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## The eco-social transition in generalist television channels in Spain: Presence and Themes

### *La transición ecosocial en las cadenas generalistas de televisión en España: Presencia y temáticas*

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#### Abstract

The Eco-social transition is the transformation of societies towards ways of life in harmony with nature, especially within the context of the current ecosystem crisis. The dynamics and media routines related to the configuration of the agenda setting are fundamental to this process, supported by the theories of framing and priming. In this sense, the media might become an inspiring reference for society or, on the contrary, simply act as a parapet, as we indeed assume in this article. This study analyses the presence of eco-social transition themes in the programming and main news programmes of the general television channels with state coverage in Spain: TVE1, La2, Antena3, Cuatro, Telecinco and LaSexta. The methodological design is based, on the one hand, on the quantitative analysis of the programming schedules for four weeks. On the other hand, the news programmes of the aforementioned channels were analysed, quantifying those pieces of news related to topics that might favour the eco-social transition, either by focusing on ecosystem problems or by presenting circular economy alternatives, among other mechanisms. The results show that only the public channels broadcast ecological programmes, and nowhere does this programming exceed 2% of the total of their programming. In relation to the presence of these topics in the news with national coverage, it does not attain 4% of its content. This minimal incidence indicates that much remains to be done. Research derived from the application of Irscom (Indicator of Social Profitability in Communication, LabCOMandalucía, University of Málaga) to television channels.

#### Keywords

Eco-social transition; climate change; environment; television; news; agenda setting

#### Resumen

La transición ecosocial es la transformación de las sociedades hacia modos de vida armónicos con la naturaleza, especialmente en el contexto actual de crisis ecosistémica. Resultan fundamentales en este proceso las dinámicas y rutinas mediáticas relacionadas con la configuración de la agenda setting, avaladas por las teorías del framing y el priming, pudiendo los medios convertirse en un referente inspirador para la sociedad, o por el contrario actuar de parapeto, tal y como asumimos en este artículo. Esta investigación analiza la presencia de temáticas de transición ecosocial en las programaciones y los principales informativos de las cadenas generalistas de televisión con cobertura estatal en España: TVE1, La2, Antena3, Cuatro, Telecinco y LaSexta. El diseño metodológico se basa, por un lado, en el análisis cuantitativo de las parrillas de programación durante cuatro semanas. Por otro lado, se han analizado los informativos de las cadenas citadas, cuantificando aquellas noticias relacionadas con temáticas que puedan favorecer la transición ecosocial, ya sea por poner el enfoque en problemáticas ecosistémicas o por presentar alternativas de la economía circular, entre otros mecanismos. Los resultados muestran que solamente las cadenas públicas difunden programas de tipo ecológico, y en ningún caso esta programación supera el 2% del total de sus parrillas. En relación con la presencia en los informativos de cobertura nacional, no alcanza el 4% de sus contenidos. Esta ínfima incidencia indica que aún queda mucho por hacer. Investigación derivada de la aplicación de Irscom (Indicador de Rentabilidad Social en Comunicación, LabCOMandalucía, Universidad de Málaga) a cadenas de televisión.

#### Palabras clave

Transición ecosocial; cambio climático; medio ambiente; televisión; informativos, agenda setting

## 1. Introduction<sup>11</sup>

The present-day climate crisis coupled with dwindling bio-diversity and the depletion of natural resources has led humanity towards an eco-systemic collapse (at all levels), without precedence in the history of our societies. The transition towards an eco-social future requires a drastic change in our global lifestyle, incorporating harmonic ways of relating with ecosystems and their resources. In the words of Leff, the environmental problem emerges as a crisis of Western civilization and culture, the rationality of modernity, and the economy of the globalized world. According to the author, "the commodification of human beings and the over-exploitation of nature lead to the unhinging of the world, in the same way as rational thought in its negation of otherness led to the loss of a sense of existence" (2004: 9). A capitalist neo-liberal "development" model based on infinite economic growth is the genesis of the present planetary crisis -at the cost of the resources of a planet with finite resources-, which has situated economic profit in terms of accumulation and wealth, over and above social and ecological wellbeing, and which threatens the living conditions of humans and other beings on the planet. Arturo Escobar speaks of an urgent need to liberate Mother Earth, to reconstruct links between human beings, non-human beings and the Planet, and to bring the Pluriverse to flower, as well as the need for a world made of many worlds (Escobar, 2018: 48-49).

The international scientific community has coincided in that human activities since the industrial revolution have generated anthropogenic climate change that has increased the temperature of the planet by 1.1°C. It is moreover expected to continue increasing over coming decades, with environmental and social repercussions such as the loss and the extinction of vegetable and animal species, rising sea levels that will cause flooding and degraded land, reduced availability of drinking water, soil desertification and difficulties cultivating foods, higher frequencies of extreme climate-change related events, as well as the migration of groups of humans who see their conditions of life endangered. All of those situations will be aggravated as temperatures rise (Hoegh-Guldberg; Jacob and Taylor, 2018).

Political initiatives such as the Climate Agreement of Paris and the European Green Pact contain proposals to limit global temperatures to 1.5°C and to reach zero greenhouse gas emissions for 2050. However, the measures and their implementation by the signatory governments are still insufficient, and they are not executed with the necessary speed (UNFCCC, 2021). More critical stances consider that the measures are inadequate, in so far as they are still framed within the model of capitalist development that is at the origin of the problem, and that they set out to undermine the meaning of ecologism through the contradictory idea of sustainable development, and the *greenwashing* of companies and governments. These outlooks coincide in so far as the measures must be conceived from a radically different paradigm, without limiting oneself to the ecological aspect, and including care and respect for human dignity, diversity, and ethnic and cultural plurality (Riechmann, 2005; Herrero, 2021; Chaparro et al., 2020).

In the present work, the concept of eco-social transition is upheld, considering it to be a broad process of transformation, which not only implies changes for the reduction of environmental impacts, but a reconsideration of our cultural paradigm, the way in which we understand each other, and relate with the natural world that surrounds us, part of which are the ecosystems, all forms of life, animals, and all other living beings. The transition is towards the ecological, but it must be cultural (change of paradigm of Modernity); economic-productive (the withering of Capitalism and industrialization); and communicative (end of Communication for Development). We argue here for the term that many authors within the same area employed, such as Barranquero, 2011, 2012; Espinar, Peralta and Chaparro, 2019; Peralta, Chaparro and Espinar, 2019, 2021a, 2021b; González, 2019; Taibo, 2020; Chaparro et al., 2020; Espinar, Mora and López, 2022; and Herrera, 2022; among others. In short:

A process of change in the industrial and consumer model that implies an ethical consideration of human dependence on ecosystems. All those social, economic, and professional initiatives, which are constituted as alternatives to the dominant system participate in this process when proposing egalitarian, fair and respectful models for intervention among people and the environment. The objective is centered on situating social wellbeing as the motor of the real economy (Chaparro et al., 2020: 63).

The eco-social transition (eco, from ecology; and social, because it requires changes to the way of life of human societies) requires fundamental transformations in two broad areas: on the one hand, the industrial model of production and consumption and, on the other, the way in which we relate with the planet and the other living beings that inhabit it. These changes must be oriented towards an harmonic, symbiotic way of life that is respectful towards nature. It requires drastic transformations in the models for energy, transport, agriculture, food, technology, fashion, waste management, and the use of natural resources (Chaparro et al., 2020). We are talking of a collective, inventive, and creative process that is without precedent, nurtured in ethical ecology that sustains it and gives it meaning, the esthetical permaculture that offers it an identity and a space in which to design anthropization for

eco-systemic respect and eco-social politics, making new forms of self-organization feasible and more resilient (Albelda, Sgaramella and Parreño, 2019).

There is no single road map for this transition, as it is in constant deconstruction and construction. It represents a search for meaning that is nurtured in various knowledge systems, is born in the land, and is adapted to the needs of the people. For example, García Olivares and Carles López (2021) acknowledge four narratives within the present-day political debate on transition in the Western context; technical-economistic optimism, green capitalism, *Green New Deal*, and degrowth. These narratives range from circumventing climate-related problems to demonstrating technology-based solutions to their consequences; moving from green capitalism or the transition to renewables without altering the system; to the degrowth stances that defend the need to end the model of economic growth.

Whereas, from an opposing perspective to the Western idea of development, Kothari et al., (2019) highlighted alternatives for respecting and nurturing life on earth, such as collective assets, the *Sumak Kawsay* or "Good Life" of the original Andean people, the Hindu ecological *Swaraj*, ecofeminism, African human reciprocity or *Ubuntu*. There are likewise hundreds of transformative alternatives, respectful towards life and ecosystems, which are being organized through various base communities. As Chaparro and De Andrés made clear (2022), the transition requires recognition of the multi-epistemologies and the multi-ontologies of our diverse world, learning the solutions of each territory, and setting up the exchange of knowledge and strategies.

So, communication for eco-social transition can be understood as the discursive evolution of the environmental problems that started with warnings on climate change, until branching out to the search for a systematic and integral transformation of current forms of living and interacting with the planet towards environmentally and socially just ecosystems. Multiple actors intervene within this communicative process; both members of the scientific and the academic community, environmental activists and organizations, representatives of the various productive industries and sectors, politicians, civil society and the information media. They all defend the transformation from within their own areas of activity (Mayer, 2016; Boykoff and Boykoff, 2007).

In any case, the transition towards the eco-social requires the implication and the complicity of the communications and information media. Their role is fundamental in the professional dynamics and routines related with decision-making, in the configuration of *agenda setting*, endorsed by theories of *framing* and *priming*. They can be converted into an inspiring reference for society or, on the contrary, serve as a line of defence, as we assume in this article. The theory of *agenda setting* establishes as its central hypothesis that there is a form of transference of some relevance from the agenda of the communications and information media to the public agenda. Since its formulation in the 1970s, the explicative *agenda setting* model of the media (first level) has been ramified, in order to explain the transmission of the agenda of the attributes (second level), and the network agendas –or relations– (third level) (Ardévol, Gil de Zúñiga and McCombs, 2020).

There are numerous studies that have taken *agenda setting* as a general theoretical framework to determine the sort of media coverage that different topics receive, such as: the use of anabolic steroids (Agulló, Castelló and Valderama, 2014); the presence of populist leaders in Twitter (Alonso-Muñoz and Casero-Ripollés, 2018); school bullying (Blanco and Cano, 2019); the most important problems that are reflected in the local news of a city such as Pamplona (Canel, Llamas and Rey-Lennon, 1996); the Colombian-Venezuelan frontier crisis (Cárdenas, 2017); the news coverage of migration from Morocco on television (Codinach, 2015); and, comparative analyses on the issue of women (Gómez, 2014), among others. A large part of these studies is sustained through the prism of the concept of "relevance" or *salience* (Dearing and Rogers, 1996: 8) which the current affairs topics may or may not acquire. The *salience* of the topic generates a hierarchization, because not all the issues are of the same importance (Macedo, 2016). Wanta and Wu (1992) made it clear that the wider the coverage of a topic in the media, the greater the interest of the population in that topic. For McCombs (1985), that agenda-setting of public relevance, situating a theme in its repertoire, in such a way that it becomes the focus of public attention and thought -and, perhaps, of public action-, constitutes the initial level in the formation of public opinion.

In turn, Iyengar, Shanto and Zinder (1993) demonstrated that the commentary that appears first in a news item is of greater weight simply because of its location. Subsequent studies have demonstrated that other factors also have to be taken into account in the reception of media messages, beyond topicalization and hierarchization, which determine the level of agenda penetration, such as people's educational levels, economic income, sex, and level of use of the communications media (Roiz, 2003). In the studies on agenda-setting, three principal phases for its constitution are pointed out: starting with the presence of a topic or object of study; development of the issue over a period; and the disappearance of the topic from the agendas. With a view to theoretical support and discussion over the results of our study, it is of interest to us to consider the presence of five principal factors that affect

the *agenda-setting* process and therefore the people on the receiving end: 1) the temporal framework; 2) the nature of the topics; 3) democratic values; 4) type of media communications; and 5) other factors (Rodríguez, 2004).

Alongside those media theories, psychology contributes sufficient theses that explain the reluctance of the population to acknowledge difficult realities, however scientifically unquestionable they may be. It is a question of cognitive dissonance and a sort of reactive defensiveness from within the comfort zone, accentuated after the disconnection from reality that is provoked by the connection with digital social networks, which reaffirms behavior that is hardly always rational. A circumstance that the media agendas scrutinize to maintain states of opinion that are contrary to recognizing the situation of a planetary crisis and the inevitable need to transform our lifestyles. These circumstances call for the reinforcement of pedagogic structures in the news (Chaparro and De Andrés, 2022).

In accordance with Moser (2016) and with Chapman, Lickel and Markowitz (2017), we understand that in this context, the role of the communications and information media in the symbolic construction of the eco-social transition and its topics is fundamental, in so far as it situates the issues within a public debate and generates news stories through which the question is narrated and debated in the public sphere.

## 2. State of the Art

From among all the topics that form part of eco-social transitions, climate change has attracted most attention, both in academic circles and among institutions and activists. The publication in 1987 of the "Brundtland" report by the World Commission on Environment and Development of the United Nations, the publication of the first report of IPCC in 1990, and the celebration of the UN "Earth Summit" in Rio de Janeiro in 1992, were acknowledged as events that prompted the emergence of news coverage of climate change, and incentivized research interest within this field. In their meta-analysis of studies on the communication of climate change, Schäfer and Schlichting noted that research between 1990 and 2010, on the whole from countries within the northern hemisphere, had exponentially increased. Using methodologies such as case studies and longitudinal and comparative analyses between media channels, they mainly analysed printed publications, up until the turn of the Millennium, and thereafter when interest increased, both in online formats, and in television and radio programmes, although more discretely in the latter (2014).

Despite the evidence, other aspects of public opinion on climate change have been highlighted in some studies: the risks appear distant and responsibilities are principally attributed to industries and to governments, minimizing the importance of individual actions (Peralta and Ouariachi, 2015). In addition, what is usually highly politicized information is often contradictory from one ideological extreme to another, lending special attention to the declarations of politicians and climate activists, which diverts attention from other relevant questions of the debate (Castillo and López, 2021). On this point, the works of such authors as McKeown and Hopkinks (2013), Moser and Dilling (2011), and Schäfer (2012), who have conducted investigations with qualitative methodologies, reached similar conclusions, emphasizing the importance and the need for social action to minimize the problem. These authors based their hypotheses on the inexistence of adequate and effective content production in relation with climate change. Cooper described it as the unintentional influence of the communications and information media: "traditional informal science education methods are unable to adequately educate the public about controversial topics such as climate change because numerous sources of information counter or distort, rather than reinforce or clarify, scientific knowledge" (2011: 233). Cebrián, Segalás and Hernández (2019) defined the need to establish indicators to evaluate public awareness and knowledge of sustainability, noting the absence of specific rubrics designed for each competence and for adapting them to different programs and contexts.

In recent investigations, it has been pointed out that the population lends greater attention to information on climate change that is broadcast on mainstream television than to any other source of information (35%); followed by the web sites of the principal media, television, radio, and online press (15%); the websites of climate-specialized news services (13%); online social networks and blogs (9%); and, finally, conversations between friends and family as sources of information (6%) (Newman et al., 2020). Studies on the coverage of climate change in the news and in television station programming are scarcer, as these are principally aimed at media with an online format, with greater emphasis on the digital press.

Something that is relevant as a starting point in this study is that few investigations have been specifically centered on the coverage of news and content on television. Bruzzo and Guido (2012) analysed ecological discourse on public television in Brazil, finding that the programs usually began with shared common notions and preconceived ideas among the audience where there is little or no debate and the members of the audience are at no time invited to speak. In this way, the multiple disputes, interests, and conflicts between the indigenous population and mining in the zone are invisible in problems as

complex as the protection of "hot" zones in the Brazilian rainforest, omitting governmental responsibilities and relegating the role of the local population.

Other approaches that have been centered on analyzing the presentation of energy on Spanish television, particularly the *La Sexta* channel, made it clear that when the question was covered, it corresponded to events linked to fires and the rising cost of electricity where the leading role was given to generalist rather than to specialized journalists, the public, experts, and ecological experts. In addition, important gaps were prominent in the news stories, such as environmental questions and the energy poverty that people experience (Mercado and Monedero, 2017). In relation with environmental divulgation in Spain, it is worth highlighting a case study of the television program *El escarabajo verde* [The green beetle], the work of Llano and Jiménez (2020). This program has been broadcast since 1997 up until the present. As well as the added value of its continuity over time, it shows a capability to adapt to new journalistic and digital languages, as well as an integral commitment to content related with conservation, studies of the aquatic environments, and waste treatment ("green, blue and brown", respectively). In accordance with the authors, the program can be considered "a perfect model" with regard to environmental conservation in Spain, although relations of cause and effect are on no few occasions established between climate change and the model of economic development.

It is in addition worth recalling the surge of inter-university research initiatives, such as the Media and Climate Change Observatory (MECCO)<sup>[1]</sup> [*Observatorio de Medios de Comunicación del Cambio Climático*], which compiles journalistic information on the monthly coverage of climate change from 126 sources. It includes newspapers, radio, and television from 58 countries, some in every continent, observing the presence of climate change, and its level in global media coverage. In the most recent reports, it has been suggested that 2019 was the year with the most widespread media coverage of climate change with topics linked to the youth movement *Fridays for Future*, the UN biodiversity report, events such as rising sea levels in the Mediterranean, the heat wave in Europe, and the UN COP 25 Climate Summit in Madrid, jointly organized by Chile and Spain, among others. However, in December of that year and as a result of the COVID-19 pandemic, coverage of the climate crisis fell a few points, reaching the level of such years as 2010, which implies a step backwards in the achievements (Boykoff et al., 2020). This reasoning proves the weak relation established in the media between systemic events arising from environmental degradation, the spread of Covid-19 and the economic model.

In a Spanish panorama, Fernández, Piñuel and Vicente (2015) mentioned that media coverage in the country was similar to the coverage observed in Western newspapers, which increased with the presence of political events such as Climate Summits and publications of scientific reports. On the other hand, the studies of Teso and Lozano (2022) indicated that with regard to the *online* communication of climate change in the country (excluding social networks), the main sources of information were the generalist press, the specialized press, institutions that were not communications and information media (sectoral associations, firms and official institutions), news agencies, media portals and radio and television web sites.

This greater frequency of information on climate change from the *online* press coincides with current investigative focal points. Case studies on the coverage of such newspapers as *El País*, *La Vanguardia*, and *El Mundo* are the most common, including studies in which information is analysed around the time of the Summits. The analyses of these media include the visual representation of news on climate change -with results that make evident the preponderance of images of politicians such as the ex-president of the United States, Donald Trump (García and Navarro, 2020), and the terminology used in the information -with results that reflect a greater use of the expressions "crisis and climate emergency" on the basis of the 2018 IPCC report "Global Warming of 1.5°C". Although the expression "climate change" continues to be the most widely used (Erviti, 2020).

On the other hand, studies that link the PRISA group, owner of the *El País* newspaper, with firms within the area of fossil fuels such as the Argentine group YPF, stand out, because they have promoted a different coverage of climate-related questions rooted in the conflicting interests of their owners (Moreno, 2018).

In turn, Vicente and López (2022), who completed a study on films in relation to the climate crisis, contended that the cinematographic picture presented the same narrative shortcomings as the informative discourse, thereby missing a valuable opportunity to transmit sustainable values. They also scrutinized the secondary role generally meted out to scientific discourse in the media, both in the news and in fictional works. The image that television news transmits was for the authors constructed on the basis of the prestige of the scientist, an idea that was reinforced through the maintenance of expressive and emotive distancing with regard to the topics that are covered, specific to the dominant investigative pattern. The idea behind their interventions was neither to seek conflict, nor discussion. Instead, they remained at a predominantly expositive level; a detail that makes it necessary to call on additional voices that are capable of mobilizing the most emotive feelings of the audience. In turn, the scientific discourse within the cinematographic world, unlike the informative one, is centered on



spectacularized catastrophes or on political arguments, common at summits, but never or hardly ever on the causes that might call into question the economic model (Vicente; Vicente, 2014: 146).

Other studies have placed the focus on the lack of relevance in the Spanish press of the role of livestock in the climate crisis, with solutions proposed by the media that are some way off the necessary transformations for the eco-social transition, where the meat-eating arguments continue to dominate (Moreno and Almirón, 2021).

The state of the art shows the centrality of climate change between the preferred themes of eco-social transitions. It highlights the importance of language and its euphemisms as an object of study. This review leaves us space to approach our work through a contribution with three differentiating nuances.

In the first place, we begin with a broad concept of the eco-social transition, which goes beyond climate change. We have said as much in various publications (Peralta, Chaparro and Espinar, 2019a, 2021a, 2021b; Espinar, Chaparro and Peralta, 2019), as well as in the *Guía de Transición Ecosocial y Principios Éticos para Nuestros Medios* (2020) [Guide to the Eco-social Transition and Ethical Principles for our Media] that contain a range of considerations directed at the communication media and that include a perspective that is more wholistic. The following stand out among its functionalities: a) approaching problematic issues arising from the present model of consumption from the viewpoint of climate justice, identifying the communities and collectives that the crisis appears to have harmed more than any others, such as women and girls, impoverished populations, people with functional diversities, indigenous, and peasant communities; b) using edu-communicative strategies with a focus on ethics and respect for all forms of life and diversities, which can contribute epistemological information on understanding the causes, the consequences and the possibilities for action in the face of the so-called "crisis, as well as bringing greater visibility to the eco-social transition, its practices and initiatives, so that the change can be projected as possible and in the near future. The *Guía* [Guide] recommends the preparation of narratives on the expansion of cooperatives for, among others, clean energy, ethical banking and/or local currencies that favour local commerce and barter, agro-ecological kitchen gardens, agro-alimentary cooperatives, artisanal supply industries, collaborative consumer groups, production initiatives, distribution and consumption of ecological products, stimulating collective transport, projects for the improvement and the recovery of biodiversity, seed banks, eco-tourism projects and initiatives to reduce plastic waste, (Chaparro et al., 2020).

In second place, the investigation at the core of this study is centered on television, although it is the press that has received most attention to date (Preston, 2009). According to a Spanish report in 2017, issued by the *Centro de Investigaciones Sociológicas* (CIS) [Centre for Sociological Investigations], 72.2% of the public in Spain are informed through radio and television, whereas only 30% read the press. Public television, it may be noted, continues to play a central role, especially at critical times, in European societies (Palmer and Rowland, 2011).

In third place, our work begins with the application of indicators to the communication and information media. In this sense, it is worth recalling that the rendering of accounts has for decades been considered as the distinctive seal of modern government (Bovens, 2010; Day and Klein, 1997). The research group that endorses it, LabCOMandalucía<sup>[2]</sup> at the University of Malaga, launched the *Indicador de Rentabilidad Social en Comunicación* (IRSCOM) [Indicator of Social Profitability in Communication] in 2012, a tool that is used to evaluate social work that the media are carrying out, to point to the strengths and weaknesses of each one through a numeric score based on fields of study. Those fields revolve around the following variables: Management, Human Resources, territorial organization, programming, and Internet presence. IRSCOM has been adapted and successfully applied to community radio, public radio, and commercial radio stations within Spain. At present, generalist public and private television stations with national coverage are within its scope of application. Similar tools are likewise found in other countries and regions: among others, Castilla-La Mancha, Murcia, Colombia, and France. This investigation forms part of the results obtained following the application of IRSCOM to generalist public and private television stations with state coverage within Spain. Among the more than 30 variables that can be evaluated with the indicator, great importance is attached to those related with media activities that raise awareness of the environment and the eco-systemic transformation (Investigation framed within the application of IRSCOM to television channels: Proyecto UMA18-FEDERJA-187).

### 3. Objectives and research questions

Our principal objective consists of documenting the presence of eco-social topics in state and generalist television channels within Spain (TVE1, La2, Antena3, LaSexta, Telecinco, and Cuatro), both in the public and the private sector, and in programming schedules and in the main news programs of those TV stations. In undertaking this task, we contemplate the following research questions, which are divided into two blocks:

In relation with the specialized programs: up to what point and with which specific themes is the thematic content of the eco-social transition broadcast on the TV channels of the sample? Is there any difference between the thematic content on the agendas of the private and the public TV stations. Which specific programs are present in the programming schedule? What importance will the TV stations give to those sorts of programs in terms of their broadcasting slots, duration, thematization and the prioritization of their contents? Are there programs in their own right, with a hallmark of environmentalism, or are the themes presented in more of a transversal way in other programming content? Can preferences be appreciated with regard to the televised formats or genres since those themes have been approached?

In relation with the news: what quantitative implications are there in relation with *agenda setting*, the number of news items on ecological themes, and the eco-social transition? Does behavior vary as a function of ownership of the media outlet? What place do these themes occupy in relation with other themes on the news agenda, and up to what point are the ecological themes eclipsed by other current affairs issues? What characteristics does a theme of an environmental nature have to meet to be a *salient* or a relevant newsworthy item? What general behavior is associated with these sorts of news items? Do they warn, raise awareness, and present alternatives to the current model? From the range of themes connected to the eco-social transition, as they are described in the methodology, which have greater impact, beyond the thematic hegemony of climate change?

We begin with the hypothesis that those themes are under-represented and ignored, delving into other implications that may be drawn from the perspective of the social function of the media.

#### 4. Methodology

The central methodological vector points to content analysis, centring on the quantitative weight -with qualitative contributions- of the programs and the news items with eco-social-transition-related themes. The sample includes public and private generalist TV channels with national coverage: *TVE1* and *La 2* (public); *Antena Tres* and *La Sexta* (private, group A3Media); *Cuatro* and *Telecinco* (Mediaset group, private). The news items of the stations were tracked over four non-consecutive weeks, to avoid overlapping themes on any relevant or salient issue, according to the dominant principles of *agenda setting*, which might over or under-compensate, or distort the results, leaving a sufficient margin of time so that the contents of the news covered the different phases set out earlier and so that the specialized programs showed a continuous or discontinuous presence in the televised program schedules. The thematic analysis was applied over the following weeks: Week 1– March 15 to 21, 2021; Week 2- April 12 to 18, 2021; Week 3- September 6 to 12, 2021; and Week 4- September 26 to October 2, 2021.

During this period, on the one hand, the complete program schedule of each of the six channels was studied; and, on the other, the evening news items. The choice of evening news items was because it is the slot with most news items throughout the day; merging the agendas of the morning and midday news items with those generated in the afternoon. The analysis of the news items was not applied to *La 2*, as it has no news program.

In total, 24 weekly program schedules were analysed (four for each station in each week of the analysis), from Monday to Friday, considering all the programs broadcast during the 24 hours of the day. The total number of news items under analysis amounted to 120 (28 from each TV station, with the exception of *Cuatro*, that only broadcasts news at weekends, for which reason the eight present in the programming schedule were accounted for in this case only). In total, 2909 news items, of which 156 were from *Cuatro*; 602 from *TVE1*; 671 from *Telecinco*; 717 from *La Sexta*; and 763 from *Antena Tres*.

**Table 1. Framework of analysis: programming schedules and news programs.**

	TVE1	La 2	Antena 3	La Sexta	Telecinco	Cuatro
Number of programming schedules analysed						
15-21/03/2021	1	1	1	1	1	1
12-18/04/2021	1	1	1	1	1	1
6-12/09/2021	1	1	1	1	1	1
26-2/10/2021	1	1	1	1	1	1
TOTAL	4	4	4	4	4	4

	TVE1	La 2	Antena 3	La Sexta	Telecinco	Cuatro
Number of news programs analysed						
15-21/03/2021	7	0	7	7	7	2
12-18/04/2021	7	0	7	7	7	2
6-12/09/2021	7	0	7	7	7	2
26-2/10/2021	7	0	7	7	7	2
TOTAL	28	0	28	28	28	8

Source: COMandalucía Investigation/Authors' own work

The analysis of the programs was completed through the television websites where the programming schedules are published for each day, as well as an explanation of the general contents and themes of each televised edition. As a function of their "own letters of presentation", a first filtering of those programs was conducted, the general nature of which was intended to favor eco-social transitions when covering or presenting topics on ecology, the environment or other themes related with eco-systemic issues or alternatives related to the circular-economy. The methodology was supported with a content analysis sheet on which the following variables could be considered: name of the program, brief description of objectives and contents, weekly broadcast slot, and the percentage that it represents of all programming.

On the other hand, a table was used in this research that had been specifically designed to analyse the presence of eco-social transition themes in the news. Each one of the news items under analysis was classified in the Table (excluding the sections on Sports and Meteorology), according to the *item* under study: television station, date of broadcast of the news item, order of appearance of the news, titles, brief description, theme, area and geographical scope.

The analysis of the information was done by quantifying the number of news items that were issued and classified on the basis of their thematic content, beginning with the following twenty general categories: self-promotion; science and technology; culture; animal rights and natural spaces; human rights; economy; ecology and transition; education; gender; judicial matters; LGTBIQ+ rights; historic memory; meteorology; migrations; leisure and free time; politics; health; the primary sector and the countryside; society; and events. This classification of the news items is the one that is used in the IRSCOM classification process to determine some of the measurement variables that are considered when using the IRSCOM tool. The division of the news items into thematic blocks, as they were configured in the application of the IRSCOM-TV-CAD indicator has given us the opportunity to isolate and to agree on the specific weight of the news items with eco-social transition topics. The remainder of the unrelated categories were used to establish comparative statistics and percentages.

## 5. Results

### 5.1. The eco-social transition in programming schedules

In this section, we take account of the specific programs on environmental topics. Table 2 shows the number of programs that were found, their number, their weekly time slot in the schedule, and the percentage of that time in relation to the programming of each television station.

**Table 2. Programmes with eco-social transition contents by chain.**

Tv	Num. programs	Name of program	Weekly time slot	Weekly percentage
TVE	1	<i>Aquí la Tierra</i> [Here the Earth]	180 min.	1.78%
		<i>El Escarabajo Verde</i> [The Green Beetle]	60 min.	0.59%
La 2	3	<i>El Señor de los Bosques</i> [Lord of the Forests]	65 min.	0.64%
		<i>Reduce tu huella</i> [Reduce your footprint]	55 min.	0.54%



Tv	Num. programs	Name of program	Weekly time slot	Weekly percentage
Antena 3	0	None found	0	0%
Cuatro	0	None found	0	0%
Telecinco	0	None found	0	0%
La Sexta	0	None found	0	0%

Source: LabCOMandalucía Investigation/Authors' own work

Over the four weeks of the analysis, TVE had been broadcasting the program *Aquí la Tierra* (TVE, 2014-), a 30-minute slot led by Jacob Petrus, a geographer specialized in climate science, which offers an "unprecedented and entertaining look at our planet". The program revolves around the weather and the climate, showing that the whole system, from health, architecture, our behavior, and even art and the economy, is conditioned by the climate. To do so, it hosts on experts and guests from the world of art and sport. Although the specific theme of the program is the weather, it is intermeshed with climate change issues. Taking into account that it is broadcast from Monday to Friday before the evening news (between 20:30 and 21:00), a program with a very high audience rating, and despite its numerous contradictions, it is clearly an important space for divulgation and awareness raising on climate change and its consequences in all areas of life and the planet.

With regard to stand-alone programs, during the first and second week of the analysis (March and April, 2021), *La 2* broadcast two programs with ecological themes: *El Escarabajo Verde* and *El Señor de los Bosques*. During the third and fourth week of the analysis (September and October, 2021), the broadcasting of *El Escarabajo Verde* continued, *El Señor de los Bosques* ended, and *Reduce tu Huella* was broadcast for the first time.

*El Escarabajo Verde* (TVE2, 1997-) is a classic on the second channel of Televisión Española. It is a "storehouse on ecology and the environment that is centered on the relations that humanity establishes with its environment". A different theme of current affairs is analysed in each 30-minute program, at all times with the purpose of sharing information in a journalistic format. The most recent programs broadcast during the analysis covered the effects of excessive artificial lighting on living beings, artistic experiences in dialogue with the landscape, the future of greener aviation, the natural reserve of Columbretes, and an analysis of the state of health of four species of corals, among many others. *El Escarabajo Verde* has been programmed since 1997, at present under the management of Eduardo La-Plaza.

*El Señor de los Bosques* (TVE2, 2017-2021) is presented as a "entertainment and information sharing program of everything that forests have to offer us". During the first weeks of the analysis (March and April), it was broadcast on Sundays from 18:30 hours, with an approximate duration of one hour. The program that has six seasons covers the principal ecosystems of Spain. Once again, although the topic revolves around ecological care and awareness raising, there are contradictions; for example, support for mono-cropping of chestnuts as a commercial opportunity in one of the programs that was broadcast.

Finally, the program *Reduce tu huella* (TVE2, 2020-) was also broadcast on *La 2* during the two weeks that were analysed in September and October 2021, on Saturdays, at 18:30. In that space, the journalist Adela Úcar travelled across Spain to find "projects and people willing to redress the damage that our species is inflicting on the planet and to make the work a better place: new energies, circular economy, waste that recovers a new life, recovery of autochthonous species, etc.". A total of 23 episodes were made available on the web of RTVE<sup>[3]</sup>.

## 5.2. The eco-social transition of the news

This section shows the results of the second block of analysis, intended to detect content in matters of eco-transitions among the news items of the sample, as shown in Table 3. In this case, there are no results for *La 2* as it has no daily news service.

**Table 3. Number of news items with eco-social themes and percentage that they represent of the total\*.**

TV Station	Total news items	Total eco-social items	% over total **
TVE 1	602	16	2.7%
Antena 3	763	6	0.8%
Canal Cuatro	156	5	3.2%
Telecinco	671	17	2.5%
La Sexta	717	14	2%
<b>TOTAL</b>	<b>2,909</b>	<b>58</b>	<b>1.99%</b>

\*The figures refer to the total over the 4-week period of analysis \*\*Rounded percentages

Source: COMandalucía Investigation/Authors' own work

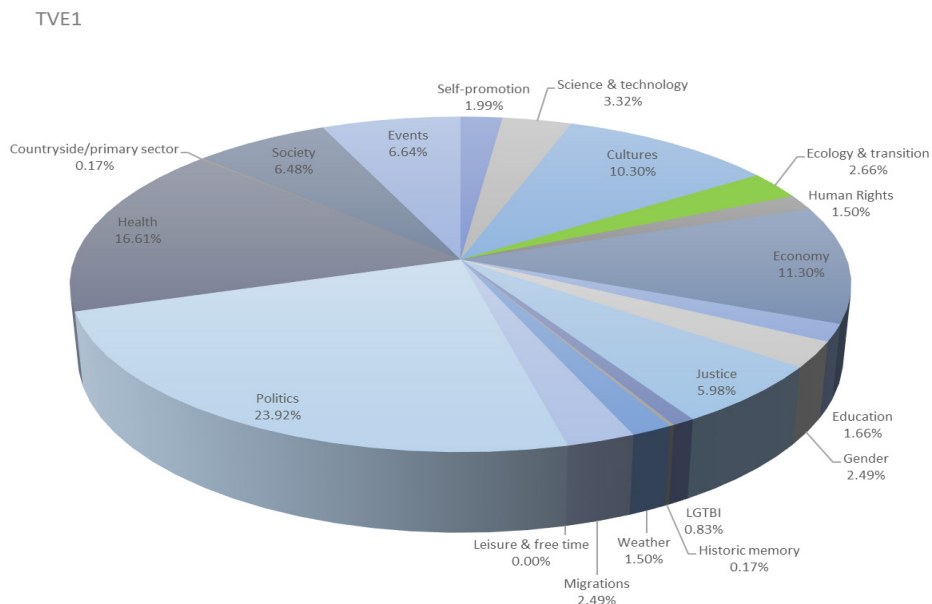
If each channel is separately analysed, the one that lends most attention to the theme is *Canal Cuatro*, with 3.2% (five news items out of a total of 156 that were analysed); followed by *TVE 1* with 2.7% (16/602); *Telecinco*, 2.5% (17/671), and *La Sexta*, with 2% (14/717). *Antena 3* is quite a way off, with 0.8% of its news items on ecological themes, a mere six news items from among the 763 that were broadcast.

The thematic contents of most news items were: "health", the main theme on *Antena 3*, *Cuatro* and *Telecinco*; and the second most important on *Tve1* and *La Sexta*; the first theme on *Tve1* was "politics", second on *Antena3* and third on the other channels; and "events", which was the most important theme on *La Sexta*, the second on *Cuatro* and *Telecinco*, the third most important on *Antena3* and the fifth on *Tve1*. In turn, the themes with less representation in the news items were, from the least to the most frequent: "*memoria histórica* [historical memory]", "animal rights and nature", "countryside and primary sector", "leisure and free time", and "education".

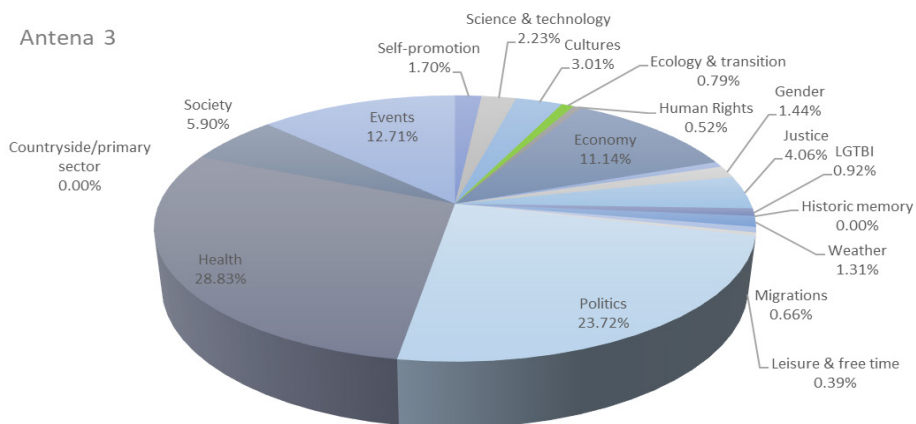
The news items related to the eco-social transition represented the 9<sup>th</sup> most frequent theme within a total of 20 thematic categories established in the case of *Tve1* and *Canal Cuatro*; the 12<sup>th</sup> on *La Sexta*; the 15<sup>th</sup> on *Antena3*; and the 16<sup>th</sup> on *Telecinco*; in all cases out of 20.

The representation of news on thematic content relating to the eco-social transition is shown in green in the following pie chart of the news channels. It shows the percentage share of all news items broadcast on the news.

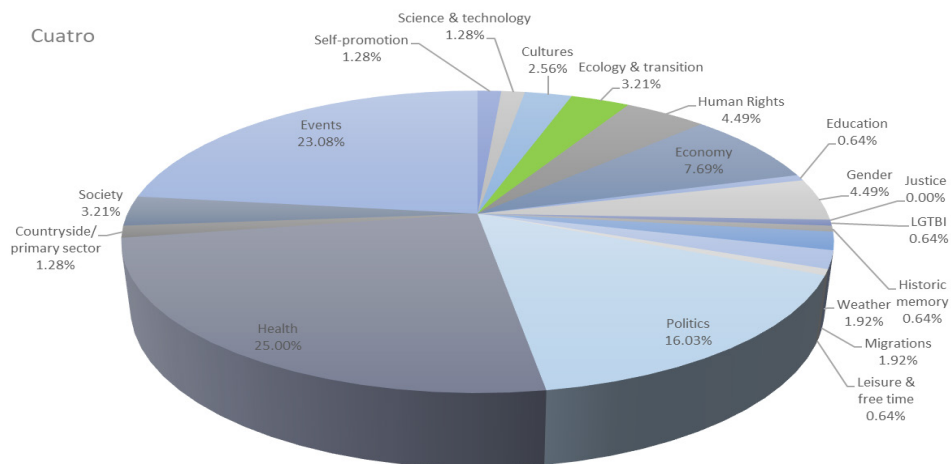
**Pie Chart 1: Diversity of news-item-related thematic content/representation and percentage share.**



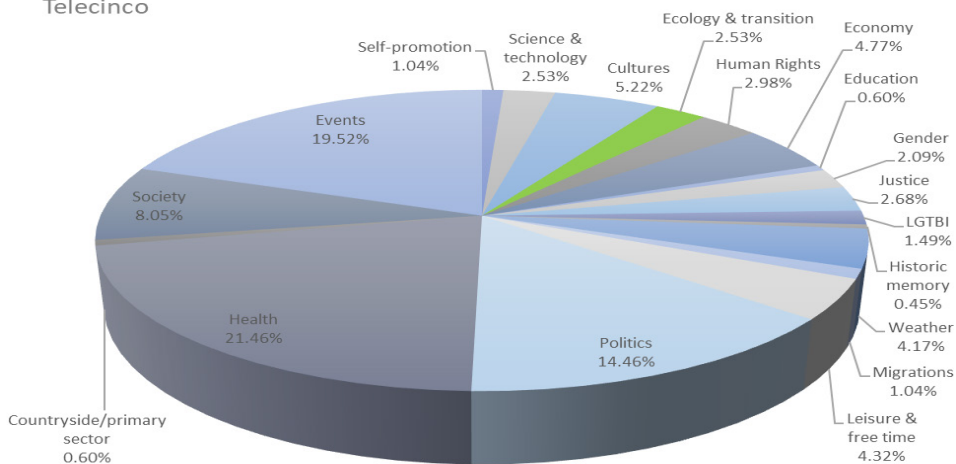
### Antena 3

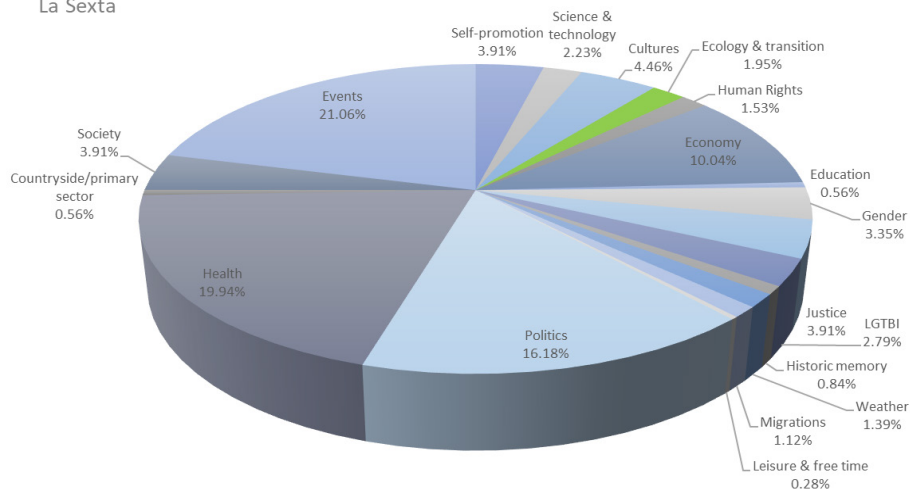


### Cuatro



### Telecinco



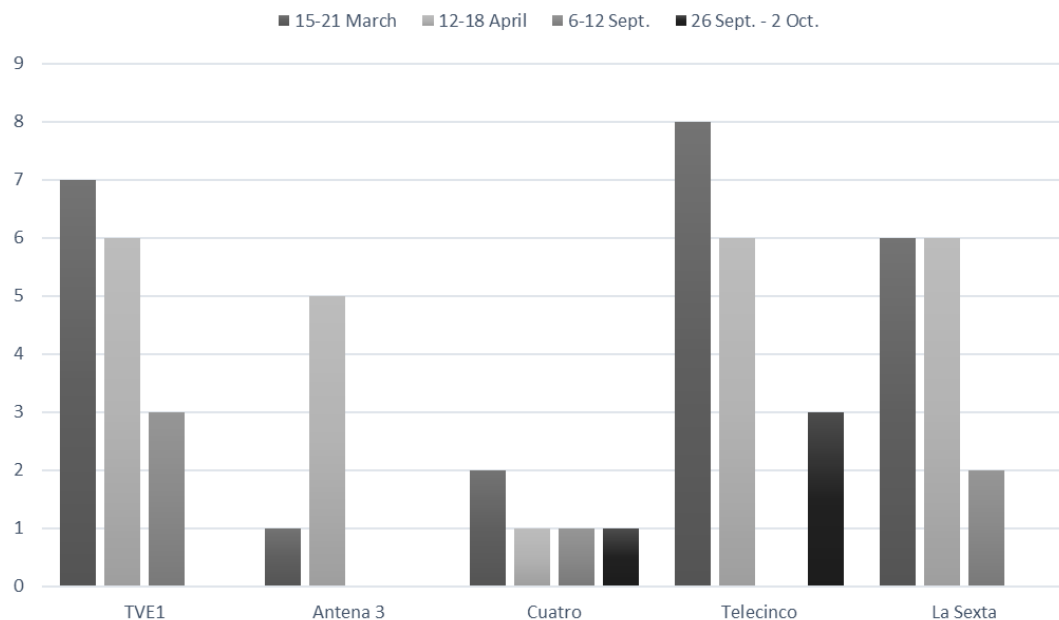


Source: COMandalucía Investigation/Authors' own work

It is worth pointing out that there were significant events during the four weeks of analysis that dominated the focus of news and considerably reduced its thematic diversity. During Weeks 1 and 2 of the analysis (15-21 of March and 12-18 April 2021), the elections in Madrid and the Covid-19 vaccination campaigns were the main news items. In the third week (September 6-12, 2021), the most significant news event was the Taliban taking over power in Afghanistan, coinciding with the 20<sup>th</sup> anniversary of the 11-S attacks. However, without a doubt, the themes that occupied most attention in the news were the eruption of a volcano on the island of La Palma, during Week 4 of the analysis (September 26-30, October 1-2, 2021).

The latter event was such a lead story in the news items that were analysed that the news on ecological themes completely disappeared from the news agendas of *Tve1*, *Antena 3*, and *La Sexta*; were reduced to only one on *Cuatro*; and to three on *Telecinco*. The evolution of the number of news items that favoured the eco-social transition over all four weeks of the analysis clearly reflected the impact of the volcanic eruption in the prioritization of news items (Graph 2).

**Graph 2. Number of ecological news items over the 4 weeks of the analysis.**



Source: COMandalucía Investigation/Authors' own work

Other variables that changed the normal lines of news reporting were as follows: in Week 1 of the analysis, for various reasons, *TVE1* had two especially short news programs (7 and 8 news items) conditioned by sporting events; as did *Telecinco*, that had one less news program than the others because of broadcasting a football match. In the third week, *TVE1* pulled one program for a special program on "Aniversario del 11-S [The Anniversary of 11-S]" and another especially brief one. In week 4 of the analysis, *Antena3* replaced two news programs for special coverage of the situation unfolding after the eruption of the volcano on La Palma. The logic is all too common: extraordinary situations push aside the news instead of being covered in extra programming time.

### 5.3. Principal themes of the contents of the eco-social transition

A total of 58 news items on ecological topics that impact on the eco-social transition were detected in the investigation, both warning and raising awareness, as well as presenting alternatives to the industrial model. Among them, a total of 17 corresponded to news items on *Telecinco*; 16 on *Tve1*; 14 on *La Sexta*; 6 on *Antena3*; and 5 on *Canal Cuatro*. These 58 news items were classified under their themes. Those that were presented have been identified in Table 4 (below), ordered by greater or lesser degree of appearance:

**Table 4. Num. of news items by theme and TV station.**

THEME	Tve1	Antena3	Cuatro	Tele5	La Sexta	TOTAL
Protection and rights of animals	1	1	2	6	3	<b>13</b>
Extreme weather events/climate change	4	1	1	1	5	<b>12</b>
Protection of ecosystems	3	1	0	4	0	<b>8</b>
Agro-alimentary model	3	0	1	1	1	<b>6</b>
Waste management and usage model	0	0	0	3	1	<b>4</b>
Mining	1	0	0	0	2	<b>3</b>
Preservation of the rural world	1	1	0	0	1	<b>3</b>
Contamination of seas and oceans	1	0	0	0	1	<b>2</b>
Transport model	1	1	0	0	0	<b>2</b>
Various	0	0	0	2	0	<b>2</b>
Air pollution	0	1	0	0	0	<b>1</b>
Energy model	0	0	1	0	0	<b>1</b>
Technological model	1	0	0	0	0	<b>1</b>
TOTAL	16	6	5	17	14	<b>58</b>

Source: COMandalucía Investigation/Authors' own work.

The most recurrent environmental themes were "protection and rights of animals" (13), and "extreme weather events related to climate change" (12). News items under the former heading were found on: the organization of the month against cruelty to animals; the fight of a group of pangolins to survive; the release of a young bear in a natural park of Asturias; various news items related to the prohibition on hunting Iberian wolves in Spain; protests against experiments on animals in Madrid; the discovery of dead turtles on a beach at Mijas; plans to protect brown bears in the Cantabrian mountain range; stem cell treatment for animal illnesses; protection of the territory of the Iberian lynx in Sierra Morena; and steps to assist the nesting of swallows taken by some local councils.

On the subject of extreme weather events, news on fires, cyclones, and flooding linked to climate change were found. News items were found on: serious fires in South Africa; a high intensity typhoon in the Philippines; a forest fire in Tarragona; extreme heat in various cities of Spain, the worst floods of a century in Australia; the warmest winter of the decade; higher fire risks within the zones affected by storm Filomena; drought in the region of Daimiel; and variations in the harvesting of wine due to climate change.

Under the heading "protection of eco-systems" (8), the news items referred to the International Day of Forests and Trees; the extraction of water in the nature reserve of Doñana; the beauty and importance of the flowering of almond trees in the region of El Jerte; and endangered life in Spanish rivers due to the proliferation of invasive species such as wels catfish, and other land species such as processionary caterpillars.

The category "agro-alimentary model" (6) has as its principal topic the *performances* to encourage the reduction of the consumption of meat held in various cities. Reports on urban kitchen gardens were also detected, and on agricultural innovation in Valencia, as well as an initiative to recycle oranges that fall to the ground from the numerous orange trees within and around the city of Seville.

Under "waste management" (4), the protagonist is plastic, with news on alternatives: the "war against plastic" in the Balearic Islands; the creation of a container for recycling face-masks; and the development of an intelligent waste-collection system in Alcorcón. The topics of "mining" (3) during the period of analysis were the public debate and the struggle of the community in Retortillo (Salamanca) against the opening of a uranium mine within its municipal area; and the closure of another mine in the province of Cáceres.

Under "pollution of seas and oceans" (2) information was broadcast on the deterioration of a rich eco-system in Capri (Italy) and the risk of Japan releasing radioactive waters into the sea. Under air pollution" (1), a report was found on the project "Environmental Ambulances", in order to measure air quality in cities and towns.

The following news items were at the forefront of the debate over models for transport (2), technology (1) and energy (1): France to prohibit internal flights in favor of the train; a campaign that promotes the use of the bicycle; a new European Law against programmed obsolescence; and a debate over nuclear power/renewable energy models.

The "preservation of the rural world" (3) is identified in news items as the reconversion in offices of Post Office staff to guarantee postal services in small towns and various projects for their repopulation. News items were also found that referred to the environmental deterioration in general (2): *Google Earth* showing the footprint of human activity on Earth, and a "Macroconcert in defence of the Planet" held in Paris.

## 6. Discussion and conclusions

In this analytical study, it has been possible to generate an X-ray of the level of implication of generalist TV stations towards themes that are linked to what we have, throughout this work, identified as the eco-social transition. It leads on to fairer and more nature-friendly societies, not only including themes on ecology, but also with broader categories, such as the rights of animals and the natural world. The study has raised a range of issues and agenda items in different formats, each of different specific weights, such as the extreme weather events and their analysis from the perspective of climate change, the protection of ecosystems, the agro-alimentary model, the models of use and waste management, mining, the preservation of the rural world, the pollution of seas and oceans, the model of transport, protection and respect for animal rights, and air pollution, among others. In this area, it may be highlighted that the coverage of climate change is focused on its consequences, all of which in the emergence of extreme weather events, never on its causes: the economic model.

With regard to the content of news items, this X-ray is comparative in nature, a methodology that is designed to observe the quantitative weight of each item. Our first conclusion has confirmed the starting hypothesis: the results have shown us that thematic content of this type is under-represented and therefore neglected. A conclusion that is reached, above all, on the basis of a comparison with the set of themes present in the news. Whereas the events occupy a great part of the *agenda setting* and attention of the news programs, the contents of an ecological nature are anecdotal. Something similar happens with the specialized programs. In this study, the incipient coverage that Spanish TV stations are extending to the eco-social transition has been identified.

In relation with specialized programs, the study has revealed a conclusive first result: only the public channels (TVE and La 2) presented formats related with the eco-social transition in their program schedules. The private channels never contemplated that sort of thematic content. Programs such as *Aquí la Tierra* (TVE, 2014-), *El Escarabajo Verde* (TVE2, 1997-), *El Señor de los Bosques* (TVE2, 2017-2021), and *Reduce tu huella* (TVE2, 2020-) are evidence of that minimalist presence on TVE 1 and La 2. In fact, La 2 is the channel on which most spaces were dedicated to the eco-social transition in its programming. It did so with specific programs, but also through a considerable presence of documentaries broadcast on a daily basis, a genre which occupied up to 56.9% of programming, or between 90 and 95 hours of weekly broadcasts.



Among them, documental series such as *Wild Latam* can be found, which explores the natural environments and wildlife of South and Central America, through expeditions across areas with unique animals, such as: the gila monster in the Sonora Desert of Mexico; the orcas or killer whales off the coastline of Tierra de Fuego, Argentina; the mythical condor of the Peruvian Andes; the river dolphins of the Amazon rain forest in Brazil; and the humming birds of the Colombian jungle, among many others (TVE2, 2021). Another similar example is *Un Planeta Perfecto* (TVE2, 2021), a documentary mini-series from the BBC consisting of five episodes, in which the forces of nature are explored, including the power of the oceans, the climate system, and even humanity, and the way they all stimulate and shape life on earth.

Our analysis determined the lack of any commitment within *Antena 3*, *Cuatro*, *Telecinco*, and *La Sexta*, inexistent to date, towards either the creation or the production of specific programs on aspects of ecological transition. We refer here to the idea that television, in so far as it is a public service, should at least in a balanced manner face up to its three -informative, educational, and entertainment-related- social functions regardless of whether it is publicly or privately owned. On the contrary, the panorama that neo-television (Eco, 1965) projects to us is all too often obsessed with the last of the three functions: (Prado, 2002; Prado and Delgado, 2010; Francés, 2009). If paleotelevision aspired to a programming design in which the genres and the blocks were separated, neo-television – the television of privatization, of the crisis, of production and self-acclaim, has shown that some programming agendas erode the frontiers between programming and publicity and the limits between television genres, with a predominance of *reality shows*, *talk shows*, *infotainment* and *docusoaps*, among others. Something that requires a change of paradigm, because neither education nor information should ever be incompatible with the idea of entertainment, although that last function has encroached on almost all televised formats, to the detriment of the first two functions. A line of reasoning that is of concern, because communication for the eco-social transition should start to form part of the proposal for the value of the media, through the incorporation of educational components and awareness raising, if the aim is to move towards modes of thought that situate the planet, living beings, and human dignity at the centre of the debate.

In relation with the number of news items on ecological themes, the eco-social transition is not found in the thematic content with the least representation on the main television channels of the country, but it is hardly close to catching up with the news items that dominate the news agendas of the five television stations that have been analysed. Most news items in the set of television channels that was analysed come under the headings of "health", "politics", "events", "economy", "culture", and "society". Faced with them, the eco-social content was in no case greater than 4% of the total contents of all news programs, in the total of 120 news programs that were analysed. Put another way, from among the 2,090 news items under analysis, only 58 covered the topic of our study, which represented 1.99% of the total.

It was likewise observed that *agenda setting* reveals the point to which the television channels thematize and hierarchize current affairs. During the four weeks of analysis, events such as the elections in the community of Madrid, vaccination against COVID, the Taliban taking over power in Afghanistan, and the eruption of the volcano on the island of Palma were the principal items aired on the news. In fact, it appeared that there was a greater possibility of the environmental themes achieving the category of an issue or news item when they were related with natural catastrophes, consequences of the ecocide, or another type of disturbing event, something which contributes salience or relevance, as opposed to news coverage of daily life, of positive achievements and advances in environmental matters. In other words, news value is attached to negative rather than to positive aspects. And, possibly, the spectacle rather than the causalities, consequences, and initiatives for mitigation and transition for a better understanding of the eco-systemic crisis. In addition, the results have shown that the most recurrent themes in our category of analysis are "the protection and rights of animals" (13 of 58 news items, in other words 2.2%), and the "extreme weather events linked to climate change" (12 of 58 news items: 2%). Far behind in order of importance are such themes as the energy model and the technological model, precisely those that could inspire society, because of the reference that they bring to the changes of paradigm, and the ways of life necessary for a successful eco-social transition to move onwards.

In our proposal, some communications and news media have also been suggested that contribute references, recover the roots of ideas, concepts, and lifestyles (Chaparro and De Andrés, 2022), some media which give keys, which inspire, which mark out roads and make good practice visible, which dynamize the transition, especially impacting on symbolic, ethical, and esthetic frameworks, reawakening feelings that infuse life, at a level of ideas and the imaginary, recovering its primordial meaning: communication as "sharing in common", as collective construction, with the community and for the community, weaving together meeting points and points of recognition (Velásquez, 2009). In this transition, it will in the performance of its work be fundamental to prioritize ethics over economic values,

given its power when diffusing and consolidating imaginary in the population. The media are expected to present a critical reading of the publicity and advertising of consumer society and its imaginaries, which continue to be broadcast *en masse* through the strategies established by communication for sustainable development and social change. The incorporation of new narratives is an urgent matter that includes eco-systemic discourses, which highlight the urgency of moving towards a way of life that is in harmony with nature.

### 7. Authors' contributions

Contributions	Signatories
Conceptualization and design of the work	Signatory 1, signatory 2, signatory 3
Documental research	Signatory 1, signatory 2, signatory 3
Data collection	Signatory 1, signatory 2, signatory 3
Analysis and critical interpretation of the data	Signatory 1, signatory 2, signatory 3
Review and approval of versions	Signatory 1, signatory 2, signatory 3

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### 10. Conflict of interests

The authors can confirm that there is no conflict of interests to declare.

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## Notes

1. Mecco: [https://sciencepolicy.colorado.edu/icecaps/research/media\\_coverage/about/method.html](https://sciencepolicy.colorado.edu/icecaps/research/media_coverage/about/method.html)

2. Laboratorio de Comunicación y Cultura LabCOMandalucía: [www.comandalucia.com](http://www.comandalucia.com)

3. <https://www.rtve.es/play/videos/reduce-tu-huella/>