# **Environmental Journalism in Spain**

María Teresa Mercado-Sáez and Manuel Chavez

María Teresa Mercado is a professor of Journalism and director of the Social Communication Doctoral Program at the Universidad Cardenal Herrera CEU, CEU Universities (Valencia, Spain). Manuel Chavez is a professor of International and Crisis Journalism and director of the Information & Media Doctoral Program of Michigan State University, College of Communication Arts and Sciences in East Lansing, Michigan

## Introduction

Environmental journalism has scarcely been studied in Spain. Its origins as an information specialty are associated with the 1970s, with a certain delay compared to other countries (Hansen, 2010, p.23) due to the political regime in which Spain was still under in those years, the last years of the dictatorship of Francisco Franco. As in other countries, it emerged after the evidence of the deterioration of nature and the first warnings against the risks of some technologies such as nuclear energy (Sachsman, Valenti & Simon, 2010, pp. 3-4).

The first references to the environment in periodical publications are in the eighteenth century, including 'Annals of Natural Sciences' in 1799. In the nineteenth century, journals publicized nature related to hiking and scientific amateurism, protected by societies and scientific institutions (Fernández, 2002). In the twentieth century, newspapers such as *El Sol, ABC*, and *La Gaceta de Madrid* published environmental information often connected with health and hygiene. In the first half of the twentieth century, international conferences took place that promoted environmental information in the media, which also occurred in Spain. In 1924, Radio España broadcast a conference on the subject for the first time.

Several events in the 1960s and 1970s attracted the attention of the Spanish press at the same time as environmental groups were emerging. The 1966 crash in Palomares of an American airplane carrying nuclear weapons drew worldwide attention. And in the beginning of the 1970s, regard for the future of the Daimiel wetlands and concern for the radioactive contamination of the Tagus River kept environmental issues on the front pages. Interest in environmental groups surged after the spread of social and political mobilizations that started in May 1968. In 1972, the Club of Rome warned of the limits of growth and the Stockholm International Conference placed environmental information on the global agenda, laying the foundation for the need to protect the environment with the creation of the United Nations Environmental Program (UNEP).

In the mid-1970s, a communicative phenomenon began to be broadcast on television in Spain: the program "El Hombre y la Tierra" ("The Man and the Earth"), by the naturalist Félix Rodríguez de la Fuente. The program broadcast 124 episodes from 1974 to 1981 and was seen by millions of viewers of RTVE (Spanish Public Radio and Television). It was a milestone in the awakening of interest in wildlife and nature. The death of Rodríguez de la Fuente in 1980 in a plane crash in Alaska shocked the entire country and

even children's songs were written to honor him. This documentary series is part of the collective media memory of Spain.

In these years, accidents at the Seveso chemical plant in Italy (1976) and at the Three Mile Island nuclear power plant in the United States (1979) increased media and social interest in environmental themes (Hansen, 2010). In Spain, the environmental movement united the defense of nature with the national struggle for democracy. The protection of natural spaces and the opposition to nuclear energy were central demands.

During the political transition that resulted from the death of Francisco Franco, the newspaper *El País* was born (1976). In imitation of the French newspaper *Le Monde*, it included an Ecology section, the first to appear in Spain. *El País* employed a journalist dedicated exclusively to environmental issues, Benigno Varillas. In 1977, the Association of Ecological Journalists of Catalonia emerged, including militant environmental journalists who edited the magazine *Userda*. In its first issue, critical articles on the energy policy of the Spanish Government were published, as well as objections to the installation of dangerous industries in Tarragona and the promotion of hygiene and health conditions in companies.

In the 1980s, environmental issues began to be highlighted in the media, reflecting a decade of growing environmental sensitivity promoted by environmental groups and international organizations. In 1982, Rafael Cid's research on the Doñana National Park was published in the magazine *Cambio 16*. And in 1984, *El País* published *El Libro de la Naturaleza* (*The Nature Book*), a compendium of reference articles regarding the relationship of the environmental movement with the media. However, Montse Quesada (1987, p.122) argued that investigative journalism concerning the environment was rare.

Nineteen ninety-two was a key year at the international level with the adoption of the United Nations Framework Convention on Climate Change (UNFCCC), as well as the Rio Summit promoted by the UN. The Summit addressed climate change and desertification, and the Agenda 21 was signed, which was a strong boost for environmental information. The Summit called on the media to involve themselves in informative tasks for the preservation of and information on the environment and to change attitudes supporting environmental objectives (Mercado, 2012).

The Asociación de Periodistas de Información Ambiental (APIA) (Association of Environmental Information Journalists) was created in 1994. Its objectives are to ensure the independence and objectivity of information and to rigorously disclose environmental information; defend freedom in the professional practice of its associates; facilitate dialogue and access to information sources; and represent their associates on issues related to the profession. APIA has become the main promoter of environmental journalism and organizes, among other activities, biannual congresses in which the group's conditions are analyzed and examined. The organization keeps all partners informed of conferences, courses, awards, and other announcements related to the field.

Disasters such as the dumping of toxic sludge in the Doñana Natural Park in 1998 and the oil spill in Galicia caused by the sinking of the oil tanker Prestige in 2002 kept the environment in the news. However, the event that caused maximum media attention was the coverage of the Climate Change Summit in Copenhagen in 2009.

Meanwhile, the global economic crisis that began in 2008 was having an impact on media companies, which were beginning to lose resources and advertisers. As a consequence, newspaper supplements (that had been sponsored by companies and private foundations) disappeared, and, even worse, newsrooms reduced the number of staff and the number of specialized environmental reporters. At that time, the traditional media of newspapers, television, and radio began to realize that their own business model was in jeopardy due to shifts in advertising to the Internet. Ten years later, the media have not recovered from this crisis.

None of the ten newspapers with the highest digital audience, according to Comscore data (July 2018), has an environment section. Only *El País, La Vanguardia*, and *El Periódico* include in their Society section environmental issues. These sections are called Vida in *La Vanguardia*, Environment in *El Periódico*, and Natural in *La Vanguardia*. In the digital edition of 20 Minutos, two of its 33 thematic blogs are related to the environment: 'La Crónica Verde' (The Green Chronicle) by César J. Palacios and 'Energy as a Right,' by the Renovables Foundation.

EfeVerde, the environmental digital platform of EFE agency, the main Spanish news agency, offers the most important source of environmental information in the Spanish media. Creator and director Arturo Larena stands out not only for his informative work, but for his concern for journalists training. He offers specialized practices and courses in environmental journalism and climate change.

The main private radio networks do not offer specific programs on the environment. In fact, public stations with the national reach of RTVE and their respective affiliates in the provinces are the ones that provide environmental content. For instance, on Radio 5 of Radio Nacional de España (RNE), the veteran weekly space "Reserva Natural" ("Natural Reserve") has included ecological topics since 1977. Joaquín Fernández, the director of "Reserva Natural" until 2009, was an environmental journalist at RNE for three decades and he has published a dozen books about what he calls "ecological culture." Josefina Maestre took over as director in 2009.

"El Escarabajo Verde" ("The Green Beetle") is a specialized environmental space on La 2 of TVE, which is national public broadcasting. It is a weekly news program that started broadcasting in 1997. An outstanding example of environmental journalism in regional public television is the program "Espacio Protegido" ("Protected Environment"), in Canal Sur, public television in Andalusia which is broadcast biweekly and directed by José María Montero since 1998. It used to be a weekly program.

## **Specialized Environmental Journalism**

APIA's first Congress of Environmental Journalism in 1995 had placed before all the participants the reality of environmental journalism at the time. Media coverage of the environment was considered timid and belated: "Shy because they barely put the technical and human resources for its implementation and development, and late because the response to the informative demand of the environmental issues are made only by begging" (Zorrilla, 1995). After studying the situation at the time, Manuel Zorrilla argued that the problem with environmental journalism was the lack of specialized

reporters and the battle in the newsroom over whether to cover environmental issues. He also noted difficulties with sources.

The Local and Society sections of newspapers "gobble" up environmental news and oblige specialized journalists to report on other subjects, a detriment to environmental coverage. Zorrilla (1995) recommended the creation of environmental sections in large circulation newspapers or, at least, a subsection marked with the corresponding heading. He also called for a weekly increase in the number of special pages devoted to environmental information so that this topic would stop being the Pepito Grillo (Jiminy Cricket) that nobody knows where to place.

On the other hand, it was noted that the vast majority of journalists specializing in the environment came to this specialty due to a personal effort and, almost always, against the neglect of their editors and publishers. Although 84 percent of the newspapers analyzed had at least one specialized journalist, practically all graduates in journalism, there was a gap in the training of specialized environmental professionals.

Environmental issues were still considered minor by the media if they were not hooked to a striking 'perch' (newshook).

In the 21st century, faced with the demand for a dedicated space for environmental coverage in the media, there is a new perspective that reduces the vulnerability of environmental journalism's dependence on or pressure from political parties, business groups, and its advertising investments (Cerrillo, 2008). María Josep Picó (2008, p.195) emphasizes that self-censorship occurs in the news media in order to avoid delving into the fundamental issues within the prevailing economic model. Specialized environmental journalism has to become an economic priority for society to overcome its discontinuity and dependence on international warnings, trends, and ecological crises and disasters, which are often addressed from sensationalistic or catastrophic perspectives.

## **Research on Environmental Journalism**

Broadly speaking, it can be said that research on environmental journalism has little relevance in the Spanish journals with the greatest academic impact, taking into account only 35 articles in 13 of the 20 journals analyzed, according to the study of Alejandro Barranquero and Beatriz Marín (2014). The specific works on journalism are focused on the analysis of the information treatment of ecological disasters (Elías, 2002) or climate change (Piñuel-Raigada et al., 2012, Fernández Reyes & Mancinas, 2013) and coverage of COP (León, 2011, Arcila et al., 2015). In short, research tends to be excessively short-term and episodic, and is correlated with the cyclical attention that the media agenda lends to issues, such as the celebration of Earth Summits or the appearance of environmental crises.

One of the main studies on environmental information was conducted by María Josep Picó (2015) in her doctoral thesis on environmental coverage from 1984 to 2004 in the newspapers *El País, La Vanguardia*, and *Levante-El Mercantil Valenciano* (three months per year, 1,800 days of which 1,297 units of analysis were obtained). The results show that due to the fluctuation in the number of topics and the published volume, three phases can be differentiated in the evolution of environmental journalism during these

20 years: the origins in the eighties, the emergence in the nineties, and a decline since the first years of 2000, with a reduction in content and journalists who are dedicated to the issue in the national press, along with the progressive disappearance of the sections of Ecology and Environment in *El País* and *El Mundo*, respectively. Paradoxically, in the regional capitals the vitality of environmental journalistic content shows an opposite evolution.

In the 1980s, *El País* more often addressed generic issues of the environment, biodiversity, and natural spaces, in addition to nuclear and water policy. *La Vanguardia* highlighted nuclear issues and the effects of radioactivity, hydraulic works, natural spaces, and biodiversity, as well as issues related to the coast, fires, water, and drought. *Levante-EMV*, in addition to the topics already mentioned, was also committed to report on the nitrate contamination of aquifers, cold drop, and floods.

The nineties saw an increase in environmental issues in the newspapers (*El País* tripled the number of pieces, *La Vanguardia* almost doubled its number of pieces), in a context that Picó calls "a period of environmental euphoria," collected by the media. Thus, on the same day, news of this specialty was published in the three newspapers studied, with more specialized personnel. In addition, the theme was diversified. In March of 1994, *El País* began to use the label Ecology. It highlighted the work of Rafael Ruiz and the presence of expert writers such as Joaquín Araujo in 1996, the year in which the Ministry of the Environment was created. *La Vanguardia* strengthened its workforce and environmental information appeared daily.

Throughout the 2000s, the three newspapers followed different paths. *El País* reduced the coverage of environmental information and ceased to use the Ecology heading, instead using the Company section to include these contents. *La Vanguardia* continued betting on the theme, but decreased the volume of published pieces. Two events marked the first years: the approval of the National Hydrological Plan in June 2001 and the sinking of the Prestige off the Galician coast in 2002. Both imply "an increase in politicization in environmental journalism" (Picó, 2015, p.87). The coverage of the Prestige case was very broad in all media, as analyzed by Vicente Mariño (2009).

Bienvenido León (2007) examined a large sample of more than 20,000 news broadcasts on national Spanish television stations between the months of July 2005 and June 2006. In its sampling, environmental news represented only 1.88 percent of the total information. Priority attention was shared between sports, disasters and violent events, and political information.

Luis Pablo Francescutti, Fernando Tucho, and Ana I. Iñigo (2013) observed an increase in the volume of environmental information on television in their subsequent analysis of one year of news (from April 1, 2007 to March 31, 2008). From a sample of 32,592 news items collected on the public TV channel and the private Telecinco, Antena 3, and Cuatro, environmental information accounted for 3.4 percent of the total, one of every 29 stories.

## A Study of Environmental Information in El País

For this chapter, we analyzed the environmental information published by the newspaper of record in Spain, *El País*, from July 1, 2014 to July 31, 2018, using the newspaper's digital

archive. We identified 563 informative pieces about the environment, among which were those related to the environmental deterioration caused by the actions of today's society. These stories represented 28.4 percent (n = 160) of the total, compared to articles about protection measures, which comprised 20.6 percent (n = 92). The second largest topic covered by *El País* was climate change (n = 150), considering it as an independent issue due to its global importance, although it could be included in the category of environmental deterioration. Biodiversity was the third category in media attention with 20.6 percent of the information (n = 116).

Air pollution was the item with the greatest presence in the category 'deterioration,' while in the case of the category 'climate change,' coverage of the summits (n = 41) and international negotiations (n = 36) were the sub-themes that stood out. Issues concerning species monopolized 'biodiversity,' with 55 stories, while another 50 focused on endangered species, of which 20 were dedicated to the Iberian lynx. The protection measures were diverse, from sustainable production to recycling, both of which had 10 pieces.

In short, 28.4 percent of the stories concerned deterioration, 26.6 percent climate change, 20.6 percent biodiversity, 16.3 percent protection, 5 percent energy, and 3 percent all others. Media attention varied during the study years, with the largest numbers of stories in autumn, with the preparation and celebration of the world summits that are held at the end of November and the beginning of December. The highest peak, in 2015, coincided with the Paris Summit. In 2017, interest in climate change declined.

An analysis of the sources of the 69 stories most closely related to the keyword 'environment' revealed the presence of 217 sources, which means an average of three sources per piece. This figure responds to the high number of reports among this information.

The category 'experts' was the most frequent (n = 73), followed by politicians, who appeared 67 times. Environmental NGOs are the third most cited source (n = 26), followed by citizens (n = 18), companies (n = 16), interest groups (n = 11), and others (n = 6). "Awareness" was the frame found in 71 percent of the stories. Conflict was the frame in 20 percent of the stories and business or advertising interest was the frame found in 9 percent of the stories.

#### **Environmental Journalists Tell Their Stories**

In-depth interviews were conducted with ten specialized journalists (five women and five men) in different media (written press, radio, television, and Internet) and the other areas of practice of journalism: a specialized agency, a communications office, an international environmental organization, and one university:

- Sara Acosta, Director of specialized magazine Ballena Blanca
- Antonio Cerrillo, Environmental Journalist, newspaper La Vanguardia
- Alex Fernández Muerza, Environmental Journalist, freelance (*Muy Interesante, Radio Euskadi, etc.*)
- Arturo Larena, Director of the Environmental section 'EFEVerde' at EFE news agency

- Lourdes Lázaro, Journalist specialized at the International Union for Conservation of Nature (IUCN)
- Josefina Maestre, Environmental Journalist who conducts and directs the radio program 'Reserva Natural' en RNE
- José María Montero, Section Chief of Environmental Reporting on 'Canal Sur' (TV de Andalucía). Director and conductor of the program on Environment 'Espacio Protegido'
- Clara Navío, Environmental Journalist, special section in newspaper La Razón.
   President of the Association of Environmental Journalists -Asociación de Periodistas Ambientales (APIA)
- María Josep Picó, Environmental Journalist. The Scientific and Innovative Culture Unit of Universitat Jaume I.
- Javier Rico, Environmental Journalist, freelance (*El País*, El Asombrario, energiasrenovables.com, etc.).

The interviews were conducted between the months of June and September 2018, via Skype or telephone, with a duration of between 30 and 45 minutes. The semi-structured interview revolved around training, the peculiarities of environmental journalism, the evolution of the specialty in Spain, media attention, the fit of the area on the Internet, work with sources, and the environmental journalist's consideration as militant ecologist.

The ten journalists interviewed were trained in the environmental area in a self-taught way since it did not exist in the journalism degree that they studied in a specific subject. Some chose to deepen in this field by personal affinity to nature or biology, although the specialization was acquired by contacting the environmental and scientific sources in the newsrooms, from the sections of Science, Society, Economy, or Infrastructure.

Four of the journalists consider it essential to incorporate a specific subject in journalism degrees, while others think that a masters in environmental management or ecology are more appropriate. In any case, knowledge is acquired through professional practice, the investigation of topics, and attendance at events, conferences, and courses organized by groups in the sector.

The characteristic of transversality is the peculiarity most mentioned by the interviewees as a defining feature of environmental journalism. News about the environment is transversal since it has political, social, economic, and scientific implications. Precisely for this reason, María Josep Picó points out, "Environmental journalism clashes with the media system, and with advertising flows oriented towards consumerism, while in environmental journalism we talk about circular economics." Another outstanding feature is the multidisciplinarity. This multidisciplinary flexibility, as described by Arturo Larena, means that there are so many topics covered by what is called environmental journalism that the journalist learns new things every day. For Sara Acosta, it is "a very interesting specialty for journalism professionals to deal with innovative issues with a lot of field to investigate." Antonio Cerrillo goes a little further, considering that the practice of environmental journalism allows the discovery of essential issues that

introduce new debates about resources, consumption, and incorporates some reflections of current society. "The perplexity of environmental damage that occurs every day is still what motivates me," Cerrillo acknowledges. Lourdes Lázaro explains that having to deal with different complex issues and scientific and technical languages "leads to more difficult learning." Environmental journalism "demands a lot of rigor due to its link with scientific knowledge," expresses José María Montero.

As the most important source for environmental journalism, most of the interviewees pointed out that there has been a change in the relationship between journalists and scientists in recent years. Scientists are no longer in their ivory tower, explains Larena. According to Montero, the step that separated scientists from journalists has been reduced, and as clarified by Josefina Maestre, scientists feel more comfortable having specialized interviewers. The main Spanish scientific institutions have put their batteries in communication and are much more accessible and competent. A few years ago, they were more reluctant to be interviewed and more distrustful, says Javier Rico. On the contrary, from the scientific communications office of a university, Picó points out that scientists "continue to hide and the journalist does not scratch much, does not make an effort. Few want to do in-depth journalism. Scientists have a lot of modesty, few offer topics. They do not have the initiative and the journalist does not either."

Despite the "wide range of topics that can be covered" described by Montero, nine of those interviewed believe there is insufficient presence of environmental information in the Spanish media. "It is still a bit relegated, there is little attention" explains Montero. Environmental topics are "still fighting in the general media to get space" reaffirms Alex Fernández Muerza. Clara Navío indicates that environmental issues are always towed by something else, they do not mark agenda. Cerrillo argues that environmental issues are not covered satisfactorily, despite the large amount of material available, due to the hyperpolarization of Spanish media, where, "Politics hijacks the pages of newspapers."

At the same time, all those interviewed relate the relative lack of presence of specialization to the crisis in the media. The precariousness of professionals, the closing of headlines, and the bankruptcy of a business model that has not yet found the way to profitability on the web has affected journalism in general and environmental journalism in particular: "It is more difficult to do journalism." According to Montero, "there is a paradox that specialized information has been improving while work has been getting worse." Precariousness affects the environmental information that needs "certain rest, analysis, look for points of view, consult with scientific sources, get out of the event."

Regarding the evolution of environmental journalism in Spanish media, the early nineties were seen as a moment of turbulation, with the climax in 1992 with the celebration of the Rio Summit. For Cerrillo it was a key moment, "it enriched me enormously." At the end of the eighties, specialized magazines began to be published, radio programs were broadcast, and sections were created in the newspapers, explains Rico. Another key time was the period prior to the entry into force of the Kyoto Protocol (2005), which placed climate change on the agenda and mobilized a lot of money. In April 2007, the newspaper *El País* released the monthly supplement 'Tierra' with 42 pages. Other national newspapers (*El Mundo, ABC*) imitated it. Local newspapers also published

environmental supplements sponsored by large companies, especially energy companies and banks. The environment was fashionable. However, the number of pages of these supplements fell as advertising decreased with the first symptoms of the global economic crisis that began in 2008.

The swings in media attention are typical of the specialty and "right now, 2018, is in the doldrums," says Lázar. Resources are "impoverished, it takes a lot of enthusiasm to embark on new projects," asserts Sara Acosta, as in the case of the specialized magazine Ballena Blanca (Beluga Whale), for which she is the director. Acosta explains that Ballena Blanca was launched in 2014 by a group of journalists with the objective of covering the environment and economy, and who were "tired of not betting on these contents." Cerrillo insists that the agenda is not marked by journalists, but rather by the news priorities, and hence the cycles of media attention are linked to the great climatic summits and ecological disasters, such as discharges. He explains, "The press only reflects the ups and downs of the information available, of what is happening. It is not a fashionable or capricious subject of journalists, 'Now I am interested, now I am not,' but it follows the fluctuations of events. It depends on the agenda of international agreements, the positioning of leaders like Barack Obama who put climate change on the agenda. The media agenda is not decided by journalists, although we try to offer information about climate change permanently in relation to current events (fires in Siberia, heat waves in Scandinavia ...)." In the summer of 2018, there was a great increase in the environmental coverage in the media after the appointment of Teresa Ribera as Minister of Ecological Transition in the new government of Pedro Sánchez. But, this situation is affected by the working conditions in the newsrooms.

Many specialized journalists with a long career have been pre-retired or dismissed, generating a certain generational gap. Some have become freelancers or have created their own publications on the web through specialized magazines or blogs where they are still active. The Internet has meant an increase in the environmental content in circulation, but not an improvement in the quality in general lines of reporting. The environmental information is lost in the vastness of the network. As Montero illustrates, "The trees do not let you see the forest." However, everyone appreciates the possibility it offers in terms of risky media bets, new narratives, and the possibility of connecting with the audience, especially young people, through YouTube or social networks. For the director of the agency EFEVerde, Arturo Larena, "You have to be there."

In the Spanish media environment, environmental journalists are sometimes labeled as activists. For Larena, it is nothing more than a "stereotype, a label that has been posted." However, Acosta recognizes that she often encounters this kind of Stockholm syndrome with environmentalism in the journalists who offer reports for *Ballena Blanca*. "Take a turn, lack equanimity, you have to be more self-critical." Everyone agrees that the journalist should not be an activist. "Commitment yes, militancy, no," says Montero, "Commitment to ethics and rigor. Militancy only leads to sectarianism, to the Manichean gaze of good and bad. We owe not to sources, but to readers or spectators." Rico believes that you have to separate the person, who can be an ecologist or activist, and the journalism professional who has to "contrast the information, look for data from other sources, question every press release, whether that comes from Greenpeace or

from Iberdrola." "If you focus on the issues as an activist, you are not doing your job well," explains Navío, although she clarifies that it can not be equidistant either, "The specialized journalist knows from his work, due to his knowledge of reliable reports, that the high pollution levels of the air are very harmful to health and you can not give a voice to those who are against taking measures for particular interests." In the same sense, Maestre argues that being accused of environmentalism is the same as being accused of feminism, "Of course, how can I not be." You do not have to be an activist, but you must be a conscientious professional because you know from your training and experience the global environmental crisis in which we are immersed.

## Conclusions

If in 1995 there was talk of a shortage of technical and human resources, in 2018, with technical resources, the problem of personnel persisted, mainly due to precarious work in the journalistic profession, on the one hand, and lack of specialization, on the other. A subject on Environment, Ecology, or The State of the Planet has not been integrated in the journalism degrees in the same way that an introduction to law or literature is included. Spanish environmental journalists have trained in a self-taught way.

Environmental journalists defend their professionalism, rigor, and depth in the explanation of complex issues of enormous importance. Interesting is the inclusion of the nuance of the 'non-equidistance,' in the same sense as the BBC in announcing in September 2018 new rules for the treatment of climate change (Hickman, 2018). Among them is the non-inclusion of deniers in the debates to ensure the balance between the sources. Alan Rusbridger, before retiring as editor at *The Guardian* in 2015, explained the position of the newspaper was to report on climate change every week regardless of whether or not there was news about it.

The global economic crisis of 2008 sharpened the internal crisis of the media in digital convergence and led to the closing of paper sections, readjustments of staff, and dismissals of numerous specialized journalists. In other words the reduction of newsrooms. Some journalists are still active as freelance collaborators, a professional situation increasingly common in the area of environmental journalism. Only some of the major newspapers have journalists dedicated to environmental issues. Environmental journalists still have to fight to position environmental information in the media. Without dedicated sections devoted to the environment, the presence of an environmental perspective remains doubtful in a media that focuses on content such as Politics and the Economy. The situation in radio and television is worse, and only the public media offer specialized spaces.

The results of the analysis of the newspaper *El País* show a clear preference for coverage of issues that denounce environmental deterioration. Considered as a separate topic, coverage of climate change on its own almost equals the coverage of the rest of the problems all together. In a prestigious newspaper such as *El País*, experts and scientists, together with politicians, are the most frequently used sources, with a focus mainly on environmental concerns. In this sense, not only the type of newspaper is important, but also the sample chosen for the in-depth analysis of sources and frames. This is critical

since it is the newspaper itself that determines what information about the environment is specific and newsworthy in its search engine.

Despite the fact that Spanish environmental journalism could enjoy better health, practicing Spanish professionals consider that its multidirectionality (the wide range of topics covered, many of them innovative as they relate to science and technology with such important economic and social implications) makes the specialty a passionate area that they consider essential to guarantee to citizens their right to know about their own environment.

#### References

- Arcila-Calderón, C.; Mercado, MT; Piñuel-Raigada, J.L. & Suárez-Sucre, E. (2015). Media coverage of climate change in spanish-speaking online media. Convergencia. Revista de Ciencias Sociales, 8, 71-95.
- Barranquero, A. & Marín, B. (2014). La investigación en comunicación y periodismo ambiental en España. *Prisma Social*, 12, 474-505.
- Bourassa, E., Amend, E. & Secko, D. (2013). A thematic review and synthesis of best practices in environment journalism. *Journal of professional communication*, 3(1), 39-65.
- Cerrillo, A. (coord.) (2008). El periodismo ambiental. Análisis de un cambio cultural en España. Barcelona: Fundación Gas Natural.
- Elías, C. (2002). Periodismo especializado en medio ambiente: el caso Doñana como paradigma de manipulación informativa. *Revista Latina*, 47, 279-303.
- Entman, R. (1993). Framing: toward clarification of a fractured paradigm. *Journal of Communication*, 43 (3), 51-58.
- Erviti, MC. (2013). Las imágenes del cambio climático en los informativos de televisión. Análisis de seis televisiones españolas de cobertura nacional. Unpublished doctoral dissertation. Universidad de Navarra. Retrieved from http://dadun.unav.edu/handle/10171/39019
- Fernández Parrat, S. (2006). *Medios de comunicación y medio ambiente*. Madrid: Fragua. Fernández Reyes, R. & Mancinas, R. (Eds). *Medios de comunicación y cambio climático*. Sevilla: Fénix editora.
- Fernández Reyes, R. (2002). *Periodismo ambiental y ecologismo: Tratamiento informativo del vertido de Aznalcóllar en El País, edición de Andalucía*. Unpublished doctoral dissertation. Universidad Universidad de Sevilla. Retrieved from https://idus.us.es/xmlui/bitstream/handle/11441/15437/
- Fernández Reyes, R. (2009). El cambio climático en editoriales de prensa. Ecología política y periodismo ambiental: una propuesta de herramienta de análisis. Unpublished doctoral dissertation. Universidad Pablo de Olavide (Sevilla, Spain). Retrieved from http://fama2.us.es/fco/digicomu/38.pdf
- Fernández, J. (1995). Periodismo ambiental en España. Madrid: MOPMA.
- Fernández, J. (2001). *Dos siglos de periodismo ambiental*. Madrid: Caja de Ahorros del Mediterráneo.

- Francescutti, L.P.; Tucho, F.; Iñígo, A.I. (2013) El medio ambiente en la televisión española: análisis de un año de informativos. *Estudios sobre el Mensaje Periodístico* 19 (2), 683-701.
- Hansen, A. (2010). Environment, Media and Communication. London: Routledge.
- Hickman, L. (7 september 2018) *Exclusive: BBC issues internal guidance on how to report climate change*. Carbon Brief. https://www.carbonbrief.org/exclusive-bbc-issues-internal-guidance-on-how-to-report-climate-change
- León, B. and Erviti, MC. (2011). Portrayal of scientific controversy on climate change. A study of the coverage of the Copenhagen summit in the Spanish press.

  Observatorio (\*obs) Journal, 5 (3), 45-63.
- León, B. (2007). El medio ambiente en las televisiones españolas.: Un análisis de contenido de los informativos nacionales. In Caraballo, A. et al (Eds). Cultura verde: ecología, cultura y comunicación (pp. 361-373). Sevilla: Junta de Andalucía.
- Mateu, A. (2015). Inicis i desenvolupament del periodisme ambiental al País Valencià. La conscienciació sobre qüestions ambientals a través dels gèneres d'opinió. Unpublished doctoral dissertation. Universitat de València. Retrieved from http://roderic.uv.es/handle/10550/50786
- Mercado-Sáez, MT. and Chavez, M. (2016). *La Comunicación en Situaciones de Riesgo y Crisis*. Valencia: Tirant Humanidades.
- Mercado-Sáez, MT. (2012). Periodismo ambiental: entre la especialización y el compromiso. In Fernández Sanz, JJ. Rubio, A. (Eds). *Prensa y Periodismo especializado V.* (pp. 439-446). Guadalajara: Asociación de la Prensa de Guadalajara.
- Mercado-Sáez, MT. (2010). La cobertura de la información ambiental en laSexta/Noticias. In León, B. (Ed.) *Informativos para la televisión del espectáculo* (pp. 41-47). Salamanca: Comunicación Social.
- Montero, J.M. (2005). *El medio en los medios. Teoría y práctica del periodismo ambiental.* Sevilla: Ayuntamiento de Sevilla.
- Odriozola, J. (2008). *Información de crisis y periodismo medioambiental. El caso Prestige en la prensa vasca.* Unpublished doctoral dissertation. Universidad del País Vasco. Retrieved from https://addi.ehu.es/handle/10810/12319?show=full
- Picó, M.J. (2008). Retrato de dos décadas de periodismo ambiental (1984-2004): de la eclosión al primer declive. In Cerrillo. A (coord.) El periodismo ambiental. Análisis de un cambio cultural en España (pp. 177-195). Madrid: Gas Natural.
- Picó, M.J. (2015). El futur del periodisme ambiental. Tendències de diaris i revistes de natura a l'entorn digital en l'àmbit espanyol i europeu. Unpublished doctoral dissertation. Universitat de València. Retrieved from http://roderic.uv.es/handle/10550/50943
- Piñuel-Raigada, J.L., Teso-Alonso, G. Painter, J., Carvalho, A. Pardo-Buendía, M & Lera, A. (Eds.) (2012). *Comunicación, controversias e incertidumbres frente al consenso científico acerca del cambio climático*. La Laguna: Cuadernos Artesanos Latina. Retrieved from http://www.revistalatinacs.org/067/cuadernos/30a.pdf
- Quesada, M. (1987). La investigación periodística: el caso español. Barcelona: Ariel.

- Rueda, A. de (2015). El discurso político y el tratamiento periódistico del cambio climático en la prensa española durante las conferencias de las partes de Naciones Unidas: de Copenhague (2009) a Varsovia (2013). Unpublished doctoral dissertation. Universidad Cardenal Herrera CEU. Retrieved http://dspace.ceu.es/handle/10637/7389
- Rusbridger, A. (2015, March 6). Climate change: why the Guardian is putting threat to Earth front and centre. *The Guardian*. Retrieved from https://www.theguardian.com/environment/2015/mar/06/climate-change-guardian-threat-to-earth-alan-rusbridger
- Sachsman, D.B., Simon, J., Myer Valenti, J. (2010). *Environment Reporters in the 21st Century.* New York: Transaction [now Routledge].
- Sahuquillo, F. (2017). Encuadres noticiosos y participación social. Análisis del tratamiento periodístico de los proyectos de prospecciones petrolíferas en el Golfo de Valencia en Levante-EMV, Mediterráneo y Diario de Ibiza. Unpublished doctoral dissertation. Universidad Cardenal Herrera CEU. Retrieved from http://dspace.ceu.es/handle/10637/9049
- Schmidt, A., Ivanova, A. y Schäfer, M. (2013). Media attention for climate change around the world: A comparative analysis of newspaper coverage in 27 countries. *Global Environmental Change*, 23(5), 1233-1248.
- Takahashi, B., Pinto, J., Vigón, M. & Chávez, M. (2018). News Media Coverage of Environmental Challenges in Latin America and the Caribbean. Palgrave.
- Vicente Mariño, M. (2009). La cobertura televisiva de la crisis del Prestige: Agendas, encuadres y discursos en los noticiarios españoles. Unpublished doctoral dissertation. Universitat Autònoma de Barcelona. Retrieved from https://ddd.uab.cat/record/64179
- Vicente Mariño, M. V. (2011). La expansión de la investigación sobre comunicación medioambiental: ¿otra consecuencia más del cambio climático?. In Álvarez, S. (Ed.) Convivir para perdurar. (pp. 371-386). Barcelona: Icaria.
- Zorrilla, M. (1995). I Congreso Nacional de Periodismo Ambiental de la Asociación de Periodistas Ambientales (APIA). Madrid: Egraf. 1995.