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RECEIVED 18 December 2024 ACCEPTED 22 January 2025 PUBLISHED 05 February 2025

CITATION

Prieto-Andrés A, Fernández-Romero C and Aguareles M (2025) The portrayal in the Spanish press of migration caused by climate change: a moral framework analysis. *Front. Commun.* 10:1546804. doi: 10.3389/fcomm.2025.1546804

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The portrayal in the Spanish press of migration caused by climate change: a moral framework analysis

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This study analyzes how migrations due to climate change and environmental causes are represented in the leading Spanish newspapers, but from a novel perspective, linking variables such as the topics that are covered the most or the most commonly used news sources to the typology of moral frames applied. This typology is based on the moral responsibility of the media when it comes to representing climate or environmental migrants. The methodology of quantitative content analysis, combined with framing theory, was used. The findings indicate that the Spanish press presents this issue from the perspective of the intellectual elite, seeking to analyze the phenomenon with rigor, relying on experts, and combining the coldness of the data with a good dose of empathy toward the migrants' situation. With regard to the most common topics, the causes of this type of migration stand out, along with the legal issues affecting migrants. The predominant portrayal is of the migrant as a victim, but also as a political subject, with their portrayal as a threat remaining very limited, which is novel when compared with other studies, in which this aspect holds greater relevance. In terms of moral frameworks, the one in which migrants are viewed as a biological life is most prevalent (32.1%), followed by that of empathy (30%) and hospitality (25%), with the one that views migrants as a threat having largely fallen by the wayside (11.4%). This paper also analyzes the combinations of this framework with the mentioned variables to identify possible correlations.

KEYWORDS

migrations, climate change, environment, press, framing, mass media, morality

1 Introduction

In this paper, we analyze how the leading Spanish newspapers cover the important and growing phenomenon of migratory movement due to climate change or environmental phenomena. Quantifying this is particularly difficult because of the multiple factors that cause it, the related methodological problems, and the lack of standards when it comes to data collection. Thus far, most such displacement has occurred internally within affected countries (32.6 million in 2022), whereas climate-related cross-border migration has been on a small scale. However, approximately 40% of the world's population lives in places that are highly vulnerable to climate change (Banco Mundial, n.d.), which is expected to increase international migratory flows in the coming decades. This phenomenon is of particular interest to Spanish society, since, according to forecasts (Clement et al., 2021), by 2050 the greatest impacts on migration, derived from climate change, will occur in Sub-Saharan Africa. This geographical area, due to its proximity, already contributes significantly to migration flows to Spain. According to data from the Spanish National Institute of Statistics (INE, n.d.), approximately

17% of the foreign-born population currently residing in Spain (which represents 18.5% of the total population in 2024) originates from North Africa. Migration is a critical issue on the political and social agenda of Western countries, and Spain is no exception. In fact, it has been identified as a primary concern among the Spanish population. According to official surveys, immigration ranked as one of the country's three most significant issues, as reported by 30.4% of respondents in the September 2024 barometer of the Spanish Sociological Research Center (CIS, 2024).

In accordance with the aforementioned general framework, the issue of climate change is among the most relevant and discussed issues of our time. In Spain, 93.5% of the population believes that climate change is real, and a majority (73.3%) believes that this problem is being given less importance than it deserves (IDEARA Investigación, 2021). However, it is not among the main concerns for the Spanish population. Nevertheless, the present study endeavors to direct attention to a phenomenon that, in our belief, has not been sufficiently investigated from the Spanish perspective: the media representation of migrations associated with climate change or environmental phenomena. This representation can influence the perception of Spanish citizens and the political agenda, given the importance of the press as a social mediator. To address this subject, we have opted for an approach centered on morality, drawing upon the contributions of scholars such as Chouliaraki and Stolic (2017), who have examined the portrayal of migrants from diverse moral frameworks. We have adapted this model for application in the present study, and a detailed exposition of this approach can be found in the methodological section.

2 Literature review

From a communicative perspective, the concept of climate change can be regarded as an unobtrusive topic. This is due to the fact that the climate and its past, current, or future developments are not easily observable first hand (Schäfer, 2015). This absence of direct perception may have a bearing on the public's understanding of climate-driven migrations. Given the inherent complexity of climate change and its associated causes, coupled with the significant role played by media in shaping public perceptions, it is imperative to examine how media representation influences public understanding of these migrations. To address this, this study aims to first provide a comprehensive characterization of climate and environmental migrants. Secondly, it will briefly review the media portrayal of these individuals according to the prevailing doctrine. And, finally, it will make a special mention regarding the concept of climate justice, a moral issue that is closely related to the focus of this research: the moral framing of climate migrants in the Spanish press.

2.1 Characterization of climate and environmental migrants

The International Organization for Migration (IOM) defines an "environmental migrant" as a person or group(s) of persons who, predominantly for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are forced to leave their places of habitual residence, or choose to do so,

either temporarily or permanently, and who move within or outside their country of origin or habitual residence. There is no international agreement on a term to be used to describe persons or groups of persons that move for environment related reasons. This definition of environmental migrant is not meant to create any new legal categories. It is a working definition aimed at describing all the various situations in which people move in the context of environmental factors (International Organization for Migration, 2020: 37).

In addition, the IOM provides the following definition of "climate migration":

The movement of a person or groups of persons who, predominantly for reasons of sudden or progressive change in the environment due to climate change, are obliged to leave their habitual place of residence, or choose to do so, either temporarily or permanently, within a State or across an international border. This is a working definition of IOM with an analytic and advocacy purpose which does not have any specific legal value. Migration in this context can be associated with greater vulnerability of affected people, particularly if it is forced. Yet, migration can also be a form of adaptation to environmental stressors, helping to build resilience of affected individuals and communities (International Organization for Migration, 2020: 37).

In short, these are either internal displacements, occurring within one country's borders, or international ones, involving movement to another state (in which case we would be talking about migration proper), that occur as a result of environmental or climatic changes, which may be abrupt or gradual.

Another term, "climate refugees," is commonly used. Because it shows up in the newspapers, it has been included in the search of the pieces under analysis herein. This term has been included in the public discourse since 1985, when UN Environment Programme (UNEP) expert Essam El-Hinnawi defined "environmental refugees" as "those people who have been forced to leave their traditional habitat, temporarily or permanently, because of marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affected the quality of their life" (Hinnawi and UNEP, 1985: 4). This definition is also used for "climate refugees" since, practically speaking, the difference between "environmental" and "climate" remains nebulous. Given these realities, attributing the designation of "refugee" to internally and externally displaced persons has given rise to debate and criticism. The Director of the IOM's Migration, Environment and Climate Change division expressed concern about granting refugee status to climate migrants. She argued that this could undermine the UN's 1951 Convention Relating to the Status of Refugees and, at the same time, prevent access to aid and support by climate-displaced persons who cannot provide adequate evidence that their forced displacement was climate related (Ionesco, 2019). A more appropriate legal framework for climate-related migration may be that of human rights (Saul and McAdam, 2008).

When it comes to the discursive and political characterization of climate and environmental migrants, the literature sheds light on the many ways in which this issue is framed and politicized. Accordingly, migrants are framed as hybrid beings, victims of climate change (a) who reemerge as adaptive agents, migrating to find work in distant labor markets, or (b) who are revictimized as sources of threat to host communities (Ransan-Cooper et al., 2015). Migration in the context of climate change is then conceived of either as a positive adaptive response, a form of resilience to climate change, or as a failure to

adapt, giving rise to the "threat" frame (Baldwin, 2013). In addition, there are often racialized distinctions between "us" and "them" and between the developed North and the deficient South (Ransan-Cooper et al., 2015). Viewed from this discursive perspective, the term "climate migrant" is used in an effort to promote migration as a strategy of adaptation to climate change and to challenge the perception of fatalism associated with the concept of "climate refugee" (Felli, 2013).

2.2 The portrayal of climate and environmental migrants in the media

When it comes to the media's portrayal of the phenomenon of climate or environmental migration, research on newsworthiness is an important aspect in selecting what to publish (Bednarek, 2016; Brooks et al., 2013). We have identified six basic values that drive the selection of stories: topicality, conflict, proximity (local stories being more newsworthy), human interest (personal stories), prominence (the influence or prominence of people involved), and impact (rarity, the number of people affected, atypicality, and its unforeseen nature). These values apply to the media's portrayal of climate-change-induced migration, although some are more significant than others. For example, proximity and human interest are relevant when migration is framed as a social justice issue, highlighting stories of local activism. We have incorporated this variable into this study, as we discuss in the "Results" section.

One of the most prominent studies that specifically analyzes climate migration is that of Sakellari (2022), who conducted a meta-analysis of a number of previous studies on the factors contributing to how climate migration is covered. It reaches some conclusions regarding the common elements among them: (a) Elite sources: The views of elite sources, rather than the perceptions of affected communities, dominate stories on climate migration; (b) Security focus: Media coverage tends to frame climate migration as a threat to national or regional security; (c) Victimization: The media portrays climate migrants as passive and helpless victims, which may humanize their situation but also presents them as a potential threat owing to their status as foreigners. In Spain, this subject remains under-researched (Piñuel Raigada, 2016; Puertas Cristóbal, 2016; Herrmann, 2017).

In the context of the frameworks used to characterize climate migrants, Ransan-Cooper et al. (2015) establish four categories: (a) Migrants as victims: This has been the main framework since the 1980s. This approach, promoted by international non-governmental organizations (NGOs), the media, and governments, presents migrants as passive and helpless people affected by environmental disasters who are in need of external assistance. This can be problematic, as it ignores the migrants' own agency and capacity and can perpetuate a patronizing view of the global North as savior. Moreover, it can shift focus away from solutions that are local and sustainable, and it does not always reflect how migrants themselves perceive their situation. (b) Migrants as security threats: Using sensationalist language, migrants are portrayed as a threat that could require a military solution, particularly in the states of the global North. This framework is frequently found in reports from Western think-tanks and forces aligned with defense, and is also deployed in the global South. It is legitimized through geopolitical narratives that position the North as rational and in control, as opposed to a chaotic South. However, some breakdowns of this framework lack rigorous data and analysis. (c) Migrants as adaptive agents: This approach views environmental migration as a positive adaptive response rather than a failure to adapt. It may overestimate positive outcomes and place an unfair burden on migrants to use migration as a livelihood strategy, rather than supporting adapting locally. (d) Migrants as political subjects: This is an emerging framework that, unlike other approaches, is not clearly defined or driven by specific institutional interests. It focuses on how unequal power relations limit the choices of vulnerable people. Key actors in this framework include researchers in political ecology, critical political economy, and postcolonial theory, as well as NGOs and community groups advocating for justice in resettlement and migration processes. This approach emphasizes the importance of community-derived and community-driven solutions, calling into question external intervention. This emerging framework seeks to empower environmental migrants and highlight issues of inequality, marginalization, and injustice by promoting bottom-up, rights-based approaches to policy decision-making. This type of framing has also been analyzed in our research.

In relation to the previously mentioned points, the discourse on migration as a form of adaptation represents an advancement in terms of understanding the complexity of migration and acknowledging the agency of vulnerable populations. However, it may also suggest a step backwards in terms of the possibility of addressing climate justice, which will be discussed further below. The emphasis on individual resilience and adaptation may result in the depoliticization of inequalities and a subsequent diminution of the states' responsibility in addressing both climate change and its impact on migration (Bettini et al., 2017).

A comparative study of Western and Arab media has yielded a nuanced characterization of climate refugees (Høeg and Tulloch, 2019). The study identified four predominant ways in which the media frames climate refugees, which coincide with the categories of victims and threats. Moreover, it is pertinent to note that the term "activists," which is employed in the context of political subjects, is characterized as individuals who challenge the *statu quo* and seek legal recognition through a radical discourse. Additionally, a fourth category is identified, entitled "abstractions," which portrays migrants as a vague phenomenon, a subject of scientific discussion, where numerical data and definitions are general.

Furthermore, it is imperative to acknowledge the influence of prevailing power structures on the portrayal of environmental migrants. The media, policy makers, NGOs, industry, and celebrities have the capacity to reinforce or challenge existing structures through their respective "frames." These frames, as outlined by Reese (2009), seek to establish themselves as authoritative voices and compete to become the media's primary sources. The media has a tendency to prioritize official sources, whether they be governmental or international, often considering them to be more trustworthy. This practice, however, has the effect of underrepresenting alternative sources, eliminating diversity and pluralism, and biasing news frames. Additionally, the endeavor to achieve impartiality by providing equal representation to both sides of a narrative, while beneficial to other subjects, has detrimental consequences on the quality of information related to climate change. This is because it can imply that the existence of climate change is a subject that is open to discussion, thereby giving credence to the most skeptical perspectives (Anderson, 2017).

The general approach described herein leads to significant challenges, as the complexity of climate migrations makes it difficult

to raise public awareness and precisely quantify the people affected (Felipe, 2021). Furthermore, the concept of the climate migrant is not neutral but is imbued with racial undertones, reflecting anxieties about order and control, often associated with their geographic, ethnic, or cultural origins (Baldwin, 2013). The portrayal of the climate migrant as a racialized figure, passive and helpless victim of global warming, is a product of these representations. The depiction of the climate migrant as a non-white figure is associated with stereotypes of populations from the global South, often situated in natural or rural environments (Methmann, 2014).

2.3 Migration, climate justice and morality in the representation of migrants

Defenders of the "historical principle" of "polluter pays" argue that it serves as a basis for moral justice in the context of the causes and effects of climate change, also referred to as "climate justice." This principle entails that the countries that have historically been the most significant emitters of greenhouse gases (i.e., the more developed countries) bear the responsibility to provide compensation to the less developed countries for the damage caused by climate change resulting, at least in part, from these emissions (Nawrotzki, 2014). However, this claim of responsibility has been criticized on the basis of the difficulty of establishing a direct relationship between past emissions and current suffering (Morales, 2022).

Another relevant concept that overlies discourses on climate migration from the perspective of "climate justice" analyzes climate change from a social perspective, highlighting how it is embedded in structures of inequality and oppression. It is conceptualized in three ways: academic theories, NGOs' perspectives, and grassroots movements. It focuses on large polluters' accountability, human rights violations, and development approaches for affected nations. Grassroots movements critique economic practices and voluntary or market-based approaches, focusing on local impacts, vulnerabilities, and the importance of community voices (Dreher and Voyer, 2015). With regard to climate-change-induced migration, a justice framework seeks to raise awareness of certain communities' vulnerability, ensuring that compensation does not perpetuate the victim-threat dichotomy. It also highlights the dominant political-economic structures, which reduce resilience and recovery; the lack of acknowledgment when it comes to political decision-making; and the human rights of climate-displaced people. In short, it is concerned with righting climate injustices such as risks to human rights, cultural loss, burdens of adaptation, and legacies of historical injustices stemming from colonization (Abate, 2016; Bulkeley et al., 2013; Saad, 2017; Sakellari, 2022).

In addition to the general moral approach to climate migrations previously outlined, this paper will focus on the reflection made by reference newspapers in Spain on the individual and collective moral responsibility towards people who, like climate migrants, suffer, and on the effects of reporting in a certain way about their situation. The media bears a general moral responsibility to inform the public in truthful and objective ways about the relevant facts concerning social life at local, national, and international levels (Silverstone, 2010). However, when it comes to the representation of migrants, another pertinent question is raised by Chouliaraki and Stolic (2017: 1163): what normative dispositions of responsibility towards migrants do news articulate? According to Chouliaraki (2006, 2008), the media's

representation of migrants has been analyzed through the lens of the "politics of pity." This concept typifies a broad spectrum of responsible agency practices, ranging from empathetic to self-reflective citizenship. In order to grant humanity and voice to these migrants, as referenced in the studies conducted by the author, the news must evolve beyond notions of "formal" responsibility, that is, the responsibility for our own actions as active citizens, towards the notion of what Silverstone calls "substantive" responsibility, or "responsibility for the condition of the other" (Silverstone, 2010: 152). While the first enables actions that potentially dehumanize and deny voice to migrants, the latter possesses the capacity to bestow upon them "narratability," defined as the ability to articulate their life narratives, trajectories, and aspirations as inherently human endeavors (Chouliaraki and Stolic, 2017: 1164).

3 Research goal

Our objective herein is to discover which elements characterize climate and environmental migrants in the leading Spanish newspapers, using a typology of moral frames (Chouliaraki and Stolic, 2017), which we set forth in the "Methods" section. With this objective in mind, the following research questions are posed:

RQ1. What are the most common moral frames applied in the analyzed newspapers, what topics are they related to, and how are climate or environmental migrants portrayed?

RQ2. From a journalistic point of view and from the standpoint of selecting what is newsworthy, which sources of information are selected? What is the most common news value? What are the implications of this?

RQ3. How do the analyzed newspapers portray migrant persons?

4 Materials and methods

4.1 Materials

The corpus used in this research comprises news items from *El País*, *El Mundo*, *ABC*, and *La Vanguardia*, four leading newspapers in Spain, which were selected for their history, readership, social influence, and distinct ideological approaches (Armañanzas and Díaz Noci, 1996; Reig, 1998). *La Vanguardia* is a conservative Catalan newspaper, whereas the other three are more nationally oriented, but ideologically diverse: *El País* is left-leaning and progressive; *ABC* has links to Catholicism, the monarchy, and conservative values; and *El Mundo* is considered liberal (Durán, 2019; Martínez Lirola, 2022). According to the audience data for the third quarter of 2024 from the Association for Media Research in Spain (AIMC, for its acronym in Spanish), a reference entity in this field, the four selected newspapers are the most widely read generalist dailies (AIMC EGM, n.d.).

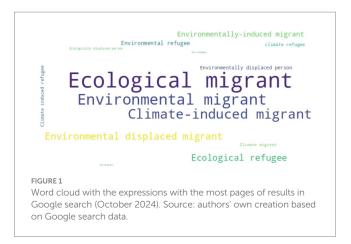
The issue of terminology in the context of migration and climate change is problematic, given that it includes very diverse phenomena and situations. An initial search of terms using Google Search, on the basis of a catalog established in a previous study (Venturini et al., 2012), showed that references to ecological, environmental, or

climate-induced migrants were used the most, whereas those that treat them as refugees had a significantly lower weight (Figure 1).

Given this terminological heterogeneity, it was decided that, not only would the most common terms (their equivalent in Spanish) be included in the subsequent search of the newspaper archives, but that other terms referring to more specific climatic or environmental phenomena would be added as well. Thus, pieces were extracted from the newspaper library platform MyNews using search terms (in Spanish) that included the word roots "refug*" (for "refugiado" [refugee] or "refugio" [refuge]) or "migr*" (for "migrantes" [migrants], "migraciones" [migrations], and their variants), in conjunction with (using the logical operator "AND") one of a series of terms referring to climate change or climatic or environmental phenomena, in general or specifically. Some combination of these terms had to appear in the title or subtitle to confirm that they were important to the content of the piece to be coded. The time period observed includes the period from January 2012 to June 2023. This period was selected because of its pertinence to climate migration. The Sixteenth Session of the Conference of the Parties (COP 16) held in Cancun, Mexico, at the end of 2010 (COP 16, 2011) is of particular relevance in this regard. This event marked a significant shift in the public agenda, with the interrelationship between migration and climate change becoming a prominent topic of discourse, including in the media. Additionally, it is noteworthy the United Nations Framework Convention on Climate Change (UNFCCC) COP 25 convened in Madrid, Spain, in late 2019, as a development that led to significant social and media discourse within the Spanish context. As a result of this search, within the established analysis period, and after filtering out duplicate pieces and those for which the object of study was not a central topic, the corpus contained 140 units. The distribution among the newspapers was as follows: 40.7% for El País (57 pieces), 33.6% for La Vanguardia (47 pieces), 15.7% for ABC (22 pieces), and 10% for El Mundo (14 pieces).

4.2 Methods

The research methodology used was content analysis, taking a quantitative approach, which facilitates the objective, systematic and quantitative description of the content manifested in the communication (Berelson, 1952). In addition, framing theory is at the core of our work. Framing reflects the journalist's bias toward some aspects of their perceived reality, making them more prominent in the communicative product (Entman, 1993). To study these framings in the news images accompanying the coverage of climate or environmental migrants, we have drawn on the typology of frames proposed in the study of Chouliaraki and Stolic (2017: 1167-71), which, building upon the moral responsibility of the media and citizens, analyzed how images of refugees in the European news in 2015 (an event known in Europe as the "refugee crisis"; mostly Syrians) represented these people and how these representations mobilized various forms of moral responsibility in public life, mediated by the printed press in five European countries. In our case, we apply this methodological approach not to the images but rather to the text of the leading Spanish newspapers, as the ideas underpinning this research are entirely applicable to the case of migrants or environmental refugees as portrayed in the analyzed texts. We have chosen this moral model of representation because it allows us to analyze the press from a different, more human perspective,



focusing on the social responsibility of the reference press in dealing with the phenomenon of climate-induced migration, providing valuable reflections for improving journalistic practice.

Thus, we identify five categories that place refugees in distinct frameworks of visibility and action: biological life, empathy, threat, hospitality, and self-reflection. These categories reflect common practices in the textual and descriptive representation of refugees or migrants, which often dehumanize them by not presenting their lives as worthy of being shared; hence, they are conceptualized as moral frames.

The first category, "visibility as biological life," shows refugees as masses of indistinguishable individuals (often located in boats or camps), reducing their existence to mere bodily needs. This approach dehumanizes refugees by presenting them as bodies in need of Western humanitarian aid to survive, without giving them a voice or a will of their own. The drawback that comes from this category is a relationship of generalized pity, which encourages the public to be merely observant, recording the facts without critically reflecting on the causes of their suffering. The second category, "visibility as empathy," focuses on personal images, such as crying children or mothers with babies (in texts, this can include the living situations of individual migrants, recounting their sufferings, for example), seeking to humanize refugees through empathy. However, this representation tends to infantilize refugees, showing them as helpless and in need of protection, which perpetuates a patronizing relationship. The responsibility here is one of charity, fostering a relationship of compassion and care that, while momentarily mobilizing emotional responses, remains volatile and can quickly shift to indignation or fear. The third category, "visibility as a threat," intensified after the Paris attacks in November 2015. It depicts refugees as threatening masses or aggressive youths. These racialized images, which present refugees as dangerous "others" who threaten security, generate fear and justify securitization and border closures. The fourth category, "visibility as hospitality," includes images of pro-refugee protests in Europe, showing Western citizens as key players in advocating for refugee rights. While these images promote transnational solidarity, they also marginalize refugees by not giving them visibility as political actors. The drawback here is twofold, because while advocating for the rights of refugees, this is done at the cost of their voice and their agency. In the absence of images, text can explain the measures being taken to care for these people. Finally, "visibility as self-reflection" manifests itself in images of celebrities supporting refugees and social media visuals that seek to humanize

refugees through co-presence and personal testimony. However, these representations often marginalize refugees, focusing on the celebrity figure or idealized depictions. The drawback that results from this is post-humanitarian, based on an ethic of solidarity that focuses on the self and consumer culture while ignoring the dehumanizing effects of these community voices. This frame is usually found less frequently owing to its specificity; this can also be observed in the text that describes certain initiatives taken by famous people from outside the political sphere.

The importance of these frames is that they not only reflect how refugees are perceived in the public sphere, but also shape the responses and actions deemed appropriate towards them. These frames: (a) organize the spaces of publicity in which refugees are constituted as subjects through moral claims of humanity and the public is invited to respond through actions of responsible agency; (b) regulate the public dispositions by which we collectively take responsibility for the situation of others from different backgrounds; (c) present a broad array of proposals for civic engagement, ranging from surveillance to political activism and personal self-reflection; (d) highlight the crisis of humanity that underlies the portrayal of immigrants, often dehumanized through strategies of massification, infantilization, debasement, or marginalization; and finally (e) reveal a crisis of the notion of responsibility that focuses on our own actions, proposing instead a substantive responsibility that recognizes the capacity to share stories and create communities of belonging. Lastly, it can be observed that despite their differences, these frames fail to acknowledge migrants as human beings with their own personal histories and perspectives. In short, it is imperative to understand these frames in order to critically analyze how the media constructs the image of climate migrants and how it influences public responses towards them. This analysis is necessary to promote a sense of responsibility that humanizes migrants and allows them to become active participants in the construction of their own lives.

The variables that we combined with these moral frames include others that are established in journalistic practices, such as the sources or the topics most used by the analyzed newspapers. In some of them, we differentiate between central and secondary. A variable is considered to be central if it clearly stood out in the news item analyzed. Prominence was evaluated according to the following criteria: (a) more space was devoted to the variable analyzed in the text of the piece, compared with other variables, and (b) the central idea of the variable was found in the headline, subtitle, introduction, and/ or summary of the piece. Once a variable was set as the central variable

in the piece analyzed according to the criteria above, any other mention was considered less important and, therefore, secondary. If there were more than one, we chose the next most relevant as secondary, depending on its prominence or, alternatively, if the difference was not appreciable, on the order of appearance in the text.

Coding was carried out by a single researcher following a detailed codebook and instruction sheet. To limit possible intracoding inconsistencies, another coauthor supervised approximately a quarter of the units of analysis, in particular the moral framing variable, since it was the most open to interpretation. Differences in criteria that occasionally appeared were resolved by consensus. This could be seen as a methodological limitation, but we believe that this effect was reduced by the application of a strict codebook, together with the consensual review of the moral framing variable, in a significant part of the corpus, to determine the most appropriate coding.

5 Results

In this paper, our reference point—around which the rest of the variables are centered-is the general framework of morality (Chouliaraki and Stolic, 2017), which established five categories of framing, as explained in the "Methods" section above. In our case study of the coverage by the Spanish press of climate and environmental migrants, these were distributed in the following way, ordered according to greatest frequency: (1) "biological life" framing (32.1% of the total pieces), (2) "empathy" framing (30%), (3) "hospitality" framing (25%), (4) "threat" framing (11.4%), and (5) "self-reflection" framing (1.4%, with only two references). In the following sections, we present the general results according to newspaper, but also according to the most common central and secondary topics, the news sources used most, and the most common news value, along with some analytical categories and the concept of "climate justice" and the portrayal of the climate or environmental migrant in the pieces analyzed, both overall and in relation to the moral frames.

5.1 Predominant moral frames in the leading Spanish newspapers

Breaking down the data by newspaper (Table 1), *El País* (which has a progressive editorial stance) had the most pieces in this study (40.7%).

TABLE 1 Type of moral framework according to newspaper (N and %).

Newspapers	Biological life		Empathy		Threat		Hospitality		Self- reflection		Total			
	N	%	N	%	N	%	N	%	N	%	N	Percent (%) of each newspaper	Percent (%) of all newspapers	
ABC	10	45.5	4	18.2	2	9.1	6	27.3	0	0	22	100	15.7	
El Mundo	3	21.4	11	78.6	0	0	0	0	0	0	14	100	10	
El País	17	29.8	18	31.6	7	12.3	14	24.6	1	1.8	57	100	40.7	
La Vanguardia	15	31.9	9	19.1	7	14.9	15	31.9	1	2.1	47	100	33.6	
Total	45	32.1	42	30	16	11.4	35	25	2	1.4	140	100	100	

Source: authors' own creation.

It was followed by *La Vanguardia* (a conservative Catalan newspaper), with 33.6%; *ABC* (conservative, Catholic, and monarchist), with 15.7% of the total of 140 pieces analyzed; and finally, *El Mundo* (liberal), with only 10%. In terms of the frames most commonly found in each newspaper, *ABC* mostly focused on the climate migrant as biological life (45.5%) and, to a lesser extent, on the "hospitality" frame (27.3%). *El Mundo* was the least interested in this phenomenon, highlighting the moral framework of empathy (78.6%). *El País*, in contrast, divided its focus between empathy (31.6%), biological life (29.8%), and hospitality (24.6%). Finally, *La Vanguardia* gave equal weight to the frames of biological life and hospitality (31.9% each).

5.2 Central and secondary topics according to type of moral frame

The most common central topic in the analyzed pieces (Table 2) was the causes of climate migrants' displacement (39.3%), followed by legal issues (25%) and international political debate (10%). The consequences of displacement (9.3%) also had significant weight. If we look at secondary topics (Table 3), or the next most important topic in the piece after the central topic, legal issues (19.3%) and the causes of migration (15.7%) continued to be given priority, confirming their importance in the set of pieces analyzed. The same occurred with

the international political debate (12.1%), which was also the third secondary topic.

According to the typology of moral frames, covering the climate migrant as a biological life, i.e., as a being whose vital needs must be considered, was most related to the topic of the causes of displacement (as the central topic: 57.8%; as the secondary topic: 22.2%), followed by legal issues (e.g., can climate or environmental migrants be categorized as refugees?; primary: 17.8%; secondary: 24.4%). However, when the predominant frame was empathy, the order of these two topics changed, with legal issues taking center stage (38.1%; secondary: 14.3%), followed by reasons for moving (31%; secondary: 21.4%). When the threat posed was the focus, the reasons for moving became particularly important (central: 50%); however, the problems generated by migrants were the most common secondary topic in this framing (43.8%). When the moral framework was hospitality, understood as the measures being taken to welcome migrants in the receiving countries, with respect to the central topic, the legal aspect affecting migrants continued to prevail (31.4%; secondary: 20%), with reasons for (22.9%) and consequences of (17.1%) displacement in a second tier. As a secondary topic linked to this frame, the migrants' difficulty integrating into host societies took center stage (17.1%). Self-reflection, understood as the ability to show solidarity toward refugees, out of compassion, but without the participation of those affected and undertaken by social celebrities

TABLE 2 Central topic according to type of moral frame (N and percentage [%]).

Central topic	Biological life		Emp	Empathy		Threat		Hospitality		Self-reflection		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	
Reasons for moving	26	57.8	13	31	8	50	8	22.9	0	0	55	39.3	
Consequences of displacement	4	8.9	0	0	3	18.8	6	17.1	0	0	13	9.3	
Description of the migratory trip	0	0	1	2.4	0	0	0	0	1	50	2	1.4	
Legal issues	8	17.8	16	38.1	0	0	11	31.4	0	0	35	25	
Welcome and humanitarian	0	0	0	0	0	0	1	2.9	0	0	1	0.7	
Difficulties involved in integration that migrants experience	1	2.2	0	0	1	6.3	3	8.6	0	0	5	3.6	
Problems generated by migrants	0	0	0	0	3	18.8	0	0	0	0	3	2.1	
Spanish national political debate	0	0	0	0	0	0	0	0	0	0	0	0	
European political debate	0	0	0	0	0	0	3	8.6	0	0	3	2.1	
International political debate	4	8.9	5	11.9	1	6.3	3	8.6	1	50	14	10	
Conceptual or academic debate	2	4.4	3	7.1	0	0	0	0	0	0	5	3.6	
Gender-related	0	0	3	7.1	0	0	0	0	0	0	3	2.1	
Upbringing	0	0	0	0	0	0	0	0	0	0	0	0	
Religion	0	0	0	0	0	0	0	0	0	0	0	0	
Others	0	0	1	2.4	0	0	0	0	0	0	1	0.7	
Total	45	100	42	100	16	100	35	100	2	100	140	100	

Source: authors' own creation.

TABLE 3 Secondary topics according to type of moral frame (N and percentage [%]).

Secondary topic	Biologic life		Emp	Empathy		reat	Hospitality		Self-reflection		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Reasons for moving	10	22.2	9	21.4	2	12.5	1	2.9	0	0	22	15.7
Consequences of displacement	7	15.6	6	14.3	0	0	2	5.7	1	50	16	11.4
Description of the migratory trip	0	0	1	2.4	0	0	1	2.9	1	50	3	2.1
Legal issues	11	24.4	6	14.3	3	18.8	7	20	0	0	27	19.3
Welcome and humanitarian aid	0	0	2	4.8	1	6.3	2	5.7	0	0	5	3.6
Difficulties involved in integration that migrants experience	3	6.7	6	14.3	1	6.3	6	17.1	0	0	16	11.4
Problems generated by migrants	2	4.4	0	0	7	43.8	4	11.4	0	0	13	9.3
Spanish national political debate	3	6.7	0	0	0	0	2	5.7	0	0	5	3.6
European political debate	0	0	3	7.1	0	0	1	2.9	0	0	4	2.9
International political debate	7	15.6	3	7.1	2	12.5	5	14.3	0	0	17	12.1
Conceptual or academic debate	1	2.2	5	11.9	0	0	0	0	0	0	6	4.3
Gender-related	1	2.2	1	2.4	0	0	3	8.6	0	0	5	3.6
Upbringing	0	0	0	0	0	0	1	2.9	0	0	1	0.7
Religion	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Total	45	100	42	100	16	100	35	100	2	100	140	100

Source: authors' own creation.

outside of politics, barely appeared in two pieces of the corpus analyzed, so from this point onward, it is not included in the analysis.

5.3 Journalistic practices: main and secondary sources and news values according to type of moral frame

The news sources that the media outlets used highlighted the differences between them, as they determine the elements upon which a news item is constructed, influencing the quality of what is published, pluralism, and the impartiality of the journalistic approach. In addition, as we will see, they influence the prevalence of some frames over others. For each topic, a main source, the predominant one according to the criteria explained in the "Methods" section, was coded, as was the next most predominant one, being classified as the secondary source.

Thus, the source that the analyzed media outlets as a whole (Table 4) used the most was civil society (35%), which groups together NGOs, the Catholic Church and religious sources, experts, academics, think tanks, trade unions, lawyers, readers, etc. Within this category, we differentiated the testimonies of migrants from their associations to determine the degree of prominence they were given as sources.

The second main source used was the media outlet itself, with the media outlet using its own opinion columns and editorials (22.1%), followed by international organizations (17.9%). The most common secondary sources (Table 5) in these media outlets overall were, once again, civil society (34.3%) and the media outlet itself (25%), with international organizations (15%) and official sources from other (non-Spanish) countries (14.3%) taking third place. The set of sources was, therefore, very limited, although the set of civil society sources was broad and diverse. This suggests that the disparity in approaches in terms of the topic of climate and environmental migrations was especially focused on the public, on the media, and, given the global nature of the phenomenon of climate change and international migration, on international organizations, which are the most appropriate forums when it comes to trying to address this multifaceted phenomenon. However, it is striking to note the very limited use as a source of the testimonies of those primarily affected: the migrants themselves (main source: 8.6%; secondary source: 4.3%). It is also significant that official Spanish sources did not speak out (or were not given a voice) on an issue that affects us all (main: 3.6%; secondary: 5.7%). Even more striking was the silence of these media outlets with respect to the European Union (1.4% as the main and secondary source), an entity that claims to be aware of everything to do with climate change and sustainability.

TABLE 4 Central source according to type of moral frame (N and percentage [%]).

Central source	Biolog	Biological life		Empathy		reat	Hospitality		Self-reflection		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Official Spanish sources	2	4.4	1	2.4	0	0	2	5.7	0	0	5	3.6
Official sources from other countries	8	17.8	6	14.3	1	6.3	0	0	0	0	15	10.7
Police or security forces	0	0	0	0	0	0	0	0	0	0	0	0
European Union	0	0	1	2.4	0	0	1	2.9	0	0	2	1.4
International organizations	6	13.3	8	19	3	18.8	8	22.9	0	0	25	17.9
Civil society	18	40	13	31	1	6.3	15	42.9	2	100	49	35
Testimony from a migrant	2	4.4	7	16.7	1	6.3	2	5.7	0	0	12	8.6
Own media outlet	9	20	5	11.9	10	62.5	7	20	0	0	31	22.1
Other	0	0	0	0	0	0	0	0	0	0	0	0
Not stated. Unknown or anonymous	0	0	1	2.4	0	0	0	0	0	0	1	0.7
Total	45	100	42	100	16	100	35	100	2	100	140	100

Source: authors' own creation.

TABLE 5 Secondary source according to type of moral frame (N and percentage [%]).

Secondary	Biolog	Biological life		Empathy		reat	Hosp	itality	Self-re	flection	Тс	tal
source	N	%	N	%	N	%	N	%	N	%	N	%
Official Spanish sources	1	2.2	2	4.8	2	12.5	3	8.6	0	0	8	5.7
Official sources from other countries	6	13.3	6	14.3	3	18.8	4	11.4	1	50	20	14.3
Police or security forces	0	0	0	0	0	0	0	0	0	0	0	0
European Union	0	0	0	0	0	0	2	5.7	0	0	2	1.4
International organizations	5	11.1	10	23.8	2	12.5	4	11.4	0	0	21	15
Civil society	17	37.8	10	23.8	7	43.8	13	37.1	1	50	48	34.3
Testimony from a migrant	2	4.4	2	4.8	0	0	2	5.7	0	0	6	4.3
Own media outlet	14	31.1	12	28.6	2	12.5	7	20	0	0	35	25
Other	0	0	0	0	0	0	0	0	0	0	0	0
Not stated. Unknown or anonymous	0	0	0	0	0	0	0	0	0	0	0	0
Total	45	100	42	100	16	100	35	100	2	100	140	100

Source: authors' own creation.

If we continue down the list of the types of sources most used according to the moral frames, in those in which the migrant is viewed from the perspective of a biological life, civil society enjoyed an even more significant weight than in the overall data (main: 40%; secondary: 37.8%). It is followed by the media outlet itself (main: 20%; secondary: 31.1%). The empathetic framing, despite continuing to give prominence to civil society (main: 31%; secondary: 23.8%), provided other sources such as international organizations (main: 19%; secondary: 23.8%) or the immigrant's own testimonies (main: 16.7%; secondary: 4.8%), with the

media outlet itself acting as an important secondary source in this frame (28.6%). When the main moral frame was a sense of threat, the media outlet itself propagated this idea when it was the main source (62.5%; secondary: 12.5%), followed by international organizations (main: 18.8%; secondary: 11.4%). However, if the source was civil society, the threat frame became significant when it was a secondary source (43.8%). In contrast, when hospitality was the most common framework, civil society sources were also used the most (main: 42.9%; secondary: 37.1%). International organizations ranked second as a main source

(22.9%; secondary: 11.4%). The media outlets themselves also provided this welcoming point of view when they were a secondary source (20%).

Along with the types of news sources that the media outlets selected to construct their pieces, we considered it interesting to look at the concept of news values, i.e., what newspapers use as a basis for ranking and deciding what is newsworthy and, therefore, should be published (introduced in the "Methods" section above). Current affairs was the value most taken into account in the corpus analyzed (54.3%; Table 6), with conflict (12.9%) and proximity or human interest (10.7% each) at a distant second and third. Cross-reference these variables with the types of moral frames highlighted that, when the main frame is biological life, then current events (57.8%), the impact or rarity of an event (13.3%), and proximity (11.1%) are the most common news values. If the frame was empathy, the human interest news value gained weight (28.6%). With the frame of the migrant as a threat, conflict was predominant (75%). However, when hospitality was the frame, topicality (62.9%) and proximity to an event (20%) are the journalistic values most taken into account.

5.4 Analytical categories of climatic or environmental migration

In this section, we group together a series of variables that allow us to make deeper reflections regarding the extent to which the leading Spanish newspapers cover climate justice issues, the type of portrayal given of the migrant, and the general tone used on the whole.

Accordingly, we analyzed whether the pieces reflected in some way upon the concept of climate justice, understood as industrialized countries' responsibility for climate change and its consequences, the

link between this topic and human rights, reflections on the rights of migrants or refugees, or other social justice issues. In this respect, 73% of the pieces referred to one of these aspects. When the prominent moral frame was hospitality, these references were more common (94.3%), whereas when the threat frame was used, they were less common than in the other frames (56.3% instead).

To conclude our cross-referencing of variables, we used a typology that established four categories of portrayals of climate or environmental migrants: victim, security threat, adaptive agent, or political subject (Ransan-Cooper et al., 2015). In the set of pieces (we combined the main and secondary portrayals; hence, the percentages are based on 280 pieces and not on 140), the main portrayal of the migrant is that of a victim (37.1%; Table 7), with that of a political subject behind it (35.7%). They were also recurrently shown as adaptive agents (19.3%) and in only 7.9% of instances as a security threat. When cross-referencing the data with the moral frameworks, the biological life frame reflected this overall result fairly similarly (35.6% as a victim, 43.3% as a political subject, 17.8% as an adaptive agent, and only 3.3% as a security threat). In the empathy frame, portrayal as a victim had the greatest weight (50%), followed by that of political subject (28.6%) and adaptive agent (19%). In the threat frame, as is logical, the main portrayal of the migrant was as a threat to security (46.9%), followed by that of the political subject (31.3%). Finally, the hospitality frame divided representation of the migrant between the portrayal as a political subject (37.1%), an adaptive agent (31.3%), and a victim (30%).

Finally, we propose a final variable that describes the general tone of a piece in relation to migrants: positive, negative, or neutral. Most of the pieces presented these people in a positive light (56.4%), 16.4% presented them in a negative light, and the rest (27.1%) presented them in a neutral light. The positive tone was presented more often if the main moral frame

TABLE 6 Relationship between news value and type of moral frame (N and percentage [%]).

							_					
News	Biolog	Biological life		Empathy		Threat		Hospitality		Self-reflection		tal
value	N	%	N	%	N	%	N	%	N	%	N	%
Topicality	26	57.8	23	54.8	4	25	22	62.9	1	50	76	54.3
Conflict	4	8.9	2	4.8	12	75	0	0	0	0	18	12.9
Proximity	5	11.1	3	7.1	0	0	7	20	0	0	15	10.7
Human interest	1	2.2	12	28.6	0	0	2	5.7	0	0	15	10.7
Prominence	3	6.7	0	0	0	0	3	8.6	1	50	7	5
Impact or atypicality	6	13.3	2	4.8	0	0	1	2.9	0	0	9	6.4
Total	45	100	42	100	16	100	35	100	2	100	140	100

Source: authors' own creation.

TABLE 7 Central and secondary portrayals of migrants versus type of moral frame (N and percentage [%]).

Portrayal of migrant	Biological life		Empathy		Threat		Hosp	itality	Self-reflection		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Victim	32	35.6	42	50	7	21.9	21	30	2	50	104	37.1
Security threat	3	3.3	2	2.4	15	46.9	1	1.4	1	25	22	7.9
Adaptive agent	16	17.8	16	19	0	0	22	31.4	0	0	54	19.3
Political subject	39	43.3	24	28.6	10	31.3	26	37.1	1	25	100	35.7
Total	90	100	84	100	32	100	70	100	4	100	280	100

Source: authors' own creation.

was empathy (90.5%) or hospitality (82.9%). However, a negative tone prevailed in the threat frame (75%). A neutral tone was most common when the biological life frame predominated (60%).

6 Discussion

To answer the research questions posed, in relation to RQ1, the results showed that the topics most frequently associated with climate or environmental migrations were their causes (main: 39.3%; secondary: 15.7%), followed by legal issues (main: 25%; secondary: 19.3%) and international political debate (main: 10%; secondary: 12.1%). There are, therefore, three central topics that account for 75% of the main thematic references and 48% of the secondary ones. This seems to indicate that the Spanish press is interested in showing and explaining why climate migrations occur, what legal implications they have for people in terms of rights and obligations, and, as it is a phenomenon without borders, being global in scope, and as it cannot be solved by states independently, a political debate among the leaders of international organizations is necessary. These are broad and complex issues that leave little room for the personal stories of the people affected, which are also difficult for the Spanish media to access if they are related to situations occurring thousands of kilometers away. Hence, the news approach is general and seems somewhat removed from the daily life of readers of the Spanish press, despite the fact that climate change is a phenomenon that also affects Spain through increased temperatures and reduced rainfall and the increased drought and desertification that accompanies it, but also through uncontrolled high-intensity torrential rains (FUNCAS, n.d.).

When relating the topics to the moral frames, which is the most innovative aspect of this study, considering the migrant as a mere living being (biological life), but in a depersonalized way, increased the weight of the reasons for moving as the central topic (57.8%) with respect to the overall figure (39.3%). When the framing was empathy or hospitality, legal issues, which are important to ensure the best reception conditions for a person, gained weight, as did the causes of displacement, which help to elucidate the situation—the starting point—that caused the displacement. However, when the moral frame is the threat posed, the reasons as the central topic continued to be important (50%), but the problems generated by migrants were also the first secondary topic (43.8%). Thus, we see how the topics that journalists choose to focus their pieces on contribute decisively when it comes to forming the type of moral frame that will be most common.

In relation to RQ2, linked to journalistic practices, the selection of sources was also fundamental in terms of determining the frames, as they are the raw materials with which a piece is created. As we saw, civil society sources were preferred (main source: 35%), followed by the media outlet itself via its opinion columns and editorials (22.1%) then international organizations (17.9%). The Spanish press turned to experts and people aware of the issue of climate change and migration, and sought out its own columnists to comment on it, drawing on organizations with expertise on the subject, trying to understand an unquestionably complex phenomenon. However, this analysis seemed to remain general and abstract, as the scarcity of testimonies from affected persons (8.6%) and other political entities (European Union, 1.4%; official Spanish sources, 3.6%) was striking. Perhaps, since these phenomena have indirect or long-term effects, political leaders, given the immediacy of their interests, have little to say, or perhaps the

responsibility, as it is shared, is diluted, so they are issues on which they do not speak out, as they are not expected to influence public voting, except in the case of catastrophes. In a meta-analysis of the media's coverage of climate migrants in different studies, Sakellari (2022) concluded that the views of elite sources, rather than the perceptions of affected communities, dominate stories on climate migration. If we consider civil society sources (experts, NGOs, and think tanks) and columnists as such, our results would corroborate this idea. The only comparable investigation (Puertas Cristóbal, 2016) that examined the Spanish press during the 2001–2006 period indicated that news content was derived from scientific studies (39.47%) and publications from journals such as Science, along with reports from international institutions. Additionally, World Summits and ephemeris were used as references. It is evident that, over time, the Spanish press has witnessed a substantial expansion in the diversity of its information sources, thereby amplifying the voice of civil society. However, it is noteworthy that migrants remain underrepresented in this media landscape. Now, let us turn to the impact of source selection on moral frames. When it comes to biological life, civil society sources had greater weight than in the overall data (40% compared with 35% of the overall data), with official sources from other countries gaining weight (17.8%). When the frame was empathy, it was because the testimonies of migrants (16.7% of the total of this frame) were given space at the expense of the media outlet itself (11.9% compared with 22.1% of the overall data). If threat was the moral frame of reference, it was the media outlet themselves who presented it (62.5%, three times the overall figure of 22.1%) at the expense of civil society, which did not exceed this representation (6.3%), and hospitality (42.9%). This set of data can be interpreted with the understanding that civil society (experts and NGOs), from their academic and practical perspective, contribute to explaining, albeit in a sometimes cold way on the basis of mere data, what happens to people and why, but also being human, warning about the magnitude of the migratory phenomenon due to climatic and environmental causes, from the moral need to welcome the people who suffer it directly, avoiding the negativity that comes with the perspective of the threat. This framing of a threat was favored by the media outlet themselves via their columns and editorials, which does not seem to fit well with their theoretical goal of objectivity and impartiality or contextualization of the relevant facts that affect us as citizens.

Continuing with our reflection on journalistic practices, among the news values that cause news to be selected for publication, current affairs were used the most (54.3%). The immediacy now demanded by the public when it comes to knowing what is happening in their environment, fueled by their regular use of the Internet, makes this a very important vector when deciding to publish an issue in the traditional print media (Bauman, 2000). When relating these news values to moral frames, human interest gains weight (28.6%) when we talk about the empathy frame, whereas when it comes to the threat frame, the preferred news value was conflict (75%), binomials that logically feedback on each other.

To answer RQ3, referring to which portrayals are shown of migrants due to climate or environmental causes, based on the typology of Ransan-Cooper et al. (2015) and partially coinciding with the analysis of Sakellari (2022), the predominant portrayal was that of victim (37.1%), but the issue of the situation of the migrant as a political subject was reiterated at nearly the same level (35.7%). However, the portrayal as a threat, which the cited author also presented as very predominant, had less weight in the case of the leading Spanish

newspapers (7.9% of the four possible portrayals). When we emphasized the moral frames in relation to the portrayals of migrants, it is worth noting that the empathy frame was related to the portrayal as victim (50%), whereas the hospitality frame was fairly evenly distributed between victim (30%), adaptive agent (31.4%), and political subject (37.1%). This approach was evenly distributed among all the possible portrayals, except for that of security threat, which appeared only once. In contrast, when the frame was that of a threat, the portrayal of the migrant as a security threat (46.9%) and as a political subject (31.3%) prevailed. It is evident that threatening portrayal and framing feedback on each other. Ultimately, victimization was offset by the presentation of the migrant as a political subject (and, therefore, a bearer of rights and obligations). The rarity of the framing and portrayal as a threat may have to do with the lack of perception of the effect that climate change has on migrations arriving in Spain, which are linked in public opinion especially to socioeconomic reasons, despite the fact that there are studies that show the significance of these circumstances in the North African region of the Sahel (Daoust et al., 2023), the point of origin of many of the immigrants arriving in Spain.

A comparison of these results with previous studies (Høeg and Tulloch, 2019) reveals the media's tendency to aggregate, collectivize, and genericize climate refugees, thereby stripping them of their individuality. There is also concurrence that there is a lack of voices representing climate refugees, thereby reducing their agency. This observation aligns with a previous study by Ruiz Aranguren (2024) examining the portrayal of migrations in the Spanish press. The aforementioned study determined that the dichotomy in representing migrants as both a threat and a victim, along with their marginal presence as a source of information, is shaped by procedural practices associated with the governance of migrations. The study further suggests that the structure and compartmentalization of institutional information broadcasting also influence this phenomenon. In this regard, it is recommended that the media incorporate migrants as primary sources in their reporting, thereby enriching the coverage of migration-related issues. Additionally, institutions responsible for disseminating information, such as media broadcasters, should be aware that their approach to message construction may not fully capture the human dimension of migration. This is evident in their tendency to rely predominantly on data and statistics to discuss climate-related migration, or their excessive selfreferentiality in dealing with events they organize.

In short, the leading Spanish newspapers portray the issue of climate or environmental migration with the aim of understanding its causes and the legal challenges it poses, albeit from a mainly elitist perspective (predominated by civil society sources, represented by experts, but also with contributions from opinion columnists of the media outlet itself), but not from that of the migrants themselves. Nevertheless, the news outlets attempt to provide a rigorous analysis, based on expert knowledge, which combines the coldness of the data with a good dose of empathy and solidarity. The predominant news value was current affairs, linked to specific events, be they climatic or environmental, or the holding of international meetings. The predominant moral frame was that of the migrant as biological life, but more humane approaches such as empathy or hospitality were very important. Portrayal as a threat, on the other hand, was the least common. The predominant portrayal was that of victim or political subject.

As for the limitations of this study, the selection of the pieces was complex, given the variety of terms related to the object of study, so this could be refined. In addition, as we have already pointed out, the moral framing model in use has an important interpretive aspect. It would also be interesting to combine quantitative and qualitative content analysis to enrich the understanding and contextualization of the numerical data. Finally, it would be of great interest to compare the data from the Spanish press with that from other countries and also from other media, especially social networks. A critical analysis of journalistic practices could facilitate the development of specific knowledge about climate migration and promote empathy towards migrants and their situation. For all the aforementioned reasons, the objective of this study is to make a contribution to the research of the media representation of climate migrations, emphasizing the need for all relevant actors, particularly the press and journalists, to adopt a moral perspective, which integrates objectivity with a greater degree of empathy towards individuals affected by climate change. This entails a deliberate selection of sources, a more profound understanding of the context, and a more critical reflection on the impact that specific discourses can have on public opinion and political agendas.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

AP-A: Conceptualization, Methodology, Supervision, Writing – original draft, Writing – review & editing. CF-R: Data curation, Formal analysis, Funding acquisition, Project administration, Writing – original draft, Writing – review & editing. MA: Investigation, Resources, Validation, Visualization, Writing – original draft, Writing – review & editing.

Funding

The author(s) declare financial support was received for the research, authorship, and/or publication of this article. This work was partially funded by the Department of Science, University and Knowledge Society, from the Government of Aragon (Spain) (Research Group S05_23R) and the San Jorge University (Spain).

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as potential conflicts of interest.

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References

Abate, R. (Ed.) (2016). Climate justice: Case studies in global and regional governance challenges. Washington, D.C: Environmental Law Institute.

AIMC EGM (n.d.). Available at: https://reporting.aimc.es/index.html#/main/diarios (Accessed 7 January 2025).

Anderson, A. (2017). "Source influence on journalistic decisions and news coverage of climate change" in Oxford Research Encyclopedia of Climate Science (Oxford (UK): Oxford University Press).

Armañanzas, E., and Díaz Noci, J. (1996). Periodismo y Argumentación: Géneros de Opinión. Bilbao: Universidad del País Vasco.

Baldwin, A. (2013). Racialisation and the figure of the climate-change migrant. *Environ. Plan.* 45, 1474–1490. doi: 10.1068/a45388

Banco Mundial (n.d.) La migración mundial en el siglo XXI: El impacto del cambio climático, los conflictos y los cambios demográficos. Available at: https://www.bancomundial.org/es/news/feature/2023/12/11/global-migration-in-the-21st-century-navigating-the-impact-of-climate-change-conflict-and-demographic-shifts (accessed 22 October 2024).

Bauman, Z. (2000). Modernidad Líquida. Buenos Aires: Polity Press.

Bednarek, M. (2016). Investigating evaluation and news values in news items that are shared through social media. *Corpora* 11, 227–257. doi: 10.3366/cor.2016.0093

Berelson, B. (1952). Content analysis in communication research. Content analysis in communication research. New York. NY, US: Free Press.

Bettini, G., Nash, S. L., and Gioli, G. (2017). One step forward, two steps back? The fading contours of (in)justice in competing discourses on climate migration. *Geogr. J.* 183, 348–358. doi: 10.1111/geoj.12192

Brooks, B. S., Kennedy, G., Moen, D. R., et al. (2013). Telling the story. Workbook: Workbook for telling the story. *Fifth* Edn. Boston New York: Bedford/St. Martin's.

Bulkeley, H., Carmin, J., Castán Broto, V., Edwards, G. A. S., and Fuller, S. (2013). Climate justice and global cities: mapping the emerging discourses. *Glob. Environ. Chang.* 23, 914–925. doi: 10.1016/j.gloenvcha.2013.05.010

Chouliaraki, L. (2006). Towards an analytics of mediation. Crit. Discourse Stud. 3, 153-178. doi: 10.1080/17405900600908095

Chouliaraki, L. (2008). The mediation of suffering and the vision of a cosmopolitan public. Tele. New Media 9, 371–391. doi: 10.1177/1527476408315496

Chouliaraki, L., and Stolic, T. (2017). Rethinking media responsibility in the refugee 'crisis': a visual typology of European news. *Media Cult. Soc.* 39, 1162–1177. doi: 10.1177/0163443717726163

CIS (2024) Barómetro de septiembre 2024. Available at: https://www.cis.es/documents/d/cis/es3474mar-pdf (Accessed 7 January 2025).

Clement, VWC, Rigaud, KK, de Sherbinin, A, Jones, B, Adamo, S, Schewe, J, et al. (2021) Groundswell part II: Acting on internal climate migration (Vol. 2): Overview. Washington, DC: World Bank. Available at: http://hdl.handle.net/10986/36348

COP 16 (2011) Report of the conference of the parties on its 16th session, held in Cancun from 29 November to 10 December 2010. 15 march. UN,. Available at: https://digitallibrary.un.org/record/708138 (accessed 7 January 2025).

Daoust, G, Cao, Y, and Jarvie, J (2023) Changing climate, changing realities: Migration in the Sahel. Available at: https://odi.org/en/publications/changing-climate-changing-realities-migration-in-the-sahel/ (accessed 5 November 2024).

Dreher, T., and Voyer, M. (2015). Climate refugees or migrants? Contesting media frames on climate justice in the Pacific. *Environ. Commun.* 9, 58–76. doi: 10.1080/17524032.2014.932818

Durán, R. (2019). El encuadre del islam y los musulmanes: la cobertura periodística en España. *Revista de Estudios Internacionales Mediterráneos* 26:158. doi: 10.15366/reim2019.26.010

El-Hinnawi, E.UNEP (1985). Environmental Refugees. Nairobi, Kenya: United Nations Environment Programme.

Entman, R. M. (1993). Framing: toward clarification of a fractured paradigm. *J. Commun.* 43, 51-58. doi: 10.1111/j.1460-2466.1993.tb01304.x

Felipe, B. (2021). "Migraciones climáticas: Avances en el reconocimiento, la protección jurídica y la difusión de estas realidades" in Zaragoza (España): Fundación Ecología y Desarrollo (Zaragoza (Spain): SdeO Comunicación).

Felli, R. (2013). Managing climate insecurity by ensuring continuous capital accumulation: 'climate refugees' and 'climate migrants'. *New Political Econ.* 18, 337–363. doi: 10.1080/13563467.2012.687716

FUNCAS (n.d.) Impactos del cambio climático en España. Available at: https://www.funcas.es/articulos/impactos-del-cambio-climático-en-españa/ (accessed 18 October 2024).

Herrmann, V. (2017). America's first climate change refugees: victimization, distancing, and disempowerment in journalistic storytelling. *Energy Res. Soc. Sci.* 31, 205–214. doi: 10.1016/j.erss.2017.05.033

Høeg, E., and Tulloch, C. D. (2019). Sinking strangers: media representations of climate refugees on the BBC and Al Jazeera. *J. Commun. Inq.* 43, 225–248. doi: 10.1177/0196859918809486

IDEARA Investigación (2021) La sociedad española ante el cambio climático. Percepción y comportamientos de la población. Madrid: Ideara Investigación. Available at: https://www.miteco.gob.es/ca/ceneam/recursos/pag-web/sociedad-espanola-cambio-climatico-percepcion-comportamientos.html (accessed 7 January 2025).

INE (n.d.) INE. Instituto Nacional de Estadística. Available at: https://www.ine.es/index.htm (accessed 25 January 2024).

International Organization for Migration (2020) Institutional strategy on migration, Environment and Climate Change 2021–2030. Epub ahead of print 21 May 2020.

Ionesco, D (2019) Let's talk about climate migrants, not climate refugees. In: United Nations Sustainable Development. Available at: https://www.un.org/sustainabledevelopment/blog/2019/06/lets-talk-about-climate-migrants-not-climate-refugees/ (accessed 1 October 2024).

Martínez Lirola, M. (2022). A critical discourse study of the portrayal of immigrants as non-citizens in a sample from the Spanish press. *Lengua y migración* 14:1053. doi: 10.37536/LYM.14.1.2022.1053

Methmann, C. (2014). Visualizing climate-refugees: race, vulnerability, and resilience in global Liberal politics. *Int. Political Sociol.* 8, 416–435. doi: 10.1111/ips.12071

Morales, VM (2022) (re)framing the ethics of climate migration: Asylum, responsibility, and the case for yielding territory. UC Riverside. Available at: https://escholarship.org/uc/item/9g157086 (accessed 7 January 2025).

Nawrotzki, R. J. (2014). Climate migration and moral responsibility. *Ethics Policy Environ*. 17, 69–87. doi: 10.1080/21550085.2014.885173

Piñuel Raigada, JL (2016) Discursos mediáticos y representaciones sociales sobre el cambio climático. Redes.com: revista de estudios para el desarrollo social de la Comunicación (13). Universidad de Sevilla: 24–30.

Puertas Cristóbal, E (2016) El discurso mediático sobre el cambio climático, los desastres naturales y las migraciones ambientales en la prensa española escrita durante el quinquenio 2001–2006. Redes.com: revista de estudios para el desarrollo social de la Comunicación (13). Universidad de Sevilla: 217–248.

Ransan-Cooper, H., Farbotko, C., McNamara, K. E., Thornton, K. E., and Chevalier, E. (2015). Being(s) framed: the means and ends of framing environmental migrants. *Glob. Environ. Chang.* 35, 106–115. doi: 10.1016/j.gloenvcha.2015.07.013

Reese, S. (2009). "Finding frames in a web of culture: The case of the war on terror" in Doing News Framing Analysis, Eds. Paul D., and Jim A. K. (New York: Routledge).

Reig, R (1998) Medios de comunicación y poder en España: prensa, radio, televisión y mundo editorial. Papeles de comunicación 21. Barcelona: Paidós.

Ruiz Aranguren, M. (2024). Producción de noticias sobre la llegada de personas migrantes por mar a costas españolas: el caso de las Islas Baleares. *Estudios sobre el Mensaje Periodístico* 30, 601–612. doi: 10.5209/emp.95584

 $Saad, A. (2017). Toward a justice framework for understanding and responding to climate migration and displacement. {\it Environ. Justice 10, 98-101. doi: 10.1089/env.2016.0033}$

Sakellari, M. (2022). Media coverage of climate change induced migration: implications for meaningful media discourse. *Glob. Media Commun.* 18, 67–89. doi: 10.1177/17427665211064974

Saul, B, and McAdam, J (2008) An insecure climate for human security? Climate-induced displacement and international law. 1292605, SSRN scholarly paper. Rochester, NY: Social science research network. Available at: https://papers.ssrn.com/abstract=1292605 (accessed 12 November 2024).

Schäfer, MS (2015) Climate change and the media. In: International Encyclopedia of the Social & Behavioral Sciences. Elsevier, pp. 853–859. Available at: https://linkinghub.elsevier.com/retrieve/pii/B9780080970868910791 (accessed 7 January 2025).

Silverstone, R. (2010). Media and morality: On the rise of the Mediapolis. Repr. Cambridge: Polity Press.

Venturini, T., Gemenne, F., and Severo, M. (2012). Des migrants et des mots: Une analyse numérique des débats médiatiques sur les migrations et l'environnement. *Cult. Conf.* 88, 133–156. doi: 10.4000/conflits.18594