not about taking sides but about giving the environment the place and depth that it deserves in media coverage. In this regard, Argentinean journalists such as Sergio Elguezabal seem to have a clear role in promoting environmental values: "Besides the political decision to undertake an integrated approach to the issue, more rigorous, less grumpy journalism with continuing commitment is vital" (*La Nación*, 9 November 2009).

There has to be better communication, says the editor of the Science/Health section of *La Nación*, Nora Bär, because according to a survey in the United States, four in ten did not know what a fossil fuel is, and six out of ten were equally in the dark about renewable energy (24 February 2010).

Hugo Caligaris (*La Nación*, 13 October 2009) explained very clearly what many expect of journalists in this crisis, "Journalists are the only ones capable of generating a strong current of opinion so as to force the rulers to correct course. In part, they already have: The subject is on the table there is more awareness than a few years ago. But we have to fight more vigorously."

ACKNOWLEDGEMENTS

The author would like to thank the grant Santander UCH CEU Mobility Scholarship 2010 at the Universidad Austral (Buenos Aires, Argentina).

NOTE

1. In order to assess intercoder reliability, two external encoders who had not participated in the initial research encoding carried out the coding process (Krippendorff, 2004; Neuendorf, 2002). Fifty reports were selected randomly (26.8 percent of the total units Type I) and were distributed to the two analysts (the same 50 for each). They both gathered the data according to the criteria established in the codebook. The data generated by the encoders were used to create a double encoding data matrix using SPSS V.14.0 Windows. Two criteria were used for the analyses: percentage of observed agreement and Scout coefficient Pi (-1/+1). As a result, the basic variables "section" and "themes" yielded a reliability of 0.97 and 0.91, respectively. Regarding the variable "frames", this was an average of 0.69 and a percentage agreement of 92, indicating that the reliability between the encoders was proper, taking into account the existent standards.

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 - María Teresa Mercado, Departamento de Comunicación e Información Periodística, Facultad de Humanidades y Ciencias de la Comunicación, Universidad CEU Cardenal Herrera, C/Luis Vives 1, 46115 Alfara del Patriarca, Valencia, Spain. E-mail: mmercado@uch.ceu.es