Evolution of the public problem of depopulation in Spain: longitudinal analysis of the media agenda

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Abstract

According to the sociology of public problems, the construction, visibility, and stabilization of a public problem require the mobilization of collectives of citizens interested in the issue, which act as an active entity in demanding actions and policies. One such issue is the depopulation of rural areas in Spain, which has shifted from a geographically localized problem to a matter of state policy. This article investigates the influence of framing in this process, analyzing a corpus of 5,980 headlines from newspapers in the Aragon, Castile-La Mancha, and Castile and Leon regions of Spain as well as from two national media outlets, corresponding to the period 2012–2021. Through the application of statistical analyses of lexical frequency in stages, the most significant terms in the evolution of the media's coverage of the issue have been identified, which has made it possible to observe the appearance and displacement of concepts and their relationship to the most important milestones of social and political mobilization. In addition, its power to stir up sentiment in socio-political discourse has been explored. The consolidation of depopulation as a stable element in the Spanish media agenda, going beyond the regional sphere and having a presence dissociated from specific events through time, in contrast to what occurred some years ago, stands out. Finding a media-friendly frame -empty Spain [España vacía] and emptied Spain [España vaciada]- may have been a key element in this.

Keywords

Media agenda; Depopulation; Public sphere; Public problem; Discourse analysis; Emptied Spain; Empty Spain; Text mining; Press headline; Newspapers; Framing.

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1. Introduction¹

The 1960s saw a migratory phenomenon in Spain that has been commonly called the "rural exodus" ["éxodo rural"] (Collantes; Pinilla, 2019; Pinilla; Sáez, 2021) and that led, on the one hand, to a population displacement toward the large cities and the coast, and on the other hand, to a gradual aging of the population in rural areas owing to the lack of generational renewal. These shifts, although not too different from those experienced in other European countries (Collantes; Pinilla, 2019), have had more extreme demographic effects in Spain because, in comparison, the total population is low and highly concentrated (Gutiérrez et al., 2020); this has led to a large area of the territory suffering the effects of depopulation (Cerdà, 2016).

The first citizen movements claiming that there was an inequality regarding public services inherent to these demographic imbalances sprang up in Teruel in 1999. However, until 2019, with the demonstration known as the "revolt of emptied Spain" ["revuelta de la España vaciada"], the demands and discontent of affected groups had not converged, turning a geographically localized social problem into a public problem for all citizens and even into a state policy (Sáez-Pérez, 2021). It is evident that depopulation has caused obstacles that should be understood as a common challenge. Some studies point to the existence of persistent myths and stereotypical representations that could have operated as limits or barriers to this (Del-Molino, 2016; Moyano-Estrada, 2020). However, that is currently a shared reference as evidenced by its incorporation into the barometer of the Sociological Research Center (CIS, 2019), where the population was specifically asked whether they had heard of the demographic challenge (24.2% responded affirmatively) and of depopulation (82.4%). In both cases, 85.6% and 88.5% of respondents, respectively, considered this to be a fairly serious or very serious problem. More significant is that, the following year, "Emptied Spain, depopulation" ["La España vaciada, la despoblación"] (CIS, 2020) appeared as an unsolicited response regarding the country's main problems for a segment of the population, going from being cited by 0.1% to 0.6% in February 2022 (CIS, 2022). These data also confirm that this problem is identified with a frame that has prevailed over others in public opinion.

1.1. State of affairs

This study is part of a broader body of research that asks to what extent the mobilized audiences' adaptation to media logics (Cefaï, 2016) has acted as a catalyzing factor that explains the growing importance of depopulation, not only as an agenda item (Campo-Vidal, 2021) but also as it has emerged as a public issue. After decades of disparate action, the influence of cross-regional citizen activism, recent institutional measures, and the greater involvement of the population have paved the way for it to become a collective concern. This study is based on the paradigm of mediatization (Scolari; Rodríguez-Amat, 2018), understood as a long-term macro-process whereby social phenomena of all kinds are interdependent on media institutions and technological mediations (Jansson, 2017); hence, the understanding and analysis of sociocultural, political, and economic processes require the incorporation of the communicative dimension. As part of the pragmatic theories (Dewey, 2004), the approach to public problems (Cefaï, 2016; Gusfield, 2014; Peñamarín, 2017) argues that, although social problems may exist, they will not become matters of collective interest in the public arena until the stakeholders manage to arouse interest and label the issue as a phenomenon that requires solutions and the intervention of public institutions to resolve the problem (Guerrero-Bernal et al., 2018). This involves obtaining media attention, managing to make the problem an agenda item, broadening the base of the stakeholders involved and committed to it, and connecting the different public arenas -economic, political, academic, and activist- through the intermediation of the media arena (Alcácer-Guirao; Fouce, 2020; Peñamarín, 2020). During recent decades, this has been the work of the stakeholders involved in the fight against depopulation and the welfare of the affected areas (Sáez-Pérez; Ayuda; Pinilla, 2016).

From this perspective, depopulation is not merely a demographic and geographical process; it is also a sociocultural and political one, in which cultures and self-identities are shaped (Bryant; Paniagua; Kyzos, 2011) and specific affective configurations intervene (Álvarez-Muguruza, 2021; Paniagua, 2019), and which is connected to metaphors and myths inscribed in the collective memory (Del-Molino, 2016) and in cultural productions (Martínez-Puche et al., 2022; Paniagua, 2018). In research about this phenomenon, the incorporation of the mediatization dimension is therefore unavoidable, given that the media are intrinsic to the shaping and functioning of institutions and social practices and that the experience of depopulation cannot be isolated from the expectations that people set on places and that are shaped by the common imaginaries that they propagate, as explained by the communication geography perspective (Adams et al., 2017; Adams; Jansson, 2012; Andersson; Jansson, 2010; Brantner; Rodríguez-Amat; Belinskaya, 2021; Jansson; Lindell, 2018).

Academic interest in depopulation has mainly come from sociology, geography, and economic science, with limited attention from communication studies (Galletero-Campos; Saiz-Echezarreta, 2022). Internationally, scientific output on the presence of this issue in the media is scarce, with only a few case studies in the United States (Dando, 2009), Sweden (Eriksson, 2008), and Germany (Christmann, 2016). Another paper examines local government communication on demographic change, also in Sweden and Germany (Syssner; Sieber, 2020). In Spain, one can only find a single qualitative study about the media's treatment of this issue prior to the emergence of the media's interest in it (Sanz-Hernández, 2016) and another focused on the perspective of journalism professionals in rural areas (De-Sola-Pueyo, 2021).

Among others, one way to explore the connection between depopulation and mediatization processes is to understand how this public problem has been included in the media agenda (McCombs, 2004), when it is incorporated as an issue that meets newsworthiness criteria, what volume of coverage it receives, and what predominant frames are used for its treatment in the media (Goffman, 2006 [1975]). This article analyzes the first level of the agenda (importance given) and makes a preliminary approach to the second level, considering the prevalence of certain ways of naming or categorizing the problem through framing. The longitudinal analysis provides access to an archive of the configuration process and the evolution of this public problem, as well as the long-term capacity for influence and success of the communities mobilized around this issue.

1.2. Objectives

This article analyzes a corpus of headlines. Its study as the main and synthetic component of the journalistic message is based on the fact that, according to quantitative epistemological assumptions, it

"not only can the headline serve as an index by attracting attention to a particular item, but it may also serve as an index in terms of influencing the interpretation of a story" (Tannenbaum, 1953, p. 189).

In addition, it acts as a sign of the editorial position of the media outlet; hence, given its importance, it often

"is the responsibility not of the journalist who is the author of the text, but of the editor-in-chief or even the director of the media outlet" ["no queda a cargo del periodista autor del texto sino de su redactor jefe o incluso del director del medio"] (Francescutti, 2009, p. 243).

The content of a headline and its semantic and connotative aspects construct social moods as they are repeated over time.

In a broad sense, the analysis of media coverage makes it possible to identify milestones in the evolution of the problem -understood as a sign of the significance of initiatives, conflicts, and moments of opportunity- and discover the emergence and organization of the most relevant stakeholders, both historical (public administrations, political parties) and that may have emerged in a specific way (citizen groups, platforms).

2. Material and methods

2.1. Sample

In this study, we focused on newspapers that come from autonomous communities in which the provinces with the lowest population density are located: Soria, Teruel, and Cuenca, with 8.61, 9.08, and 11.40 inhabitants/km², respectively². For each autonomous community, the regional newspaper with the highest circulation according to OJD and the provincial newspaper published in each province indicated were chosen, viz. El Norte de Castilla and Diario de Soria in Castile and Leon and Heraldo de Aragón and Diario de Teruel in Aragon. Since no regional newspapers are published in Castile-La Mancha, four newspapers were chosen: Nueva Alcarria, Lanza and the editions of the Tribuna group, La Tribuna de Albacete, and La Tribuna de Cuenca in Castile-La Mancha. The first two are the benchmark newspapers in their provinces, Guadalajara and Ciudad Real, whereas the other two have been the only newspapers published in Albacete and Cuenca since 2013, which makes a complete analysis of the entire period possible.

In addition, two national newspapers were chosen with the aim of obtaining comparative results: El País, as a benchmark newspaper, and a digital native, elDiario.es, which reports on the current affairs of the regions studied in specific sections, making a total of nine media outlets.

Once the selection was made, the My News exploration tool was used to compile all the journalistic pieces in print and digital editions that contained any of the following keywords in the headline or subheading: "depopulation" ["despoblación"] as well as its derivative "depopulated" in its feminine and masculine forms ["despoblado/a"], "empty Spain" ["España vacía"], "emptied Spain" ["España vaciada"], or "demographic challenge" ["reto demográfico"]. The use of these keywords corresponds to the monitoring of the issue in the media, the prevalence of these terms when referring to the phenomenon of depopulation, and the aim of comparing the evolution of the framing. Thus, between 2003 and 2021, 9,271 headlines that matched the search criteria were found. However, because the same headline could appear several times owing to the presence of different keywords, the texts were cleaned and formatted using the open-source tool Open Refine, eliminating redundancies. In addition, owing to the disparity in the dates for the collections available in the database, we worked with two subsets of data. The first subset includes the media outlets El País, El Norte de Castilla, Heraldo de Aragón, and Lanza, whose data were accessible for the period from 1 January 2003 to 31 Decem-

ber 2011 (498 pieces), whereas the second subset of data covers 2012-2021, the period for which the output from the nine selected media outlets has been collected. This leads to a final sample of 5,980 unique headlines. On the basis of the analysis of the evolution of production over these 10 years, as discussed in the "Results" section, three time frames have been established for the analysis of texts, with the aim of detecting similarities or differences between the most frequently used words.

2.2. Preparation and analysis of texts

The texts associated with the unique headlines collected were preprocessed using MATLAB 2021a data processing software (Bednarek; Carr, 2021). First, each headline was broken down into words, removing punctuation marks and spaces. In addition, a dictionary of Castilian Spanish words lacking meaning ("stop words," such as conjunctions or articles) was used to eliminate them from the corpus, although some prepositions and prepositional locutions -such as "against" ["contra"], "facing" ["frente a"], and "for" ["por" and "para"] - have been kept owing to their relevance to the configuration of discursive frames (Bugueño-Miranda; Sita-Farias, 2011). Likewise, all capitalized words were placed in lower case, and a nearest-neighbor clustering algorithm (Ishii et al., 2006) has been applied with the aim of grouping all words with similar morphological and orthographic variants under the same term.

Once the sample was preprocessed, different statistical analyses were carried out to highlight the nature of the discourse (Touri; Koteyko, 2015) and its distribution over time. First, to analyze the relative frequency of the headlines in each time frame, histograms were calculated for each media outlet by year of study, for each subset, and for each corpus. In the same way, the word frequencies of each stage have been obtained to understand the thematic orientation of the text considered, and the statistics corresponding to the log likelihood G² were estimated to compare the terminological differences among different corpora (Rayson; Garside, 2000). Thus, this measurement enabled the extraction of the words that are significantly more frequent in one stage than in others so that, the higher the G^2 statistic, the more significant the difference in word frequency between two corpora. In this sense, values higher than 10.83 would be equivalent to a statistical significance of p < 0.001 with a confidence of 99.9%.

Finally, to explore the semantic context of the corpora, we considered the co-occurrences of words, that is, the tendency of two or more words to appear in association with each other in a text, either consecutively or in proximity to each other, calculating concurrence as long as the two co-occurring elements did not exceed the total size of each headline. In addition, the shared information for each frequent word and its co-occurrence has been evaluated, obtaining the degree of association between lexical and grammatical words. This relationship between co-occurrences and degree of association has been represented through graphs to make visualization easier (Rifón, 2020). In them, the greater the thickness of the line connecting two terms, the greater the degree of association between them.

3. Analysis and results

3.1. Volume of production and hegemonic frames of meaning

The production of news in the period 2003–2011 in the four newspapers available in the database (n = 498 pieces) confirms that, for years, depopulation failed to capture the interest of the media, either at national level or in the affected territories, with the exception of El Norte de Castilla, where it was a substantial element of the editorial line. Indeed, this newspaper from Castile and Leon accounts for 85% of the news published during these years. In this autonomous community, in 2010 the regional government approved the Agenda for the Population of Castile and Leon 2010-2020 [Agenda para la población de Castilla y León 2010-2020], one of the first tools for action on this issue.

Considering the whole corpus between 2012 and 2021 (n = 5,980), Figure 1 indicates an increase in attention starting in 2013, confirming that depopulation started to appear in the journalistic agenda in the three regions. This growth was much more accentuated between 2016 and 2019 in nearly all the media, including national media, although El País incorporated coverage on the subject later. Once again, El Norte de Castilla stood out above the other media outlets, but the media from Aragon were also showing more interest. For the media from Castilla-La Mancha, on the other hand, this subject did not appear in the keyword framework until 2018. The increase in new items in Heraldo de Aragón in 2017 is significant. That year, the Chair on Depopulation and Creativity of the University of Zaragoza was created, as mentioned in several news items. The upward progression shows a turning point in 2019, coinciding with the massive demonstration in Madrid, when depopulation entered fully into the electoral political discourse (López-Ruiz, 2021) and an upsurge occurred in journalistic attention to this issue that, despite the decline in 2020 with the outbreak of the pandemic and the consequent change in the focus of interest, restarted in 2021 at levels higher than those recorded before the citizen mobilization. In that year, the newspaper from Aragon stood out, with a higher production than the other regional newspapers and *Diario.es*, showing a clear publishing initiative around the subject.

By extracting the 55 most repeated lemmatized terms in the corpus as a whole, it was observed that the hegemonic discursive frame shows depopulation as something that must be fought against or combatted, or that must be stopped. What stood out were the verbs of action that are characteristic of the development of a public problem – "asks" ["pide"], "claims" ["reclama"], and "proposes" ["propone"]— and the mention of public policy tools: "measures" ["medidas"], "laws" ["leyes"], "funds" ["fondos"], "plan" ["plan"], "strategy" ["estrategia"], "funding" ["financiación"], "pact" ["pacto"], and "project" ["proyecto"]. Another semantic field that emerged is the toponyms related to the affected areas such

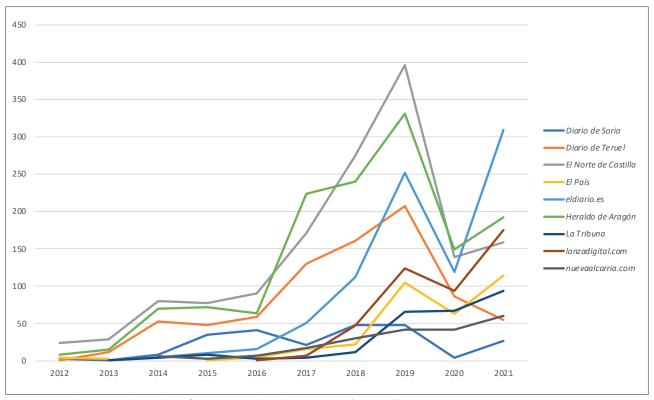


Figure 1. Annual variation in the number of pieces per media outlet, 2012-2021 (n = 5,980)

as Teruel, Aragon, Soria, Cuenca, Castile-La Mancha, and Castile and Leon, but also related to other abstract spaces such as "rural" and "village" ["pueblo"]. In this group, Teruel and Soria appear more than the rest of the terms because they are found in the names of the political parties *Teruel Existe* and *Soria Ya*. As for the institutional stakeholders, the role of "provincial councils" ["diputaciones"], "regional government" ["Junta"] (used to define the autonomous government

in the two Castiles), and, to a lesser extent, "Congress" ["el Congreso"] and the "Senate" ["Senado"] are important. The word "Government" ["Gobierno"] is one of the most commonly used words because it is versatile.

3.2. Discursive shifts

To observe the emergence, stabilization, or modification of the terms and frames, as well as to identify the events that have set the agenda in the 10 years studied, we have defined three time intervals in the sample, which guide the statistical analyses for the comparison of the corpora.

3.2.1. January 2012 to 5 April 2016

The appearance of the first headline reviewing the book *Empty Spain* [La España vacía] by **Del-Molino** (2016), a moment that represents a significant discursive change by introducing a syntagm that was not used until then, was established as the end point of the first period. There are a number of terms that identify this first stage in a significant way, relative to the rest of the corpus (April 2016 to December 2021).

The political parties ("PSOE," "UPyD," and "PAR") are more prominent than in later stages, as they would be displaced by new stakeholders and platforms. Their appearance is consistent with a time of political discussion that coincides, on the one hand, with the work that led to the creation of a specific submission to the *Senate* (2015) and, on the other, with the negotiation for European funds for 2014-2020. Of note are the provinces of Soria, Teruel, and Cuenca, leading the way in articulating complaints together ("unity" [unidad]). The years

Table 1. Keyword corpus (1 January 2021 to 5 April 2016 versus 6 April 2016 to 31 December 2021)

Term	Frequency	Keyness (log likelihood G²)
PSOE	67	69,660
Senate [Senado]	36	63,126
Soria	56	56,215
Cuenca	39	53,240
Funds [fondos]	50	51,348
Presentation [ponencia]	10	46,346
Depopulation [despoblación]	545	41,983
UPyD	8	37,074
Entrepreneurs [empresarios]	16	33,124
Teruel	73	32,922
Stop [frenar]	48	26,870
Suárez	7	26,617
Employer [patro- nal]	12	24,836
PAR	12	19,807
Employers [patro- nales]	6	19,220
EU	29	18,933
Unity [unidad]	10	18,517

when affected territories connected were 2013 and 2014, to be exact, during which the word "lobby" was used for the first time (23 July 2013), and other autonomous communities (Asturias, Extremadura, and Galicia) were mentioned. The prevailing expression was "to stop" ["frenar"] depopulation, calling for the adoption of a common position before European bodies, in the Senate, etc., rising above the autonomous and provincial fragmentation.

Another salient feature is the emergence of another stakeholder, viz. employers and entrepreneurs, who would later lose visibility to the detriment of social organizations and institutional spokespeople. The explanation for this lies in the creation in 2016 of one of the first interprovincial networks, the Network of Sparsely Populated Areas in Southern Europe [Red de Áreas Escasamente Pobladas del Sur de Europa], founded by business organizations from Cuenca, Soria, and Teruel to promote fiscal and legislative measures for depopulat-

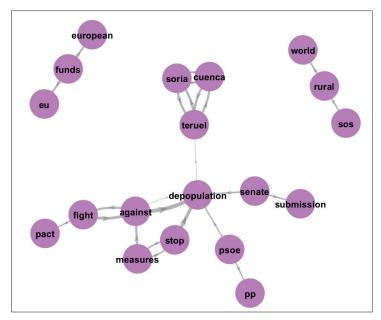


Figure 2. Graph of co-occurrences, sample 1 from January 2012 to 6 April 2016 (n = 637)

ed areas. The link between these three territories can also be seen in the graph of co-occurrences (Figure 2), which visualizes the topics surrounding depopulation: the national pact with specific measures requested by six autonomous communities, the submission presented to the *Senate*, and the political parties. This was a volatile period for this phenomenon, characterized by vindictive speeches (**Sanz-Hernández**, 2016), in the context of autonomic elections and attracting attention in Europe. The isolated cluster –SOS Rural World [*SOS Mundo Rural*] – corresponds to an association from Aragon with this name.

3.2.2. 6 April 2016 to February 2020

The publication of the book by **Del-Molino** (2016) implies, especially in emotional and affective terms, that the affected areas identified with a feeling of belonging to another country, another Spain. It thus introduces a new meaning to an issue that has since achieved the recognition of populations not directly affected by the problem. This second time interval runs from that moment until the outbreak of the Covid pandemic, a breakdown in all matters on the public agenda.

The graph of co-occurrences shows that, while maintaining some associations that were already common in the previous period, a grouping of terms around "empty Spain" ["España vacía"] and "emptied Spain" ["España vaciada"] emerged. The "revolt" ["revuelta"] is worthy of mention, being observed to be associated with "repopulation" ["repoblación"]. Also noteworthy is the addition of the adjective "concrete" ["concretas"] to the word "measures" ["medidas"] in a call to action. Both co-occurrences reflect a problem-solving discourse. The construction "rural environment" ["medio rural"] also appears, which implies a more global perspective as opposed to other frames (for example, "village" ["pueblo"]) that limit the problem to specific territories. Specifically, it is in keeping with a perspective that overcame viewpoints that, for years, had led to an identification of the rural with the agrarian legacy of the Democratic Transition in Spain. This perspective, on which public policies had been based, would have ignored the development possibilities in these areas, where the population has been making a living for decades from activities outside of the primary sector (Collantes, 2020).

Table 2 presents the terms that emerged with respect to the previous period and also those that, significantly, appear at this stage but that do not appear later.

Table 2. Comparison of the corpora

Keyword corpus (6 April 2016 to 1 February 2020 <i>versus</i> 1 January 2012 to 6 April 2016)		Keyword corpus (6 April 2016 to 1 February 2020 <i>versus</i> 1 March 2020 to 31 December 2021)			
Term	Frequency	Keyness (log likelihood G²)	Term	Frequency	Keyness (log likelihood G²)
Spain [España]	709	151,333	Depopulation [despoblación]	2,699	75,387
Emptied [vaciada]	420	128,424	Rajoy	40	32,934
Empty [vacía]	181	55,104	Demonstration [manifestación]	48	23,221
Cs	68	20,660	Herrera	28	23,050
Revolt [revuelta]	64	19,443	World [mundo]	45	21,125

The new terms are those indicated in Figure 3, and to this we add the media attention paid to Ciudadanos (Cs), which in March 2018 promoted the creation of a law for depopulation reversal in the Congress that would define the affected areas and establish measures. However, only this party voted in favor of the proposal. Regarding the words that appear in this time frame but not the subsequent corpus, it is evident how the preeminence of political parties that was apparent in previous years was supplanted by governmental spokespeople, among whom Mariano Rajoy, President of the Government and notable for creating the role of Government Commissioner for the Demographic Challenge, and Juan Vicente Herrera, President of the Regional Government of Castile and Leon until 2019, stand out. The most common word is "depopulation" ["despoblación"], which loses prominence from 2019 onward, as the terms "empty Spain" ["España Vacía"] and, to a greater extent, "emptied

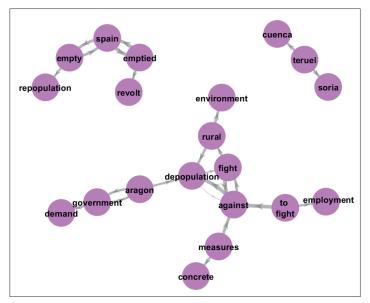


Figure 3. Graph of co-occurrences, sample 7 from April 2016 to 28 February 2020 (n = 3,641)

Spain" ["España Vaciada"] gradually become established as central concepts in the coverage.

3.2.3. March 2020 to December 2021

The final time interval starts with the outbreak of the pandemic and extends until December 2021. The significant words from this stage are grouped into three main frames:

- as expected, mentions of the pandemic and the Commission for the Social and Economic Reconstruction of Spain appeared after Covid-19 ("pandemic" ["pandemia"], "coronavirus", "covid", "reconstruction" ["reconstrucción"]);
- we identified another milestone, the approval of a specific law in Castile-La Mancha, Law 2/2021, on May 7, for Economic, Social, and Tax Measures against Depopulation and for the Development of the Rural Environment, placing this autonomous community center stage ("law" ["ley"], "Castile-La Mancha" ["Castilla-La Mancha"], "Castiles" ["Castillas"], "Page"); and
- an organized civil society ("platforms" ["plataformas"]) prevailed and became more coordinated after the citizen mobilization in 2019, as evidenced by the celebration of subsequent anniversaries.

Table 3. Keyword corpus (6 April 2016 to 1 February 2020 versus 1 March 2020 to 31 December 2021)

Term	Frequency	Keyness (log likelihood G²)
Spain [España]	628	160,505
Law [ley]	123	154,053
Emptied [vaciada]	389	112,582
Castile-La Mancha [Castilla-La Mancha]	102	78,336
Pandemic [pandemia]	15	35,730
Coronavirus	13	30,965
Empty [vacía]	147	30,308
Covid	12	28,582
Reconstruction [reconstrucción]	12	28,582
Eurocaja	10	23,817
Pioneering [pionera]	12	22,256
Castiles [Castillas]	9	21,435
Regional	46	20,592
Facing [frente]	84	20,442
Platforms [plataformas]	27	20,440
Page	22	19,902
Risk [riesgo]	34	19,715

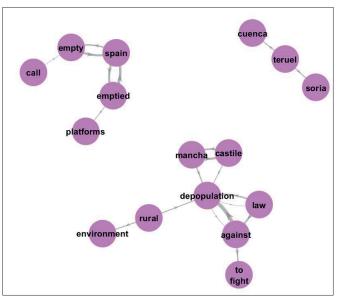


Figure 4. Graph of co-occurrences, sample 1 March 2020 to 31 December 2021 (n = 1,702)

In the final two years, there was an increase in the use of the term "emptied Spain" ["España vaciada"], a concept used by demonstration organizers to reaffirm that they are passive subjects of a phenomenon that is not natural but rather provoked, and therefore, there are people responsible. From that moment on, the concept was personified in the media, finding in this label a way to bring together the affected groups that made it easier to communicate their demands. The economy of journalistic language and the significant density of the expression made it easier for journalists to settle on two words that brought together many meanings. Thus, while "empty Spain" ["España vacía"] was used to define a geographical area or to designate the leaders of the affected autonomous communities, "emptied Spain" ["España vaciada''] took on a civic nature and a spirit of protest that served to identify both an organized collective and the population of these areas. Since 2019, diverse organizations have begun to form coordinating networks in each autonomous region of Emptied Spain, which reaffirms the prevalence of this syntagm.

The graph of co-occurrences (Figure 4) shows an association of the word "empty" ["vacía"] with "call" ["llamada"], the latter being used in the headlines in two senses: as a wake-up call and as someone being called to do something.

3.3. Regional versus national comparison

Although there are patterns common to the entire sample, some specific characteristics of the media in each region can be identified, whether owing to the events surrounding or the development of specific public policies, the adoption of specific frames, or the differences in the map of local and regional stakeholders. In the case of Castile-La Mancha, in addition to the importance of the law ($G^2 = 247,985$), called "pioneering" ["pionera"] ($G^2 = 17,798$) by the Government of Castile-La Mancha, "water" ["aqua"] ($G^2 = 29,949$) was a central issue, as it has been a historical demand of the territory, which has called for a reassessment of the Tajo-Segura aqueduct. The media rely on institutional sources, as their headlines reflected; however, in addition to government representatives, the presence of rural women's organizations, Amfar ($G^2 = 26,261$) and Afammer ($G^2 = 17,999$), is a singular element.

In the media in Aragon, the provincial councils (Provincial Council of Zaragoza [DPZ], $G^2 = 37,113$; Provincial Council of Teruel [DPT], $G^2 = 26,252$, and Provincial Council of Huesca [DPH], $G^2 = 26,252$) have greater visibility, and the historical prominence of the Province of Teruel is also apparent through the mention of the association and, later, the political party Teruel Existe ($G^2 = 48,358$). The words showing the greatest contrast also include the demonyms "aragoneses" [people from Aragon] and "turolenses" [natives of Teruel], which can be understood as a strengthening of the identity of the territory that is not observed in other regional coverage. Finally, of note is the incorporation of a term from the academic field, "Celtiberian Mountains" ["Serranía Celtibérica"] ($G^2 = 18,719$), which was proposed by researcher Francisco Burillo from the *University of Zaragoza* and became established with the creation of the *Institute for Research and Rural* Development of the Celtiberian Mountains in 2012 (Burillo-Cuadrado; Rubio-Terrado; Burillo-Mozota, 2019).

The coverage of Castile and Leon during the period studied did not present any noteworthy milestones and was the least distinct from the rest of the group. Only the importance of Soria ($G^2 = 47,145$), the epicenter of activism in the autonomous community, stands out.

The comparison of the corpus of national media with regional media reveals significant differences in the use of the terms "empty Spain" ["España vacía"] and "emptied Spain" ["España vaciada"], more markedly so in El País, where the former is more common ($G^2 = 371,573$), suggesting a more objective treatment. In this sense, it is also statistically significant that the term "depopulation" ["despoblación"] appears less frequently in the national media and that they do not use the lexical construction "against depopulation" ["contra la despoblación"] as often, which could be indicative of less interest in the active pursuit of measures or strategies for action on the part of those territories that are not directly affected. Among the terms characteristic of these media outlets, the word "village" ["pueblo"] ($G^2 = 60,767$) stands out as a way to activate a symbolic location in the imaginary; the rhetoric of "risk" ["riesgo"] ($G^2 = 29,636$), evoking the possibility of exclusion from a community; and the idea of "filling" ["llenar"] (G2 = 18,926), forming a space that is understood as "in need" ["necesitado de"].

4. Discussion and conclusions

The evolution of media attention to the phenomenon of depopulation confirms its recent establishment as a contemporary public problem. After its emergence, the type of coverage has now changed and no longer follows a cyclical pattern based on fundraising periods, demographic updates, or electoral periods, as was the case until 2016 (Sanz-Hernández, 2016); rather, it has established itself as a perennial issue in the media agenda that remains of interest after the pandemic.

As shown by coverage and academic research (Sáez-Pérez; Ayuda; Pinilla, 2016), during the first decades of the century, there were not only local community movements but also some national proposals to address this reality, although they did not achieve the impact that public policies and citizen activism have had after the "revolt of emptied Spain" ["revuelta de la España vaciada"], which managed to strengthen that discursive frame. While the concept of "demographic challenge" ["reto demográfico"] has not yet taken hold in the media, it is confirmed that the change in frame -the shift from "depopulation" ["despoblación"] to "empty Spain" ["España vacía"] and then to "emptied Spain" ["España vacíada"] – does seem to have acted as a driver to, on the one hand, connect those affected by the problem and, on the other, encourage engagement from the population at large. In the media, this facilitated the condensing of a complex issue into a concept that allowed for the creation of imaginaries and the forming of a political subject, two dimensions that are in keeping with journalistic production methods.

This study shows that communication is a dimension that should be considered in the analysis of demographic processes, usually observed from an economic or geographic perspective.

This first quantitative survey does not address the symbolic construction of the discourse and does not allow us to conclude whether there is a consistent narrative for a malleable concept that, as Sanz-Hernández (2016, p. 111) indicates, is sometimes shown as a "cause/consequence of" ["causa/consecuencia de"] and sometimes as an "opportunity or threat to" ["oportunidad o amenaza para"], but fundamentally is built on, negative connotations (De-Sola-Pueyo, 2021). However, it lays the groundwork for future research that will delve deeper into the way in which the media interpret the different conflicting visions of depopulation, observing whether they portray it as a homogeneous or diverse phenomenon –taking an objective approach or taking into account the subjectivity of the affected areas– or whether they identify it with the processes of the urban environment, among other things.

Although it has been proven that the media have incorporated depopulation as an agenda item, it will be necessary to study whether this is a passing trend or whether it will remain steady over time as one more element of editorial lines. In this sense, it may be linked to other issues related to sustainability, such as climate change, or to concerns such as the demographic evolution resulting from the declining birth rate, among other things. Whatever the case, this problem requires reflection on the work performed and the media's responsibility when it comes to the demographic challenge. In their coverage, they need to strike a balance between giving a voice to the protagonists involved from a local perspective and promoting the consideration of what the loss of places means (for everyone) at a cultural, ecological, and emotional level. This implies, especially for the national media, avoiding an objective view and the homogenization of the phenomenon under a single label, and instead paying attention to the different political agendas, organizational networks, modes of participation, and particular cultures in each territory.

In the future, the issue of the influence of mediatization on the emergence of depopulation as a public problem will help to elucidate to what extent the strengthening of new discursive frames such as those detected in the analysis has activated a public capable of investigating and experimenting to find solutions to the challenge that depopulation poses for Spain as a whole.

5. Notes

- 1. The notion of a "public problem" is understood from the pragmatist perspective of John Dewey, who adopts the postulates of Gusfield (2014) and the French school of authors such as Cefaï (2016). This theoretical approach holds that the existence of a public problem requires the existence of a public mobilized around the phenomenon who are capable of investigating, experiencing, and articulating their discomfort about the problem to produce and demand changes in the situation.
- 2. Data calculated on the basis of the number of inhabitants on 1 January 2021 in the municipal census of the National Institute of Statistics and the geographical size registered in the National Geographic Institute.

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