Dublin City University

Mediations of Environmental Risk: Engagement of Young Audiences in Uruguay and Ireland

A thesis submitted for the Degree of Doctor of Philosophy
by María Victoria Gómez Márquez, MSc.

Research Supervised by Dr Pat Brereton
School of Communications, Dublin City University

September 2021

Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Philosophy is entirely my own work, and that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

Signed: 

ID No.: 16213459

Date: 28.6.2021

Acknowledgements

First and foremost, I would like to take the opportunity to express sincere appreciation and endless gratitude to my supervisor Dr Pat Brereton for his openness and generosity, deployed from the very first transatlantic email exchange until this last step of submitting the thesis dissertation. In between, his guidance, availability, patience and unyielding support were crucial to helping me walk and enjoy this journey while learning beyond any previous expectation and keeping alive the sense of contribution to a better world that scholars like him inspire.

Another pillar of this research was the academic and personal support of Dr Belén Amadeo, always lucid and encouraging through their responses from either Montevideo or Buenos Aires. Besides her endless generosity, the political communication and social sciences background that accompanies her profound contextual knowledge of Latin America helped the enterprise of working across continents.

This cross-national research would not have been possible but for the financial support from the Irish Research Council and the National Agency for Research and Innovation (Uruguay). It also received the constant institutional support of the School Communications in DCU in multiple ways, along with the assistance of the Faculty of Communication at the University of Montevideo at crucial stages of the project. In DCU, Dr Trish Morgan, Dr Brenda McNally and Dr Jim Rogers provided guidance and support through the process of doctoral training, involving the immersion in Irish´ culture, its academic scholarship and its institutional dynamics. In Montevideo, I was fortunate to have the confidence and support of my colleagues at UM, especially Dr Álvaro Pérez, now serving as a Dean of the Faculty of Communications.

Nonetheless, the valuable material and immaterial resources provided would not have been enough without the collaboration of the young participants who lent their voice for this research and the organisations or institutions to which they belong. I must also thank the effort, time and spirit of collaboration of all those friends, colleagues and strangers who did answer my queries when doing the fieldwork, despite a focus group could not be finally set up as a result.

Finally, my utmost thanks and gratitude go to my husband Gonzalo and my beloved daughter Celeste, who were my rock along the many hours of intellectual and practical work that certainly challenged our family dynamics. We made it here supported by a small tribe of grandmothers and “aunts”, especially when the logistics of travelling abroad and dealing with COVID-19 appeared overwhelming. I would like to thank in particular my faithful mother, María Nilda, and to my friend Amalia, who usually knows better than me what I am capable of and how to accomplish it.

Table of Contents

List of Figures

List of Tables

ABSTRACT

Mediations of Environmental Risk: Engagement of Young Audiences in Uruguay and Ireland

María Victoria Gómez Márquez

The research focuses on young adults' reception of environmental communication channelled through online audio-visual media.

In the Anthropocene, it is critical to understand lay-people' perspectives of environmental risks, while advancing situated knowledge on the potential role of pervasive media like YouTube. Young adults are critical networked publics, who remain object of apocalyptic or celebratory interpretations regarding their relationship with media technologies, and their civic agency in the environmental crisis. Through social media platforms, they become strongly inscribed in a diversity of cultures in the convergence of the local, the national and the international level of a globalised world. For instance, Ireland and Uruguay have in common the national sustainability challenges of a robust agricultural economy and culture, while also inserted in the mediatised global scene through a high penetration of online media.

The substantial fieldwork of this study consisted of sixteen focus groups with young adults, conducted in Ireland and Uruguay, comprising 109 participants. In these face-to-face led discussions, the question of how young adults engage with online eco-video was explored. It was carried out through the reported and performed selective exposure to a wide variety of short-form videos presenting environmental issues, alongside interpretations and assessment of the perceived influence of these contents. Engagement and distance with environmental risks were further analysed through participants' issue awareness, together with their perceived responsibility and agency, in order to situate the audience reception process in specific cultural mediations.

The findings signal the coexistence of environmental concerns situated at the local and the global level, with traces of a North-South divide, while exposure and interpretation of eco-video remains highly globalised. As hypothesised after reviewing levels of environmental concern across time versus the lack of significant mobilisation or massive lifestyle changes worldwide, these new findings support the notion that it remains crucial to analyse more sophisticated forms of denial, connecting with communication barriers dependent on dissonance, doom, distance and identity.

CHAPTER 1. INTRODUCTION

Faced with an empirically agreed urgent environmental crisis, humanity has however not responded proportionally, either as masses of individuals or as an institutionalised system. The recent pandemic shows that the globalised world can react to a major crisis with conviction, with strong alliances in which science and states regain centrality, supported by citizens who are convinced that there is no alternative to acting consciously. Then, market players have no choice but to accommodate with and go along with the general movement. The response to the health crisis and its scientific-technological solutions resembles the "exceptional political leadership worldwide" that Urry (2011, p. 159) posed, almost as wishful thinking, when discussing a timely transition from high to low carbon societies. With less evidence and much less public discussion, humanity reacted to the coronavirus "as if our house is on fire", a response that Greta Thunberg has consistently been calling for with regard to climate change (2019, p. 37). Hence, memes about securing a publicist for climate change, as good as those working on the coronavirus, rapidly spread everywhere. In sharp contrast with such (black) humour, there were also rumours of a world conspiracy, essentially based on the apparent complicity of the media. Camus' classic *The Plague* (1947) had a revival, but less so than Soderbergh´s movie *Contagion* (2011) available on streaming platforms. Oh, and then there was the media, spreading fear, encouraging hopes of getting out of the situation, making solidarity visible, or at least calling for it, and even showing us a planet relieved by the sudden shutdown of the most destructive species: dolphins enjoying clean channels in Venice, wild deer resting under the cherry trees of Japan…

Certainly, several characteristics of the environmental crisis (progressive, not so democratic in its consequences, slow in its deadly effects, not isolatable in a test tube, etc.) caution against such a direct comparison with the pandemic, although the tangible links have been already thoughtfully discussed by environmental communication scholars (Barry, 2020; Parks & Walker, 2020). Furthermore, it is probable that the type of solutions required, which are not as magical or game changing as the vaccine, will militate against facing this other more multi-layered pandemic and responsibly follow instructions from public or scientific institutions. Uncovering solutions to climate change or unsustainable consumption alternatively involve accepting that human civilisation has embarked on a path of (self-)destruction (Weintrobe, 2013) and demands changing the way we live—eat, travel, buy—all of which is rather more difficult and even more ambitious than temporary seclusion in facing up to a virus pandemic. In fact, although we quickly let ourselves be comforted by the return of fauna to habitats liberated by humans, there are projections today of both consumer rebuttal and potential conservation of more sustainable lifestyles if ´building back better´ (Echegaray, et al., 2021). In any

case, it is clear that we (as a human species) still lack a thorough understanding of what motivates society to respond in time to a lethal crisis that makes us seem small, and what place the media occupies in these multidimensional processes involving both elites and crowds.

Besides its material existence, the environmental crisis is also one of the main public conversations of this century, a moment in history where the media plays a central role that could only be properly understood from the perspective of varying and non-homogenous audiences. This implies understanding what type of crisis is visualised and what human responses it arouses—from activism to denial—throughout the planet, without resorting to naive universalisms. Furthermore, we also need to understand the multiplicity of narratives in circulation, the new dynamics of media consumption, and the various mediations that intervene in the interpretation of its contents by different audiences. So-called legacy media and traditional categories are challenged by the proliferation of new digital platforms and formats, while news media compete with entertainment and advertising activities with increasingly unclear boundaries as the spread of globalised branded content trends demonstrates. In a world of narrowcasting with on-demand services and intelligent algorithms, there is a need to segment audiences and media in order to understand what is happening behind that reiterative facade: a person staring at a screen, bigger or smaller, during a large part of the day and, inside that screen, potentially almost every type of content one can imagine. Individuals might experience multiple audiencing processes (Fiske, 1992) in one ever-present device, at a faster pace than previous researched eras, and all these possibly brief encounters with media contents can only be analysed by turning to the *persona* who unify these experiences and give them meaning (Livingstone, 2013).

Goals and Scope of the Study

In this particular study, the audience segment chosen is that of young adults, while online short-form video consumption provided the media scope. The abovementioned challenging scenario for communication researchers led to investigating the features and the contextual factors involved in media reception as reported by the participants, while also recreating a possible situation of encounter between ´text´ and viewer.

From the comprehensive perspective of media reception (Martín-Barbero, 1987; Orozco, 1996; Jensen & Rosengren, 1990; Livingstone & Das, 2013), the specific objectives of this research were:

1. to describe and analyse online exposure to and interpretation of short-form pro-environment videos in young adults (18-35 years old, living in rural and urban areas, with diverse educational and socioeconomic backgrounds) across Ireland and Uruguay;

2. to identify cultural sources of audience mediations through social representations of the environmental risks, the human responses to them, and the role of the media in environmental risk engagement;
3. to compare the young audiences across two regions, as a potential large-scale reference mediation source in assessing global media reception of environmental communications.

The substantial fieldwork this thesis entailed sixteen natural focus groups with a total of 109 young adults, half conducted in Ireland and the other half in Uruguay, during the pre-pandemic year of 2019. In these face-to-face discussions, the question of how young adults engage with online eco-videos (Parham, 2016; Brereton, 2018) covering diverse strands of global environmentalism (Guha & Martínez Alier, 1997) was explored. The study involved reported and performed selective exposure to a wide variety of pro-environment short-form online video texts, together with interpretations and assessment of the perceived influence of these contents. Engagement (Weintrobe, 2013) with regards to environmental risks (Beck, 2009; Urry, 2013) was further analysed through participants' issue awareness, together with their perceived responsibility (Clarke & Agyeman, 2011) and agency (Bourdieu, 1972; 1990), all of course framed against the environmental crisis.

On the one hand, the novelty of this project relies on the initiative to analyse and compare young populations of two distant countries sharing some contextual features, with special emphasis on covering a diverse range of educational and socioeconomic backgrounds. Environmental awareness and behaviour of young adults have been widely explored, but less frequently involving media consumption and, even less, going beyond news consumption and the cohort of university students, whose possibility of representing the general population varies, specifically taking into account a nation's varying rates of third-level education enrolment. This would be the first study of its kind with a thematic focus involving Uruguay and Ireland. In Ireland, there are previous public opinion qualitative studies on environmental attitudes and, notably, on the role of public discussion in environmental citizenship. Nonetheless, they do not extensively cover diverse young cohorts or specifically explore short-form audiovisual media reception. Additionally, the relationships of adolescents and young people with the digital world have been widely studied, especially in the educational aspect, but the informative and recreational use of online videos with pro-environmental messages has not been explored. Online audiences like highly mediatised young adults are a niche cohort for relevant research on media and environmental risk engagement. Besides their condition as being direct heirs of a world at environmental risk, young adults constitute critical networked publics (Boyd, 2010) who should be better understood, in terms of going beyond apocalyptic or celebratory interpretations of their relationship with media technologies.

On the other hand, and unlike most cross-national studies in environmental communication, the qualitative approach of this research provides dense descriptions enabling the emergence of social representations of the environmental problem, as articulated by these audiences all the while embracing contradictions associated with the challenge of environmental risk engagement. This approach will also facilitate comprehensive understanding of contemporary media repertoires informing or reflecting environmental discourses, as a focus that is richer than quantitative accounts of media consumption, while also giving space to a media reception perspective that isolates neither "texts" nor "readers". While some remarkable efforts of analysing transnational audiences have been made, they focus on long-form audiovisual narratives which, moreover, are not usually made up of eco-films. Comparative efforts are helpful to avoid 'radical contextualism' in ethnographic or any kind of empirical audience research (Ang, 1996). In environmental communications specifically, more theoretically-driven approaches are demanded to help to understand "what larger principles about audiences can be derived from this work, and which aspects of audience segments will always depend on cultural or regional idiosyncrasies" (Scheufele, 2018, p. 1125). For mediated communication of climate change, for instance, comparative approaches are particularly relevant since it is a transnational phenomenon and because political solutions are sought primarily at the international level, as many involved actors and institutions are transnationally organised –IPCC, UNFCCC, NGOs such as Greenpeace, transnational corporations like Shell, etc.- (Schäfer, et al., 2016). As researchers on this topic argue, "Cross-national and cross-cultural comparisons are ideal for highlighting and explaining the interplay between national and transnational aspects" (Schäfer, et al., 2016, p. 13), although there has been very little international comparative research across countries and regions in environmental communication (Anderson, 2021; Scheufele, 2018). If not all of the environmental risks are so at a global scale, these assertions apply to a highly interconnected ecosystem beyond national frontiers.

Research Motivations

In 2016, the first self-sustainable school of Latin America was built in Uruguay, applying for the first time the US architect Michael Reynolds Earthship method to an educational building that could offer an immersive experience of ecological education for children. The origin of this project was an encounter on YouTube between a 23 years old Uruguayan from Montevideo with the documentary *Garbage Warrior* (2007), featuring Reynold's journey and explaining his "biotecture". During the building process and afterwards, media from many parts of the world covered the Uruguayan story, creating short-form documentary videos on the project, which reached millions of viewers through social media online platforms. What would such media contents inspire in contemporary young

audiences? For instance, would they even serve as a seed for other citizen projects tackling the urgent environmental crisis? While some might dismiss such mediation as mere entertainment, it could hopefully help spectators develop pro-environmental attitudes. Overall, one wonders if such short-video promo's help frame audience responses with their pro-environmental content or even incite a call to action. Furthermore, the same trailer about self-sufficient buildings in Taos might not have meant anything to young people not previously mobilised and interested in searching for sustainable alternatives. Of course, as environmental communicator scholars assert, this can depend on the symbiotic relationship and specific context linking the text and audience.

This researcher was part of the group that, inspired by Earthship Biotecture, applied all kind of communication strategies to help that young Uruguayan developing the pioneer project of "A Sustainable School". As Michael Reynolds argues when interviewed in the documentary film, it seemed common sense to build the alternative sustainable society urgently needed. Especially after having opposed a large-scale mining project that uncovered how outdated discourses of progress undermined environmental protection in the public conversation in Uruguay, this new world had to be built not only on the physical ground but also symbolically. After an intense ethnographic journey of hands-on voluntary work, the doctoral training offered the opportunity to study how communications could further contribute to a robust environmental movement beyond material and immaterial borders.

Despite a grassroots background, this study –same as the School project- does not assume that small changes of lay-citizens, which are of course necessary, or long-term environmental education, which is strategic, are enough to drive substantial change. However, the research is foregrounded in the field-based conviction that citizen transformative agency alter structures, through protest and through multi-stakeholder cooperation (government, companies, social organisations, universities), in the mixture of bottom-up and top-down processes where media and communication are paramount.

Main Approaches

Therefore, the research theme is concerned with environmental challenges and the role of audiovisual media, leading to at least two different fields: environmental sustainability (political ecology and socio-environmental sciences), and media studies (audience reception, with supplementary support from cultural studies, psychology and sociology). These key approaches have informed the research project, justifying the methodological procedure and resulting in a certain framing and interpretation of the findings.

First of all, the environmental problem is framed from a political ecology perspective (Martínez Alier, 1991; 2008), beyond science and situated within a world system economy (Wallerstein, 1974) where societies face large-scale manufactured environmental risks (Giddens, 1990; Beck, 2009). The environmental crisis, which includes but is not limited to climate change, is undoubtedly a global challenge so serious that it requires a sustainable turnaround in human ways of producing, consuming, and coexisting on the planet (Urry, 2011; United Nations Environment Programme, 2021). However, its causes and consequences are asymmetrically distributed among regions, with operating forces ranging from individual choices to transnational agreements, in a multidimensional scenario where scientific, economic, political, and cultural spheres converge. Power, responsibility, structure and agency (Bourdieu, 1972; Calhoun, *et al.*, 1993) are crucial concepts to analyse the situated human response to the environmental crisis.

"The environment" is always abstract, ever changing, and therefore difficult to apprehend or objectify in a comparable way across countries and regions. The brief account of socio-environmental conflicts identified in the Environmental Justice Atlas (Temper, *et al.*, 2015) or the ranking in the Environmental Performance Index (Wendling, *et al.*, 2020) give some clues about potential concerns in each country, although the contemporary mediated access to many geographically distant "environments" discourages such linear assumptions. At the local level, for instance, it might matter that Ireland and Uruguay have in common the sustainability challenges of a robust agricultural economy and culture. While they belong to the Global North and the Global South respectively, both countries also share the feature of a high penetration of online media, which would facilitate the globalisation of media consumption and the access to other mediatised environments. Nowadays, young adults are particularly inscribed in a diversity of cultures at the local, national, and international levels of a globalised world (Roudometof, 2003; 2005; Beck, 2006). Glocality seems to be a feature of the current times and a new space of reference in which media plays a substantial role.

Second, environmental citizenship is considered in this study in the light of worldviews or environmental ideologies (Corbett, 2006) marked by social and cultural factors including institutional communication (news media, environmental groups, government, business) and pop culture (advertising, entertainment) (Corbett, 2006). Overall, the present study privileges a value-belief-norm approach to explain significant environmental behaviour (Stern & Dietz, 1994; Stern, *et al.*, 1999; de Groot & Steg, 2008).

Additionally, the relationship between humans and non-human nature at risk is understood as an existentially conflictive one, as discussed from the psychoanalytical perspective of environmental risk engagement (Weintrobe, 2013). "Engagement with climate change", an approach developed by

Weintrobe's foundational book, poses questions beyond rationality, while including personal and social dimensions:

> What lies beneath the current widespread denial of climate change? How do we manage our feelings about climate change, our great difficulty in acknowledging our true dependence on nature, our conflicting identifications, the effects of living within cultures that have perverse aspects, the need to mourn before we can engage in a positive way with the new conditions we find ourselves in. (Weintrobe, 2013, p. 1)

Giving priority to this approach does not by any means suggest that participants will be psychoanalysed, but rather that they will be listened to and interpreted, transcending the knowledge-behaviour, cause-effect linearity of some audience and reception investigation. This approach will provide a focus on the question of how we as humans come to face reality and engage with environmental issues, as a mediation source in environmental communication reception.

Third, among the multiple links between media and environment, the influence of the mass media is analysed in this study from the point of view of a reception tradition within audience research. Regarding this other main research field, the tradition of media studies allows exploration of the kind of contribution that symbolic production can make to this necessary social shift to sustainability, as Beck points out when updating the diagnosis of global risks (2009). Communication and media activities play a role in this construction, (re)presenting the issue, channelling and disseminating voices on this shared topic, and framing it within a certain value system, with specific valuation languages. Cultural artefacts such as literature and media texts have historically reflected and shaped the contesting existing visions on the human-nature relationship (Hiltner, 2015; Parham, 2016), providing a space of commonality where meanings are negotiated with and through audiences.

Rather than analysing media production, the focus of this particular research is on the reception end of the process. Among the five traditions of audience research distinguished by Jensen and Rosengren (1990) - effects research, uses and gratifications research, literary criticism, cultural studies, and reception analysis - this study will privilege the broad modality of reception analysis (Martín Barbero, 1987; Orozco, 2000; Livingstone & Das, 2013). The reception tradition is best represented by the question "how specific audiences differ in the social production of meaning" (Jensen & Rosengren, 1990, p. 218), while the meaning-making process is considered to be multifactorial and not necessarily homogenous, as Martín-Barbero proposed in a shift from a univocal meaning of media to culturally shaped mediations performed by the people (1987). However, the distinctive feature of

reception is that it combines key theoretical and empirical aspects of both humanities and social science approaches, allowing analysis of both message and audiences: reception studies "include a comparative empirical analysis of media discourses with audience discourses" (Jensen & Rosengren, 1990, p. 218). Therefore, along with Fiske´s conceptualisations (1987; 1992), meaning "is considered to emerge from the context-dependent interaction between a polysemic text and an interpretative reader" (Livingstone & Das, 2013, p. 2), which goes beyond a literary criticism approach to the text, without substituting it with audience motivations alone. Reception is a theoretical choice that preserves some of the contributions of other traditions, especially the active audience emphasis of uses and gratifications theory in the rise of daily life technological mediations (Livingstone, 2013).

Per Espen Stoknes' (2015) model for barriers in climate change communications will help to organise the previous findings related to: distance, doom, dissonance, denial, and identity potentially operating in the encounter of audiences with environmental stories. As he concluded from reviewing twenty years of psychological research, the main challenges remain that "1) climate change is perceived as *distant*, (2) it is often framed as *doom*, cost and sacrifice, (3) few opportunities for action weaken attitudes through *dissonance*, (4) fear and guilt strengthens *denial*, and (5) climate messages are filtered through cultural *identity*" (Stoknes, 2014, p. 162).

Outline of Chapters

This thesis dissertation has seven chapters. An overview of the current environmental crisis and regional environmentalisms identified in the literature opens the following chapter of this study, leading to identification of major discourse trends and debates. After that, the cases of Uruguay and Ireland as agricultural countries facing heightened and specific environmental challenges are introduced. In the third chapter, media reception and environmental risk engagement are the related subjects of the environmental communication approach of this study, providing an individual and communitarian exploration of the role of the media along with a close-up investigation of young audiences. Chapter Four presents the methodology used by which this research attempts to produce new knowledge, while the fifth and sixth chapters are devoted to the findings. Chapter Five describes engagement with environmental risks in Ireland and Uruguay through issue awareness of the participants, and also their perceptions of responsibilities and agency in the face of the environmental crisis. Chapter Six explores eco-video exposure and interpretations, as reported by the young audiences in both countries. Chapter Seven is devoted to the final discussion and conclusions.

A Note for Readers

In these chapters, the written communication might be enjoyed because of its novel content but also potentially suffered because of its modes of expression. Born and raised in Uruguay, the researcher not only strives to understand environmental communication reception but also faces transcultural challenges. While the tribulations related with research work are well-known, there is another journey that is often overshadowed, namely that of translating different cultures and realities. More than a linguistic task, this is an intercultural enterprise that starts when carrying out a literature review across at least three languages, trying to establish dialogue between communication traditions of diverse cultural roots. This task has extended throughout the fieldwork with conversations in many registers of English and Spanish, to this point of presenting the research findings in a 'foreign' language. While largely transformed across the globe by its many speakers, English is a language rarely spoken in Latin America. As a result, if all researchers are somewhat uninvited strangers to the objects of their study, Global South researchers from this region also remain guests of a Western science epistemology, whose rule of thumb is writing as an English native speaker. Besides the technical challenge of using a foreign language, one has mixed feelings when embracing this type of linguistic hegemonic modes of globalisation, as social science scholars belong to a stream of research and knowledge whose responsibility is to shed light on the wider dynamics that have configured the breeding grounds of global inequalities. Nevertheless, many benefits also arise from using varying languages to help cross cultural barriers. For instance, as Hulme notes, "we must first hear and understand the discordant voices, the multifarious human beliefs, values, attitudes, aspirations and behaviours" (Hulme, 2009, p. 172). After accepting this technical and ethical challenge, the researcher confirms that use of multiple languages as a powerful and necessary tool for broadening meaningful global conversations. Instead, when one cannot embark on learning the languages of other cultures, it might happen that access to their insights comes at a cost which might be, as in this case, reading academic work which unwillingly or unwittingly seems to defy the English code of Westernised science.

Hopefully, the intercultural journey is worth it for the reader, as much as it was for the researcher, and the findings reported in this study can contribute to identifying challenges and opportunities in the task of communicating the complexity of sustainability issues and the interdependence of their dimensions across different scales: individuals, communities, nations, and even the whole planet.

CHAPTER 2. GLOBAL ENVIRONMENTAL RISKS AND REGIONAL PERSPECTIVES OF ENVIRONMENTAL CITIZENSHIP

Humanity at Risk: the Current Environmental Crisis

As we usually hear, we are currently experiencing an environmental crisis. In objective terms, that is the degradation of the habitability conditions of the planet Earth, affecting mostly human beings alongside other species that inhabit it. This process has intensified, approaching a point of no return: the ecosystem that makes human life possible might stop providing a context where human beings can develop the life as they know it, which is not a risk for "the environment" or for the planet but for this species. The phenomenon of climate change is central in this crisis, while fed back with sustained damage to sources of life: water, soil, air. Another remarkable aspect of this crisis is that changes in the ecosystem that sustain human life are synergistic and unpredictable to a certain extent.

The last UN Report on the Environment summarises the problems in three main areas of action: climate change, biodiversity loss and pollution emergencies (United Nations Environment Programme, 2021). Besides climate change and its manifestations - rise of sea level, heat waves, violent storms, floods and droughts - scientific sources point to fisheries overexploitation, dead oceanic zones, decrease of pollinators putting agriculture at risk and atmospheric pollution, as the most important health risks (Gardner, et al., 2015). There is compelling evidence that any natural balance holding human life in the planet is at serious risk (Wallace-Wells, 2019), no matter if such is seen as a perfect cooperative system, as the deep ecologists would suggest, or if it is seen as a 'discordant harmony' (Parham, 2016) such as more recent science claims.[1] A very straightforward measure of the crisis is provided by the Earth Overshoot Day, which graphically shows how humanity is spending its annual "environmental budget" months before the end of the year. It happens earlier each year, in contrast with the notion of a development that satisfies the needs of the present without endangering the satisfaction of needs for future generations proposed in the foundational Brundtland Report "Our Common Future" (United Nations, 1987). From the perspective of human beings, David Wallace Wells foregrounds eleven ´elements of chaos´ in his journalistic account of the available scientific evidence on the environmental crisis: heat death, hunger, drowning, wildfire, disasters no longer natural, freshwater drain, dying oceans, unbreathable air, plagues of warming, economic collapse and climate conflict (Wallace-Wells, 2019).

The complexity and dynamism of environmental challenges are even greater than traditional development deficits as for instance multidimensional poverty, in addition to the fact that environmental problems are physically determinant for the existence of any other type of problem.

> The set of environmental impacts derived from human actions are not always easily discernible. Environmental changes do not occur in a linear and predictable way, which can be studied in isolation without influencing other factors, but instead, they involve dis-continuity, synergies, feedback loops and unpredictable cascade effects. And these phenomena can also reinforce each other (...) Consequently, the total costs of modern comfort can remain hidden, sometimes manifesting only after many years or even decades. (Gardner, et al., 2015, p. 28)

The gradualism and invisibility of harmful effects previously signaled led to the concept of ´slow violence´ (Nixon, 2011) applied to the environmental crisis in general and especially to how it hits harder the poor, vulnerable groups whose life-sustaining conditions are eroded. The environmental crisis involves future impacts on people´s lives, but also current ones, not evenly distributed across the planet. Habitability conditions are already being affected in various parts of the world, as it is not a geographically homogeneous or simultaneous change over time; there are and will be places and, therefore, populations that will suffer the most serious consequences first. Due to the existing inequalities between and within nations, we know they will have different resources to respond as well, which implies also differentiated levels of lethality to human life of these environmental changes.

While the extreme events brought about due to climate change remind humanity of the connections within the Earth system holding their life and the essential vulnerability of almost every place in the planet, its effects are not equally harmful, despite its pervasiveness. Climate vulnerability, as the tendency of a region or human group to be negatively affected by climate change, depends on exposure to harm and most importantly relative adaptation capacities (Agard, *et al.*, 2014). These capacities usually depend on institutional infrastructure and socioeconomic circumstances, typically leaving developing countries in a more vulnerable situation (Scabin, *et al.*, 2016). Furthermore, the IPCC (Intergovernmental Panel on Climate Change) argued that marginalised groups are disproportionally affected by the impacts of climate change including extreme events (Olsson, et al., 2014), due to the barriers often held by women, children, the aged, disabled and various indigenous populations, while taking into account relative risk management, reactions to shock and overall levels of adaptation. Therefore, UNESCO states that climate vulnerability originates in the intersection of inequalities and is socially differentiated afterwards (Olsson, *et al.*, 2014), thus contributing to

enlarging existing inequalities (Ryan & Gorfinkiel, 2016). This is something easy to connect with early claims of environmental (in)justice in the USA (Bullard, 1990), while typical unequal countries like those at the periphery of the world system are therefore at most aggravated risk.

Today, this scientifically based critical diagnosis has been accepted by the system of nations and all but determines the transnational political agenda (United Nations Environment Programme, 2021), which consequently permeates the agendas of national governments in turn. The vast majority of Western democracies agree with the diagnosis of a global environmental crisis which is broad and deep enough so as to require urgent political decisions and policies, as highlighted in the Paris summit held in December 2015. While economic and social levels of development remain unsatisfactory for a large part of world's population, environmental concerns are now at the center of the so called 'sustainable development' initiative, officially pursued by and constituting the largest contemporary alliance of countries: the United Nations. Driven by the agenda of Sustainable Development Objectives and by new green consumption trends, the business sector also incorporates sustainability in their strategic goals.

The United Nations institutional call to consider the environmental problem started in the eighties with the Brundtland Report which was concerned with 'our common future' (United Nations, 1987), following a path opened by the independent report of the Club of Rome, warning about the limits of economic growth (Meadows & Meadows, 1973). Since then, the United Nations has shaped the agenda of global policies with periodical summits at the end of the twentieth century and the beginning of the twenty-first; with issues from deforestation to climate change in focus. One of the most notable recent events was of course the Paris Agreement, affirming measures around global warming as being one of the main international policies of this century, where 195 signatory countries committed to:

> Holding the increase in the global average temperature to well below 2°C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5°C above preindustrial levels, recognising that this would significantly reduce the risks and impacts of climate change. (United Nations, 2015, p. 3)

The periodical assessment reports by UN´ scientific Intergovernmental Panel on Climate Change have been also central to the diagnosis of this global environmental crisis. It has been such from the first report in 1990 to recent ones like the special report recommending to adjust the aim of the Paris Agreement of topping at 2ºC the increase from preindustrial levels to a "Global Warming of 1.5 ºC" (Intergovernmental Panel on Climate Change IPCC, n.d.). The latest one, released in September 2019,

was a special report focused on the ocean and the Cryosphere, and all of them fed the latest UN report calling to make peace with nature (United Nations Environment Programme, 2021).

This means that, nowadays, multilateral agencies publicly acknowledge concerns that were long manifested by Think Tanks like The Worldwatch Institute, environmental activists, NGOs, local movements and a considerable part of the scientific community within the last fifty years. From the perspective of new environmental movements such as Fridays for Future or Extinction Rebellion, they are certainly not doing enough, or acting quickly enough, but the environmental crisis is ´official´ now and this constitutes a somewhat new scenario for citizen pressure on public institutions as well as private enterprises.

Unsustainable Development, Ecological Modernisation and Beyond

An essential aspect of the current environmental crisis is the certainty that the unprecedented changes to Earth systems are mainly driven by human action. Not only was climate change found to be caused by externalities of intense human activity on the planet, and accelerated in the last thirty years. The signaling of the Anthropocene as a new geological era and the portrait of an economic system which is essentially unsustainable, expand the scope of the problematic human footprint in the Earth beyond emissions. Consequently, since the First Industrial Revolution, there are proposals aimed at preserving the balance, through either relying on technical and ethical developments of modern capitalist societies, or demanding a systemic change as the only way out, as will be depicted in this section.

Nobel laureate Paul Crutzen asserted that a new geological era was born when coal-based steam power was invented in the second half of Eighteenth century: the 'Anthropocene' era (Crutzen & Stroemer, 2000; Crutzen, 2002). "Coal enabled the production and consumption of various large systems, generating the horsepower of millions of people. Societies came to be organised around new production, transportation and communication methods, which were whole new patterns of living" (Urry, 2013, p. 3). The concept was widely accepted among environmental studies, with contesting starting points before or after the eighteenth century, but without losing the essential acknowledgment of humanity as the driving force of epochal environmental change.

The complicated relations between society and nature were also the focus of the environmental sociology theory of risk society developed in the nineties, after Chernobyl, by Ulrich Beck and Anthony Giddens. They pointed to the response (Beck, 1992) and the concern (Giddens, 1990) in face of the safety threats introduced by modern society or industrial civilisation, and how the 'success

of Western modernisation' brought about these undesirable effects. As a result, Giddens would call them ´manufactured risks´. “Incalculable risk and manufactured insecurities resulting from the triumphs of modernity marked the condition of humanity at the beginning of the 21st century” (Beck, 2009, p. 191). When updating the diagnosis, Beck posed that nowadays humanity lives in a ‘world risk society’, where environmental risks are one of the most important global systemic threats, along with financial risks and terrorism (Beck, 2009).

As evident in the abovementioned widely accepted theories, the manner in which societies have developed their production and consumption systems is paramount for the environmental balance. The focus on the challenging relationships between society and nature, especially through the economy, has older roots and an early diagnosis around unsustainability. As usually quoted, the first economic theories taking this into account could be found in Marx's critique of the capitalist ´metabolic rift´ between humans and nature, associated to the alienating fact that food and clothes were consumed far from the land in which they were produced. Following this analysis, Allan Schnaiberg (1980) found a sustainability problem within what he called the 'treadmill of production': the infinite consumption demands from a capitalist society versus a finite resource, given that production meant the 'withdrawal' of raw material from nature plus the 'addition' of waste. This sustainability problem does not seem fully solved nowadays.

The Western modern model of development has certainly produced environmental outcomes that put sustainability at risk (Beck, 1992; Crutzen, 2002; Giddens, 1990; Martínez Alier, 2008). This acknowledgement led to upgrading the United Nations program for global development, aligning its goals with the paradigm of sustainable development: from the millennium goals, set to end in 2015, to the sustainable development goals aimed at a 2030 horizon (United Nations, 2015). As recalled by Jochum in his account of the debates around the apparently consensual notion of sustainable development, this development paradigm has achieved some significance since the Earth Summit of Rio in 1992, although coined originally five years before in the UN Brundtland Report (Jochum, 2015). It was a direct attempt to resolve the dichotomy between economic growth and environmental protection, usually in tension, “by sending the message that it is possible to have economic development whilst also protecting the environment” (Carter, 2007, p. 207). Sustainable development is usually associated to the type of response to the environmental challenges focused in adjustments to the previous development model, but still prioritising the economy and mitigation instead of prevention, thus under the shadow of ecological modernisation, but also harvesting the benefits of its wide acceptance among governments and corporations (Cohen, 1999).

Following similar analysis of Beck and Giddens around the reflexivity and flexibility of modern capitalism, ecological modernisation theory states that environmental problems could be managed with a strategic use of either technologies or policies which are developed within the system, and for its own sake. A sustainable or green mode of capitalism might be possible, from this perspective. "From a North American and British perspective, Arthur Mol and Gert Spaargaren are now generally recognised as the key figures in the field, although in Germany, the Netherlands, and elsewhere on the Continent, ecological modernisation is still very closely associated with the work of scholars such as Joseph Huber and Martin Janicke", Buttel further explains in an article on the popularity of this approach within academic and nonacademic elites (Buttel, 2000, p. 63). This prominence can also be traced to the findings on discourse analysis focused around environmental debates in Western democracies, as outlined by Marteen Hajer (1995) and John Dryzek (2005).

In *The Politics of the Earth* (2005), Dryzek identified Industrialism as the hegemonic discourse and signals eight discourses contesting it: the discourse of Global Limits, divided into Survivalism and Denial; the discourse of Environmental Problem Solving, with Administrative Rationalism, Democratic Pragmatism and Economic Rationalism as subdivisions; the discourse of Sustainability, taking the form of Sustainable Development or Ecological Modernisation; and the discourse of Green Radicalism, including Green Romanticism and Green Rationalism. Based in his own experience in Europe, North America and Australia, this is the result of a longitudinal analysis of how deliberative democracy works in the case of environmental debates.[2] Long-term observation and research on arguments in dispute in environmental conflicts, especially in the peripheries, allow Martínez Alier to offer a classification that sheds light on the geographical application of Dryzek´s discourses. The Catalan economist and social researcher would also include Environmental Problem Solving and Sustainability in the category of Eco Efficiency - 'the Gospel of Eco Efficiency'. For Martínez Alier, it is an environmentalist response that emphasizes the sustainable management of natural resources and entails the promise of controlling pollution, therefore supporting the feasibility of a sustainable development and a technology based ecological modernisation (2008; 2011).

Both Dryzek and Martínez Alier found out that Eco-Efficiency in its various manifestations has been the dominant discourse of the decision makers in core societies and their former colonies. Ecological modernisation remains the mainstream discourse, as revealed by large scale contemporary studies, which found, for instance, that "systematic empirical indications at the level of public opinion that are congruent with the discursive shift toward ecological modernisation by the elites" (Harring, et al., 2011, p. 398).

However, the challenge of humanity is not at all similar to the challenge faced back in the 1960s and 1970s, when developing technologies to reduce pollution and waste offered a more or less adequate response to the most pressing problems. In the twenty first century, the failure of efforts aimed at ensuring sustainable development is clear. Furthermore, the last UN report on the environment dedicates an extensive section on how the problems with climate, biodiversity and pollution will also impede the achievement of non-environmental goals such as fighting poverty (United Nations Environment Programme, 2021). The world now needs to adopt solutions that fundamentally transform the entire production and consumption system, solutions that carries societies from a surplus situation into one of scarcity in energy and materials, and that develop the necessary foresight to detect sustainability threats that are still hidden. "This exceeds by far the scope of technical adaptations, requiring large-scale social, economic and political engineering in an effort to create the foundations of a more sustainable human civilisation" (Gardner, *et al.*, 2015, p. 39).

Some analysts go even further, affirming that we can only think about how to rebuild a post-peak-oil society after an energy collapse, since it is too late to make a transition from high to low carbon societies unless a powerful unexpected technology emerges, bringing about rare unexpected economic and political support which helps generalising it quickly (Urry, 2011). Other authors warn about limits in individual's responses to environmental threats under existing socio-ecological formations where nature is alienated and culture is reified (Morgan, 2017), which remains both a summary of how capitalism has historically worked, and a given scenario where personal human efforts on their own are futile. By means of the lack of political will or because of socio-cultural structures, individuals would not have any reason to be hopeful about neither their agency (Bourdieu, 1972) nor their possibilities of success in preventing a major challenge for human survival in planet Earth.[3]

For ecological economists at the end of the twentieth century, the only solution involves changing the logic of the economic system to a new one that considers social metabolism. Different from neoclassical theories of environmental economy, ecological economy does not consider pollution as an exceptional externality (either as a result of market or state failures) that can be prevented with a discouraging pricing system or a protecting governmental policy. Instead, it takes "the perspective of social metabolism mentioned by Marx in The Capital (in relation to Liebig's studies of Peruvian guano and agriculture nutrients) but not yet developed, neither by him nor by any other Marxist analysis", Martínez Alier explains (2008, p. 12). This perspective asserts that these pollution ´externalities´ are systemic and unavoidable because the economy always receives resources and produces waste; consequently, pollution should be integrated in the accounting of gains and losses.

Degrowth remains another radical solution to the environmental crisis proposed by theorists of decreasing (Georgescu-Roegen, Schumacher, Daly, Shiva, etc.) and revitalised nowadays with the pandemic of COVID-19 -the 2021 Tim Jackson's new book *Post-Growth Life after Capitalism* provides a media raven example. Basic calculations with available data show that levels of consumption in 'developed' societies could not be generalised within the limits of the ecosystem, so this proposal entails living better with less, close to the notion of frugality. This certainly erases the last hope in the linear Western modern development project (Rostow, 1990), the kind of fairy tale in which progressive stages of economic growth would ensure material welfare for all humanity, in a cumulative and non-limited process. If no evidence of significant progress in this direction, despite material growth, was considered as bad news, knowing that magically achieving it would make the Earth collapse, presents a devastating irony. Finally, industrialisation, urbanisation, together with high levels of education, adopting modern values, and technification of agriculture were not the answer for a global system to be able to thrive and sustain itself.

Furthermore, the very notion of "development" as a cumulative process recommended for every country in the world has been certainly contested. In parallel with the UN's revision of its economicist notion of development from the seventies, after Roma Club warned about the limits of growth, a group of critical thinkers coined the term "post development" to go beyond adaptations: these included Esteva (1988), Escobar (1995), Marglin (1990), Ferguson (1990), Peet (1997), Watts (1993). They were inspired by Foucault's ideas about the relationship between knowledge, discourse and power, so they wanted to directly erase the very concept of development. From their perspective, the system of globalisation where periphery countries provide raw materials and buy industrialised goods from central regions, established worldwide the linear model of Western development, which included Western cultural patterns of modernisation as well (Dussel, 1995; 2005). Viola most notably cites Escobar on development: "It does not matter if the meaning of the term has been intensely criticised; what remains unquestioned is the basic idea of development as an organising principle of social life; and the fact that Asia, Africa and Latin America can be defined as underdeveloped; and that their communities indisputably need development" (2000, pp. 501-502)

As sometimes asserted for ecological modernisation, one of the distinguishing features of the machinery of knowledge and power of the paradigm of development is the use of a technocratic language that undermine political and cultural analysis needed to provide contextualised solutions. Local and regional perspectives on how a desirable future is envisioned are override, along with an analysis of inequalities that could lead to feasible solutions to the challenges for striving together. In

Viola's words, it "substracts problems from its political and cultural framework, to formulate them as technical problems and propose neutral solutions" (Viola Recasens, 2000, p. 20).[4]

Unequal Global Development, Ecological Debt and Peripheral Alternatives

As just argued, the development model of modernisation remains environmentally unsustainable, considering the type of exchange with nature implied in the dominant economic system still in place. Additionally, the model appears also socially unsustainable through inequalities that determine the vulnerabilities of certain regions of the world, especially when confronting the consequences of environmental degradation. Furthermore, regional roles in the global market are also associated to a differentiated footprint in the planet –consumer First World, commodity producer Third World-, which makes global inequality also relevant to analyse the causes of the current environmental crisis, as will be explained in this section.

Humanity is not a homogeneous driver in this epochal change, as acknowledged by the recent contributions to the Anthropocene debate, as well as by the agreements forged between leading countries aimed at reducing emissions. "For instance, the explosive growth in consumption (crucial for anthropogenic environmental change) during the Great Acceleration was strongly dominated by the Global North: by 2000, 15% of the global population roughly used the same amount of energy as the remaining 85% in the Global South. In 2013, almost half of global GHG emissions were caused by only 10% of the world population" (Pichler, et al., 2017, p. 33).[5] Even the emissions produced by the extractive companies in the periphery, or their extensive animal farms, serve the demands for the 'development' of core regions and certainly exceed those of domestic households in the global South.

Following the same critical tradition of Foster or Schnaiberg, the American economic historian and sociologist Immanuel Wallerstein sets his 'world systems theory' (1974), arguing that capitalism not only operates at a national level but also at an international level, creating a global economy which is responsible, through various modes of colonialism, for the underdevelopment of periphery regions. In this sense, it contributes to the theory of dependency and sets the framework for environmental reflections on how the unequal exchange of resources and commodification produced unsustainability.

World System Theory dividing the globe among a core, a periphery and a semi-periphery, has spread within the Anglo-Saxon academic circuit by Wallerstein's publications in the seventies. However, back in 1949, the Argentinian Raúl Prebisch was already promoting the analytical axis of center-periphery to explain how the development of the 'first world countries' or central economies caused

the underdevelopment of the 'third world countries' or periphery, that used to be their colonies (Prebisch, 1950).[6] From an ecological economy perspective, "the metabolism of rich societies could not be sustained without cheap natural resources of suppliers of raw materials, it is a structural condition of the global market" (Martínez Alier, 2008, p. 18). This economic system described by Prebisch first and Wallerstein later, taking into account previous analysis such as Lenin' 'economic division of the world' (1948) originally published in 1917 and the Mainolescu's 'unequal exchange' (1931) first published in 1929, implies environmental impacts that follow the same distribution of the economic benefits and damages. It was then identified that the extraction of natural resources to feed industrial modern lifestyles in terms of comfort, consumption and growth for core countries, leads to deforestation, biodiversity loss, food insecurity, poverty and, in a more general term, unsustainable energy in the global South. Therefore, financial debt filtering from South to North posed a counterpart of ecological debt in the opposite direction (Peralta, 2006) which is still in place.

While structural economic conditions as the ones signaled in the world-system theories might definitely determine diverse type of experiences and evaluations of "the environmental crisis", peripheries might not be just ´victims´ or subjects of international aid. As some post-development approaches suggest, they might be also a reservoir of alternatives to the dominant Western recipe for (ecological) modernisation, sometimes intentionally proposing themselves as alternatives. Eco-centric cultures, or what Corbett (2006) would identify as ´transformative environmental ideologies´, could show a more positive face of global diversity. This is partially acknowledged in the paradigm of multiplicity or "other development", which emerged around the eighties, after the paradigms of modernisation and dependence (Servaes, 2000). According to this perspective, there might be diverse ´recipes´ for development, which are integral, multidimensional, dialectic, but all sharing the concern for basic needs, ecology, participatory democracy and structural changes.

Certainly, local cultures have sometimes resisted the codes and valorisation scales of capitalism (Martínez Alier, 1991), especially in the world peripheries. They have taken an active role in the globalisation process by providing alternative environmental ethics with their more holistic and systemic worldviews, which could substitute the linear framework of development. Environmental values, cultural values, subsistence values and economic values are often expressed in different scales in the socio-environmental conflicts, therefore, they cannot be negotiated. Here lies the importance of the political ecology perspective: "Who has the social and political power to simplify the complexity imposing a certain language of evaluation?" (Martínez Alier, 2008, p. 27). In media terms, the question could be 'Who has the power to frame the ecological problem?' In socio-environmental

disputes involving these local cultures, participant observation revealed an evaluation conflict: not only interests of different groups were opposed, but especially different values, incompatible values.

> It may happen that governments and companies want to impose an economic language, saying that a cost benefit analysis including all externalities (translated into money) will be made; and that an impact evaluation will be made, to decide if a conflictive dam or mine is authorised. It may occur that the affected population turn to languages available in their cultures, even when they understand the economic language and think that a compensation is better than nothing. They can declare, as U'wa in Colombia against Occidental Petroleum, that their land and subsoil are sacred and that no price can be put to their own culture. (Martínez Alier, 2008, p. 26)

This acknowledgement would mean to go towards the opposite direction of the modern development project promoted around 1950 in publications such as 'Economic Development and Cultural Change', where local cultures were seen as obstacles for "progress", thus, requiring the whole Western cultural package: "capitalism, industrialisation, advanced technology and representative democracy, but also individualism, secularisation and utilitarianism" (Viola Recasens, 2000, p. 21). Equally far from ecological devastation of planned socialism, indigenous traditions might make a call to a kind of ritualism and communitarianism that includes and worship nature. Instead, nature has rights, spirituality takes over materialism, the web of life interdependences is recognised, land and natural resources are sacred. From the 'uncivilised' and their traditional knowledge of biodiversity management, a new world can emerge.

Different approaches to a sustainable life can be traced to traditional notions that coexist with Western dominant development model in the periphery of the world system but questioning its statements and experiences. Alternative social organising principles as the Andean "*Sumak Kawsay*", ancient Quechua words meaning 'good living' and referring to a way of living in harmony within communities, ourselves and nature, are an example (Gudynas & Acosta, 2011). *Ubuntu* ethical concept of Southern African origin is another example: the belief in a universal bond of sharing that connects all humanity (Tufte, 2015). The happiness index of Buthan also defies Western economic development agenda. Within these cultures, traditional ecological knowledge and spirituality are intertwined with environmental ethics ruling the relationship between society and nature, often regarded as one.[7]

At the same time, essentialism or reification of ´the ecologically noble savage´ (Redford, 1990 in Viola, 2000) should be avoided as just another manifestation of ethnocentric preconceptions never grounded in empirical data, and projecting phantoms and anxieties of modern societies, in Viola's words. Moreover, being inspired by these traditions cannot allow the biopiracy of local knowledge, such as patents on seeds, for instance, as long as it just renews logics of accumulation by dispossession (Harvey, 2003). On the contrary, there is evidence that significant environmentalist triumphs result from alliances between indigenous groups and international NGOs, despite their different approaches and eventual conflicts, as an alternative cooperative scenario. To thoroughly understand the challenges and opportunities in these encounters between the local and the global, we need empirical contributions from anthropology and their insights on development, instead of a cultural universalism.

Departing from the classification of sustainable development discourses of Dryzek (2005), and considering the analysis of universalism, particularism and pluralism, Vanhulst shows the great potential of "good living", in its less essentialist interpretation, as a platform for a dialogue with global alternatives of sustainability. First of all, it is important to state that the 'good living' is not exactly an indigenous cosmovision, even though it does have indigenous components (Gudynas, 2016), but instead, it emerges as a critic to Eurocentric modernity paradigm (anthropocentric, capitalist, economistic, universalist) and as an intercultural political project (Vanhulst, 2015). Actually, three major streams of thought can be distinguished within good living discourses in terms of how they discuss modernity and sustainability: indigenist; socialist -focusing on public policy and equality before environment and culture -; and post-structuralist, which is that of Latin and European progressive intellectuals close to environmentalism and social movements. While the emphasis of socialist in good living and justice for people AND nature can connect with the second wave of eco-criticism (Hiltner, 2015), the indigenous perspective relates to the first wave, nature centered eco-criticism, because of its eco-localism and connection to the place itself. What they all have in common is the idea of being in harmony with nature, the defense of principles and values of marginalised people, the State as a guarantee for basic needs (education, health, food, water), along with equality, social justice, and democracy.

Moreover, the economic struggles of developing countries add obstacles to break the cycle of pollution and l*et al*ternative cultural values turn into policy, as evident in political decisions aligned to the interpretation of ecological concern as a postmaterialist value (Inglehart, 1981; 1995). It is the case of current Latin American decision-makers, even those who promote the "good living" as a less economicist approach to development (Vanhulst, 2015). The Bolivian former President, Evo Morales, who was the promoter of a constitution acknowledging the ‘rights of nature’, did not fight to reduce

extractivism; instead, he ended up increasing taxes to extractive activities to fund social welfare policies and other measures to ease various forms of poverty. The ex-President Rafael Correa, who was another promoter of 'the good living' and the rights of nature, finally accepted oil drilling in Ecuadorian Amazonia, arguing that "money will combat poverty of the population living in the area" (El País Newspaper, 3/6/2016). Former Uruguayan President José Mujica, globally known for his call to frugality and the author of an emblematic pro-environmental speech in Rio+20 UN Summit, issued controversial statements to national media in 2011 when he criticised environmental activists - after they had been opposed to his idea of selling dunes of a National Park to private owners. Furthermore, he dismissed dunes defenders as well-off people who were supposedly not aware of the needs of the working class. When environmental sustainability and poverty are set up as opposites, one might expect the environment to lose within these periphery regions and probably everywhere else, despite it being a false opposition (Pogge, 2010; Klein, 2015). Eduardo Gudynas, an Uruguayan intellectual involved in the Andean constitutional processes and in the conceptualisation of the "good living", labelled this phenomenon of progressive governments aligned with traditional extractive economies as neo-extractivism (2010; 2012). His analysis acknowledges how paramount economic factors are to the environmental challenges in Latin America, in spite of the presence of inspiring ancient eco-centric cultures.

A complex, non-homogenised, interpretation of the so-called First World is important too. Interviewed by Viola, Escobar offered the following example of the more nuanced analysis needed to counteract simplistic North-South divides:

> Some people argue that there are at least two big historical rationalities in Europe: the instrumental, North European, Anglo-Saxon rationality; and the rationality that some call scholastic, more Iberic, Southern European, Mediterranean. The latter is very different from the former, as it implies a certain attitude towards society, State, the individual … And the development has been thought and promoted from the instrumental Anglo-Saxon rationality, from the economic rationality and the individual construct. (Viola Recasens, 2000, p. 150)

The Portuguese intellectual Boaventura de Sousa Santos highlighted the existence of a 'south' in Northern regions as well (2016), a notion that connects with the PIGS acronym where both Ireland and his country were eventually included. In the same logic, great inequalities revealed by GINI index in, for instance, Latin American countries suggest a ´North´and a ´South´ also inside peripheral nations. These kinds of critical reflections of polarised world-system interpretations can open new paths of dialogue and gathering, for the sake of a sustainable future.

Another ray of hope to reconnect with non-human nature in a more sustainable way is sometimes found in the concept of spiritual knowledge, which has been neglected by illustrated modernists and Marxists alike, such as Martínez Alier, while recently vindicated along with philosophy and creative arts' professions by eco-thinkers like Hulme (2018). Rationalism proved not efficient enough, so far as solving environmental problems, where what might be considered as an information deficit is no longer accepted as a fundamental drive, and fruitless democratic deliberations on responses to the environmental crisis take place at all levels of citizenship. Alternatively, the answer could be "to bridge the great wellspring of human understanding - the natural and social sciences, philosophy, religion and the creative arts - to 're-imagine' how we live on Earth" (Nisbet, et al., 2010, p. 331).

Environmental Citizenship across the Globe and Regional Currents of Environmentalism

In this context of powerful economic and cultural operating forces, citizens are still key agents and environmental citizenship remains a crucial concept for analysing the environmental crisis, despite the diagnosed decline of civic engagement in democratic societies (Dahlgren, 2015). The role of people across the planet have been analysed in various ways, focusing on either citizen´ responsibilities or citizen rights. Democratisation of responsibilities (Beck, 1992; Thompson, 1995) might be emphasised in a call to global action to save the planet, while individual agency could be assessed instead in the light of diverse levels of enjoyment of the right to a healthy environment. The foundational social science notions of structure and agency, developed by Pierre Bourdieu (1972; 1990), have been useful to reflect on the transformative potential of individuals (Calhoun, et al., 1993) facing a crisis like the environmental one.

The ´environmental sustainability agenda´ (Agyeman, 2005; Clarke & Agyeman, 2011) has a focus on non-human nature as an object of care and encouraging stewardship by humans, who are agents with the capacity to make choices while responding to their universal responsibility. Governmental institutions and conservation organisations usually act within this framework, which could be associated to one of the first currents of environmentalism, as widely extended in the United States: namely the Cult to Wilderness (Guha & Martínez Alier, 1997). Following Beck´s world risk theory, this agenda builds on the idea that “poverty is hierarchic, smog is democratic” (1992, p. 36), so everyone is equally compelled to take action to stop environmental degradation. This interpretation was confirmed by Beck when updating the diagnosis, twenty years after that quote; he emphasised the global dimension of the risks, how 'democratic' these risks are and how nobody, nowhere, can feel safe, although risk evaluations are contextualised and therefore vary considerably across regions (2009). Contrasting with environmental catastrophes, risks are potential and, therefore, World Risk Theory prioritises prevention instead of mitigation, which is the reason why Beck considers media as

key agents as well. A new global citizenship must then arise in times of environmental risks. Beck sees a sign of this possible adjustment in the emergence of the concept of sustainability and predicts that, when mitigating risks, knowledge will play a bigger role than wealth (Beck, 2009). Human agency is generally expanded in late modernity and, as a consequence, ethnicity or class would be "zombie categories", still used, but not useful anymore to assess daily life opportunities and threats of global populations (Beck & Beck-Gernsheim, 2002, p. 27).

In contrast with a responsibility-based universalist agenda, Agyeman identifies the paradigm of ´just sustainability´ (Bullard, *et al.*, 2003; Agyeman, 2005), from a perspective of environmental justice that focuses on citizen's rights to an environment where to develop their long term goals. Unlike the environmental sustainability agenda associated to the New Environmental Paradigm (Dunlap & Van Liere, 1978), just sustainability emphasises the everywhere "relationship between environmental degradation and social inequality experienced by current generations of disadvantaged groups" (Clarke & Agyeman, 2011, p. 1777). This conceptual framework proposes the redefinition of sustainable development: "the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems" (Bullard, et al., 2003, p. 5). Without dismissing everyone´s responsibilities, Clarke & Agyeman (2011) usefully recovered Dobson (2003) emphasis on the importance of both dimensions of citizenship – duties and rights - in the pursuit of environmental sustainability and social justice. "Since we all utilise and make an impact on environmental resources through our daily lifestyles and should be held accountable and, yet, there are many communities around the globe who do not have access to the basic human right of an environment fit for their health and well-being" (Clarke & Agyeman, 2011, p. 1776). The notion of just transitions when discussing low carbon futures could also be associated to this perspective on the environmental crisis and how to respond to it while it resonates with the environmental justice perspective of ´the Ecology of the Poor´, developed to map a certain environmentalism developed in the world system peripheries (Guha & Martínez Alier, 1997).

Historically, environmental citizenship has been exercised in various modes of so-called environmentalism. Regions appear as a forecast of varying interpretations based on their systemic experience and cultural roots, as argued by Guha and Martinez Alier (1997). In chronological terms, the first current of environmentalism was what these authors labelled as ´the Cult to Wilderness´, which would focus on preserving an untouched nature, without human interference. It was born a hundred years ago from the love to the forests and the rivers, under the influence of John Muir and the Sierra Club in the United States of America. The other two were ´the Gospel of Eco-Efficiency´, already discussed in this chapter, and the third was ´the Ecology of the Poor´ or popular ecology. In

1998, the executive director of the European Environmental Agency, Domingo Jiménez Beltrán, held a conference entitled "Eco Efficiency: the European answer to the challenge of sustainability" at Wuppertal Institute. Martínez Alier turned the answer to that into his book entitled *Ecology of the Poor* which, in his words, could have the parallel title 'Eco Justice: the Third World answer to the challenge of sustainability' (Martínez Alier, 2011). Additionally, Martínez Alier would emphasise the difference between Dryzek´s categories of green social awareness and green politics to identify the other two main streams of thought in environmentalism: the Cult to the Wilderness, a social awareness movement developed in core economies, and the ´environmentalism of the poor´ in the peripheries, accounting for a political ecology perspective.

The Ecology of the Poor, situated in an environmental justice perspective, reflects on the rights to a sustaining ecosystem, actively defended by economically disadvantaged populations. Instead of a portrait of victims, he highlights the agency of indigenous, peasants and other locals, to whom we owe the preservation of nature in many territories. As the presentation of the 2048 cases included in the interactive website of the Environmental Justice Atlas claims:

> Worldwide, communities are struggling to defend their land, air, water, forests and livelihoods from harmful projects and extractive activities with heavy environmental and social impacts: dams, tree plantations, mining, fracking, gas flaring, incineration, etc. As resources needed to fuel our economy move through the commodity chain from extraction, processing and disposal, at each stage, environmental impacts are externalised onto the most marginalised populations. Usually, this all takes place offstage, and so, concerned citizens or consumers of the end-products are oblivious to it. (Temper, et al., 2015, p. 1)[8]

Across these cases, it is possible to have an overview of the dispersed global environmental justice movement revealing the empirical grounding of the label of 'the Ecology of the Poor', which accounts for social concerns and actions originated in the view of environment as human livelihood (Martínez Alier, 2011). As stated by Inglehart, "people tend to be more concerned about immediate needs or threats than with things that seem remote or not threatening" (Inglehart, 1997, p. 4). However, in the low industrialised peripheries of the world, nature is not always a distant landscape but the immediate source for making a living for substantive portions of the population. Because they depend directly on natural resources which are at risk, conservation is less a luxury than an urgent necessity for the rural population and dispersed urban settlements; as a result, the poor remain the more effective environment conservationists (Guha & Martínez Alier, 1997; Anguelovski & Martínez Alier, 2014). Far from Brundtland's diagnosis, pointing to poverty as a cause of environmental degradation, and

without calling themselves environmentalists, these local groups were: "trying to take natural resources out of the economic sphere, out of the largely spread market system, out of the mercantile rationality" (Martínez Alier, 2008, p. 15).

From this perspective, environmentalism is not - or not only - the sixties and seventies movement of affluent countries' middle classes, inspired by the preservation efforts of Sierra Club founder John Muir, or by previous romantic readings of Leopold and Thoreau. At the same historical moment, or even before, there were social movements whose goals were defined by ecological needs in the world systems' peripheries. The problem was not only activated of course in periphery regions. There is no doubt that industrial development in Europe and North America changed their landscape and brought about environmental criticism within the North, sharing perspectives with popular environmentalism. Prosperity or abundance environmentalism includes several second-wave critics, inspired by Rachel Carson's *Silent Spring* (1962), which started to portray the environmental problems of the "modern world" rather than the rural or so-called primitive habitats. Waste produced by the more affluent countries, as well as resources depletion, have undoubtedly made possible some unique ecological movements as recalling the anti-nuclear power movement, or the selective garbage collection in urban areas.

The type of resisted extractive or industrial projects could be the same but, while in the USA there were environmentalists complaining about beautiful canyons being flooded because of dams, a Brazilian movement opposing the same kind of infrastructure would call themselves '*Atingidos por barragens'* ('Affected by Dams') and they would put people - poor people who are eventually displaced - at the center of their concerns, instead of more Western-centric conservational norms of protecting wildlife and un-spoilt landscapes. In Brazil, as in other places such as India, these environmentalists were groups that needed the land to work as well as inhabit it, not having the luxury of living somewhere else and thereby having to fight for their survival. Very frequently, this social conscience of the indigenous groups or peasants, from Argentina to Japan, "does not use the language of the scientific ecology but that of local languages, such as indigenous land rights or religion" (Martínez Alier, 2008, p. 15). Neither the Cult to Wilderness wildlife environmentalism, nor the Eco-Efficiency Gospel of ecological modernisation can capture the perspective of these Global South communities. As reflected in some manuals of environmental ethics, the widely spread discourse of ecological modernisation promoting techno-fix solutions to problems finds no echo in these spaces:

> Whatever potential such high-tech solutions may propose for ameliorating the environmental problems that are mainly within the minds of the rich people of the world, they seem almost entirely irrelevant to the needs of the poorest of the poor,

> who often are locked in a day-to-day struggle with life-threatening air conditions and water pollution. (Jamieson, 2008, p. 13)

The differentiated impact of environmental degradation in marginal groups in the USA, for instance, shifted the focus to civil rights and led to the emergence of the environmental justice movement (Bullard, 1990). Agyeman´s work analysing Britain vulnerable populations follow this path. The convergence between the rural Third-World notion called the 'Ecology of the Poor' and the urban American notion of 'environmental justice' was first suggested by Ramachandra Guha & Martínez Alier (1997), based on similarities lately confirmed when reconstructing the history of eco-criticism in Latin America (Heffes, 2014, p. 17). The defense of local people´s rights to a healthy natural or built environment, which they reclaimed from the streets or from the forests as a bottom-up movement usually lacking the support of political elites, are examples of these common features. Recent updates of Martínez Alier on his Ecology of the Poor focused more on urban populations nowadays, arguing in favour of the global spread of environmental justice movement beyond world system peripheries and beyond rural communities (Anguelovski & Martínez Alier, 2014). Connections among regional currents of environmentalism need to be addressed more often, along with hybrid versions of "old" perspectives, especially when public conversations easily reach transnational arenas, thanks to new media and environmental movements such as rapidly global initiatives like Fridays for Future did.

These regional varieties of human response to environmental risks reveal multidimensional schemes close to the idea of environmental ideologies (Corbett, 2006), according to which each individual develops an environmental belief system based on experiences in childhood and adolescence, a sense of place, and historical and cultural influences (Corbett, 2006). "A fully formed environmental belief system is an environmental ideology, or a way of thinking about the natural world that a person uses to justify actions towards it. Ideology articulates a relationship to the land and its creatures, and to some extent, guides the way we act toward it" (Corbett, 2006, p. 13).

In this century, beliefs, attitudes and behaviours have been even considered in quantitative explorations of environmental citizenship, particularly regarding climate change and mainly focused in core countries. For instance, the foundational research Global Warming's Six Americas identified six unique 'interpretive communities' within society who each respond to the issue of global warming in their own distinct ways (Leiserowitz, 2005). These six interpretive communities were the 'Alarmed', who are most engaged about global warming; the 'Concerned', who believe that global warming exists but are less involved; the 'Cautious', who are not as certain and do not think climate change is a threat to them personally; the 'Disengaged', who have not thought about the issue much; the 'Doubtful', who doubt either that climate change exists and/or that it is caused by human activity;

and the ‘Dismissive’, who firmly believe that global warming is not happening. In its last measure, the biggest groups were the Concerned (29%) and the Alarmed (26%), while the smallest portion of Americans would be the Disengaged (6%) (Yale Program on Climate Change Communication, 2020). As the study has been replicated in other countries afterwards (Australia, Germany, India, Singapore), it is another tool to understand how environmentalism (and the lack of it) might vary across and inside regions or countries, despite not yet offering conclusive findings.[9]

Even within environmentalists, who share a clear position of acceptance of the environmental crisis as a fact, it is possible to identify subgroups whose different worldviews show the complex challenge of dealing with environmental risks. A recent empirical study (Bernstein & Szuster, 2018) found at least four varieties of environmentalists: Pragmatic Reformers, Activist Greens, Eco-modernists, and Eco-fatalists. The biggest group that emerged from the clustering process within environmentalists were the Activist Greens, who believe that "nature would be in harmony if human beings would leave it alone" (Bernstein & Szuster, 2018, p. 1066). Activist Green is a similar category to the Ecological Activist category previously applied to public intellectuals (Nisbet, 2014). Like the Pragmatic Reformers, the Activist Greens subgroup accepts that "the earth has limited room and resources" and that there will be a "major ecological catastrophe if society continues on its present course". But unlike other subgroups, the Activist Greens have little faith in technology and institutional solutions, while they do not consider technology as guilty for environmental degradation (Bernstein & Szuster, 2018, p. 1066). Activist Greens do not believe that technology will solve environmental problems and favour engaging in grassroots action more than other groups (Bernstein & Szuster, 2018, p. 1066), taking distance from eco-efficient perspectives, and from Eco-modernists, who believe that "environmental problems will eventually be solved through better technology" while rejecting the efficacy of individual and grassroots action (Bernstein & Szuster, 2018, p. 1066). Eco-fatalists have the lowest levels of faith of all subgroups in national laws and policies, as well as within international agreements, while strongly endorsing the effectiveness of "people making small changes in their daily lives" (Bernstein & Szuster, 2018, p. 1066). Therefore, Eco-Efficiency loses popularity while democratised responsibilities remain central along with active citizenship among the environmentalists.

The Local and the Glocal in Environmental Risks

After such a global perspective of the environmental crisis and the strands of environmentalism emerging from international logics of interaction, it is important to recall on the local component. American environmentalism developed and widely projected an environmentalism strongly rooted in local place attachment, with ethics of proximity as a fundamental drive for human action (Heise,

2008). Local resistance to extractive globalisation is also crucial when portraying the environmental justice movement in socio environmental conflicts in the world system peripheries, where the relationship with the territory and its living creatures foreground the struggles. However, a third space facilitated by a network society (Castells, 1996; Castells, 2013) and international migrations aggravated by environmental risks, impose a somewhat new approach to environmental risks, thus leading to an emerging eco-cosmopolitanism and a potential sense of planet (Heise, 2008) which might displace the local sense of place. What is the meaningful environment for individuals and what are environmental threats increase in scope when we can become spectators across all corners of the planet, all the time, to start.

European and North American cultural studies started eco-criticism analysing "how nature and the natural world are imagined through literary texts" (Hiltner, 2015, p. XIII). Stormy wild in Shakespeare, ideally untouched in Blake and Shelley, Hiltner expresses that nature is for ´people´ (although it might mean an elite literary minded educated cohort who engage with such romantic literature) a fulfilling break of anxiety over stressed modern lives. He also affirms that this way of conceiving nature is, to some extent, culturally constructed in John Muir's *Our National Parks* (1901). Two waves of eco-criticism were identified initially (Buell, 2005): the one shown in the twentieth century, starting around 1980 focused on wilderness and pristine nature non-fiction writings, alongside eco-feminist perspectives; and the twenty first century wave, focusing the attention on portraits of environmental devastation and a wide variety of landscapes, including urban sights, therefore, appearing closer to political statements of environmental justice.

Recently, a Third Wave has been signaled by experts in the field of eco-criticism, emerging in 2000 from within the Second Wave, and including the impulse to compare human experience across cultures (Slovic, 2010, p. 1). Along with further gendered approaches in eco-criticism, greater links with activism and an intensified focus on animality emerged in this new wave, while place is contested:

> Global concepts of place are being explored in fruitful tension with neo-bioregionalist attachments to specific locales, producing such neologisms as “eco-cosmopolitanism, “rooted cosmopolitanism,” “the global soul,” and “translocality”); strong comparatist impulses are raising questions about the possibility of post-national and post-ethnic visions of human experience of the environment, while some (as in the 2009 special issue of MELUS) consider the importance of retaining ethnic identities but placing ethnically inflected experience

> in broader, comparative contexts (including postcolonial contexts). (Slovic, 2010, p. 7)

Starting with place perceptions and its associated ethics, Slovic identified three general questions gaining particular importance for ecocritics within the Third Wave, thus suggesting routes for cultural analysis of the environmental crisis. The first is what are the emerging discourses of materiality (place attachment, corporeality) and commitment (ethical awareness, political engagement) in this global era. Secondly, how do today's narratives of environmentally and socially sensitive lifestyle changes support or undermine meaningful systemic transformation? Finally, "when is it useful to merge and compare texts across regions, languages, cultures, historical eras, and disciplines, and when do such comparisons offer little traction in responding to today's pressing concerns?" (2010, p. 8).

Academics tracing eco-criticism in Latin Americanist literary and cultural studies (carried out in Latin America, the USA, or Europe) found that it was highly influenced by the dissemination of environmental bibliography in English and that environmental issues were mostly neglected in Latin American cultural theories in the last thirty years (Marcone, 2013). In the last decade though, social movements with environmentalist agendas and political impact have renewed interest in the cultural politics of indigenous peoples (Marcone, 2013). Gisela Heffes, author of *Politics of Destruction / Poetics of Preservation. Notes for an (eco) critic reading of environment in Latin America* (2013), confirms that eco-criticism is mainly absent in the Latin American disciplinary field until a dozen of publication in this century (Heffes, 2014, p. 19).[10]

Nonetheless, amplifying the places of reference for eco-criticism, a distinguishing factor of Latin American eco-criticism is the inclusion of indigenous and African components that were marginalised in dominants discourses of the European modernity. One example might be Paredes & McLean (2000) recovery of Popol Vuh as an ecological archetype (Heffes, 2014), along with the extensive analysis of the regional or rural novel and a postcolonial perspective. Therefore, there is a point of convergence with the Third Wave of eco-criticism as depicted by Slovic. However, Heffes proposes that, for Latin American society, a bio/eco-criticism that goes beyond ecocentrism (2014) is needed, thus reflecting the social justice tradition that encompasses inequalities in the peripheries. Therefore, connecting with the human-centred environmentalism of the poor, local attachment acquires a community meaning more than a landscape-based bond in this peripheral eco-criticism.

Beyond literature and by extension films, the interplay of the local and the global might also be analysed in the politics of public environmental discourses. Issues that were not seen originally as problems; from protecting whales to actually seeing the earth as finite, are quite central today in the

public sphere, as Dryzek broadly exemplifies in his introduction to *The Politics of the Earth* (2005). Furthermore, political ecology studies environmental conflicts and finds out that actors with different interests, values, cultures, knowledge and power use different languages of evaluation of the problem, as previously analysed. The most powerful forces set the codes of debate and this explains economic reductionism of dominant discourses (Martínez Alier, 2008). Communication studies show that, for instance, good living environmental discourse, although deeply rooted in many Latin American countries traditional culture, can hardly find their way to mainstream media and political public discussions, which tend to use the ecological modernisation frame (Kinsella, 2008; Wilde, 2008; Romero, et al., 2009; De Oliveira, 2012; Brianezi, 2012; Gómez Márquez, 2013). In the case of Amazonia, for instance, the narratives of progress connecting with the national interest enabled industries to appear as jungle protectors from deforestation and also people´s saviours from unemployment, thus appropriating the noble mission of preserving biological and cultural national heritage (Brianezi, 2012).

Social movements and resisting communities also have their ecological narratives, eventually trespassing national frontiers and mixing into the global conversation, as Haarstad and Floysand (2007) observed in a Peruvian Tambogrande case against mining. They concluded that globalisation enables a re-scaling of oppositional narrative empowered by networking with international organisations and adapted to global discourses codes, especially when broadcasted by international media.

Therefore, the early economic mode of globalisation posed by the world system market is by all accounts a different phenomenon than the cultural globalisation starting in the nineties, where regions or state-nations composing the world system cannot be regarded as homogeneous units of analysis as "the experiential space of the individual no longer coincides with national space" (Beck & Beck-Gernsheim, 2002, p. 29). The notion of belonging to and inhabiting a place of planetary scale, a finite "spaceship" in Buckminster Fuller's terms, pictured as a whole in 1972 for the first time but known as such since the fifteenth century, is reinforced now by extreme weather conditions randomly scattered throughout the globe. The Uruguayan writer Fernando Aínsa calls it 'planetarisation', in his 2013 essays on postglobalisation, identifying a shared awareness on common planetary challenges, such as environment and demography (Aínsa, 2013). Furthermore, other authors have also identified a somewhat new 'sense of planet' (Heise, 2008).

Meanwhile, building on Beck's concept of 'internal globalisation', Roudometof reminds: "the fact that globalisation is not a macro-concept that can only be accounted for through references to large

structures (…) but is present in everyday life, at the micro-level" (Roudometof, 2005, p. 121). Furthermore,

> Transnational social spaces are constructed through the accelerated pace of transnational practices that become routine practices in social life (…) Large numbers of people around the globe are exposed to other cultures daily without crossing borders on a regular basis, simply through the variety of communication media (including satellite broadcasting, radio and other forms of communication). Furthermore, they might encounter immigrants, refugees, or tourists in their own locality. They might also encounter cultural artefacts and commercial establishments that bring other cultures into close proximity to their own. (Roudometof, 2005, p. 121)

As a result, the opposition between the local and the global is no longer useful to explain contemporary experiences including environmental risks, and 'glocality' is the notion that better describe the cultural universe where contemporary citizens live (Tomlinson, 1991; Urry, 2002; Roudometof, 2003; 2005).

The Environmental Crisis according to Ireland and Uruguay

Ireland in the Global North and Uruguay in the Global South offer a unique opportunity to analyse the environmental crisis.

Uruguay' geographic extension (177.960 sq. km) doubles Ireland´s. However, it is considered a small country in Latin America. If not an original feature in Europe, both countries claim that one grade of separation is way much accurate than six when it comes to connections inside their borders: Uruguay has 3.5 million inhabitants –95% urban based- while Ireland has 4.8, with 64% living in cities. High Internet penetration - 77% for Uruguay in 2019, 85% for Ireland in 2018 (World Bank, 2021) - and access to devices in both countries reinforce these national level connections beyond the help of kilometres and numbers.

In Ireland, with "the plans for expansion of agricultural output under Food Wise 2025, there is a need to ensure sustainability of the sector for both economic growth and environmental protection" (Environmental Protection Agency - EPA, 2016, p. 13). The Irish case exemplifies the problems of transition to a low carbon society for economies dependent on regrowth, as explained through a recent study of media coverage of the issue; in this study, the transition is systematically framed as harmful or problematic, highlighting, for instance,

> Ireland's unique status within the EU and the challenge of decoupling growth and emissions, to raise questions about top-down regulatory approaches to LCT/DC. Noting that Ireland will have to make the transition to sustainability ahead of the rest of Europe because of its dependence on agricultural food production and the need for economic regrowth, these articles are increasingly critical of Ireland's high emissions targets and calls by environmental groups and the Green Party to further increase them. (McNally, 2015, p. 134)

It is a traditional Uruguayan assertion that the cow population was more numerous than the human population, with the result that, in 2000, Uruguay's methane emission per capita doubled Ireland's, and the Latin American country was among the five highest emitters in the world (Dow, 2006). Uruguay´s exports have historically been concentrated on products derived from livestock, agriculture and forestry, which accounted for 70% of the total exports of goods in 2014. Thus, Uruguay is one of the world's largest food producers in relation to its population, supplying about 28 million people, nine times the country's population (MGAP, 2019). Therefore, the economy of this small country is heavily based on agro-industrial chains, all the while challenging core environmental protection goals. Despite its traditional role as a high emitter food producer, the country has been carrying out structural transformations in recent years. As a result, "the GHG emissions of the country remained almost constant and in some sectors decreased in form while per capita GDP almost doubled in ten years and food production multiplied by more than three" (Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente - MVOTMA, 2017, p. 7).

Besides their contributions to climate change, given their coastal extension and its productive schemes being highly dependent on nature (agro-industrial and tourism) Ireland and Uruguay are very vulnerable countries in terms of climate change effects (Escoto Castillo, et al., 2017). Most remarkable effects in Ireland are "rising sea temperature, ocean deoxygenation, rising sea levels and ocean acidification" (EPA, 2016, p. 12); and, from an emerging risks perspective, the need "to be vigilant in relation to climate change-induced health risks" is also acknowledged (Environmental Protection Agency - EPA, 2016, p. 10). Uruguay is particularly sensitive to losses and harms caused by extreme events, such as droughts, floods, cold and heat waves, strong winds, tornadoes, hailstorms, frosts, heavy rains and severe storms. Floods and droughts are some of the worst scenarios for agriculture, alongside the retreat of coastlines, which concentrates both 70% of residents and most of the incomes for tourism (Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente - MVOTMA, 2017, p. 13).

In parallel, "countries leading the way in VRE (Variable Renewable Energy) - wind and solar-penetration include Denmark (nearly 53%), Uruguay (28%) and Germany (26%); Ireland, Portugal and Spain also have VRE penetration levels above 20%" (REN21, 2018, p. 43). Because of the shift

in energy performance, Uruguay is sometimes signaled as a success case on combining development and sustainability, along with Costa Rica (Kirby & O'Mahony, 2018). Meantime, Ireland had a pioneering role in other environmental challenges as sustainable consumption, being invested also in circular economy efforts.[11]

> It has in recent years dramatically reduced the waste consigned to landfill and produced less household waste per capita than the European average. Ireland has pioneered economic initiatives which have changed consumer behaviour and prevented waste including the plastic bag levy. (Environmental Protection Agency - EPA, 2016, p. 14)

With regards to hydrocarbons with complementary environmental risks connected to the extractive and transportation process, it is remarkable that both countries banned fracking in 2017. In the case of Uruguay, it is only a temporary ban but this put the country in an exemplary role regarding neighbours like Argentina. Ireland's European context is anti-fracking (United Kingdom, Germany, France, etc.), but a national law had not been passed until the Irish did so in 2017.

There are also internationally known pioneers of ecological experiences in Ireland. Cloughjordan Eco Village is an example mentioned by EPA and also the An Taisce's Green Schools program. "There are now a number of local community and niche projects that are leading the way in the transition to a more sustainable future" (Environmental Protection Agency - EPA, 2016, p. 14). Meanwhile, a growing permaculture movement in Uruguay and the first self-sustainable public school of Latin America (2016) - replicated later in Argentina and Chile - show a similar trend in this country.

Additional evidence on the involvement of these two countries in the environmental crisis might be provided by their performance in well-known international environmental indexes; the mapping of socio-environmental conflicts in their territories and finally, public opinion trends in environmental attitudes.

The Environmental Performance Index (EPI), developed at Yale University, ranks countries performance on high-priority environmental issues across two areas: protection of human health and ecosystem vitality. Both Ireland and Uruguay rank among the upper half out of 180 countries in the most recent calculation of the EPI (Wendling, et al., 2020). While Ireland in the first quintile (ranks 16, with 72.8 points), is relatively low compared with the Global West region, Uruguay remains in the second quintile (ranks 61, with 49.1 points), but close to the top of the Latin America and Caribbean region. However, in the ranking resulting from the measure of efforts to support healthy

populations, while minimising the threats of agriculture to the environment, Uruguay occupies the 7th global position (71.4 points), while Ireland is down in 59th position (47,3 points). Regarding climate change, greenhouse gas emissions (GHG) per capita, Ireland is (#159) and Uruguay (#150) in a complicated position globally, although Ireland ranks higher than Uruguay in climate change, as an aggregated indicator, considering various other factors also.

In 2021, the United Nations programme in charge of Human Development Reports launched the Planetary pressures-adjusted Human Development Index (PHDI). The PHDI "discounts the HDI for pressures on the planet to reflect a concern for intergenerational inequality, similar to the Inequality-adjusted HDI adjustment which is motivated by a concern for intragenerational inequality" (United Nations Development Programme, 2021)**.** Carbon dioxide emissions per person and material footprint per capita are considered to account for the potentially excessive human pressure on the planet. According to this measure, Ireland ranks second in the global PHDI (0.955 points), while Uruguay ranks #55, with 0.817 points.

Despite this relatively high environmental performance of Ireland and Uruguay compared to other countries, the active socio-environmental conflicts identified by the Environmental Justice Atlas (Temper, Del Bene, & Martínez Alier, 2015) reveal how old school extractive and pollution problems are still alive in both countries. Furthermore, they share a similar conflict rate, with cases set far from the capital and other populated cities.

Excluding Northern Ireland, five environmental justice conflicts are mapped in Ireland at the moment (Temper, et al., 2015). Two related to fossil fuels, two related to waste management and the other to new infrastructure in an urban setting (Dublin). The following chart present them all briefly.

Table 1. Recent Environmental Justice Conflicts in Ireland

	Name of conflict:	Type of conflict (1st level)	Type of conflict (2nd level)
1	Corrib Gas in Rossport	Fossil Fuels and Climate Justice/Energy	Oil and gas exploration and extraction Transport infrastructure networks (roads, railways, hydroways, canals and pipelines) Oil and gas refining
2	Dublin Airport expansion	Infrastructure and Built Environment	Land acquisition conflicts Ports and airport projects
3	Stop Irish Cement Ltd. (Limerick) from burning tyres and other waste	Industrial and Utilities conflicts	Incinerators
4	LNG Shannon terminal	Fossil Fuels and Climate Justice/Energy	Oil and gas exploration and extraction Transport infrastructure networks (roads, railways, hydroways, canals and pipelines)
5	Construction of Ringaskiddy Waste Incinerator, Cork	Waste Management	Incinerators
Source: personal collection, based on EJatlas (2021). The Global Atlas of Environmental Justice. www.ejatlas.org Accessed June,15th. 2021.			

The environmental conflicts that the Environmental Justice Atlas (Temper, et al., 2015) register for Uruguay are six at the moment. The following chart offers a synthesis of the environmental risks involved, while only one occurs in the capital city Montevideo. Cellulose (3), extraction (2) and waste (1) are the conflictive areas in Uruguay.

Table 2. Recent Environmental Justice Conflicts in Uruguay

	Name of conflict:	Type of conflict (1st level)	Type of conflict (2nd level)
1	Ban on animal-drawn carts jeopardizes wastepickers' livelihoods in Montevideo	Waste Management	Waste privatisation conflicts / waste-picker access to waste
2	Aratirí Project for Iron Mining	Mineral Ores and Building Materials Extraction	Water access rights and entitlements Mineral ore exploration Land acquisition conflicts
3	Eucalyptus plantation in Soriano department.	Plantation conflicts (incl. Pulp Agro-toxics	Plantation conflicts (incl. Pulp) Agro-toxics
4	Cellulose industry in Gualeguaychu, Uruguay and Argentina	Industrial and Utilities conflicts	Plantation conflicts (incl. Pulp) Chemical industries
5	Pulp Mill UPM (Ex-Botnia) Installation	Biomass and Land Conflicts (Forests, Agriculture, Fisheries and Livestock Management)	Water access rights and entitlements Plantation conflicts (incl. Pulp Intensive food production (monoculture and livestock) Land acquisition conflicts
6	No Fracking in the Guaraní Aquifer in Uruguay	Fossil Fuels and Climate Justice/Energy	Water access rights and entitlements Shale gas fracking
Source: personal collection, based on EJatlas (2021). The Global Atlas of Environmental Justice. www.ejatlas.org Accessed June,15th. 2021.			

Some innovative policies and successful environmental movements - such as those related to safe energy - suggest a significant level of environmentalism in these countries. However, they could be just the result of political elites agendas or small activist group efforts. Therefore, knowing public opinion (Lippmann, 1992) trends might help build a complete portrait of these countries and their social change potential within the environmental crisis. As raised by such theorists, environmental risks depend on social constructions and are highly coincidental with the perception of risk. "Their reality can be dramatised or minimised, transformed or simply denied, according to the norms which decide what is known and what is not" (Beck, 2009, p. 30).

According to data from Eurobarometer 92.4, for 2019 (European Commission, 2019), in Ireland, 93.0% of the population consider that the protection of the environment is fairly or very important. Ireland is therefore, using such a crude metric, in 21st position, when we compare these results with other European Union Member States. Notwithstanding, it worth pointing out that environmental concern across European Union's population is quite high, ranging from 87.2% (in Austria) to 99.2% (in Malta). If the analysis focuses specifically on the proportion of the population declaring that environmental protection is very important – the environmentalists of the sample - Ireland scales up to the 5th position (68.3%) in a ranking where Sweden (80.6%) is located at the top and Latvia remains at the bottom (35.5%).

Table 3. Environmental protection concern by country. EU-28, 2019.

Country	Proportion of the population showing environmental concern (%)	Proportion of the population showing **acute** environmental concern (%)
Malta	99.2%	70.5%
Portugal	98.8%	39.5%
Sweden	98.3%	80.6%
Cyprus (Republic)	97.0%	76.4%
Spain	96.9%	49.2%
Greece	96.7%	62.0%
United Kingdom	96.7%	70.2%
Denmark	96.3%	50.0%
Luxembourg	96.3%	56.1%
France	96.2%	62.8%
The Netherlands	96.0%	49.7%
Germany - West	95.5%	47.9%
Slovakia	95.2%	47.6%
Finland	95.0%	44.9%
Belgium	94.9%	46.3%
Hungary	94.8%	46.6%
Slovenia	94.4%	64.7%
Italy	93.7%	62.4%
Bulgaria	93.4%	60.5%
Estonia	93.2%	36.7%
Ireland	93.0%	68.3%
Czech Republic	92.8%	47.8%
Lithuania	92.2%	39.8%
Croatia	91.8%	44.8%
Latvia	89.8%	35.5%
Poland	89.4%	42.6%
Germany East	89.3%	42.7%
Romania	87.6%	46.2%
Austria	87.2%	42.4%
Note: 1. By country data present Germany divided into East and the West region		
Source: Personal collection, author´s elaboration using data from Eurobarometer 92.4, 2019.		

Another interesting source of knowledge about public opinion agenda in Ireland is the research on the 2016-2018 Citizens' Assembly, which analysed the views on climate change of 99 citizens who were randomly selected to be representative of the Irish electorate (in age, gender, social class and

regional spread), along with analysing 1185 submissions from the public (Devaney, et al., 2020). They focused on the sectors of transport, energy and agriculture in particular. As a result,

> Overarching proposals included the need to put climate change at the heart of policymaking in Ireland through a new climate governance architecture, as well as an increase in the carbon tax. Other recommendations included increasing investment in public, electric and active transport, supports for micro-generation and community ownership of renewable energy, and the ending of subsidies for peat extraction. Enhanced support for land use diversification also featured, alongside provisions for a socially just transition to protect vulnerable citizens. (Devaney, et al., 2020, p. 6)[12]

In contrast, an outstanding commonality among citizens of diverse age and gender surveyed in 2019 in the context of another EPA research project, was the expressed scepticism about meaningful government and business action in Ireland with regards to climate change (McNally, 2020). Young participants presented a markedly different feeling of personal loss when talking about climate change, usually expressed with anger about the lack of action, especially of the decision makers. Low awareness of government initiatives was found, along with the concerning notion of Ireland as a laggard in Europe, while the knowledge gap also included the social justice aspects of the climate crisis and the wide array of citizen actions that could be taken beside simple bottom up domestic decisions like using the appropriate waste bins, while minimising and disposing of all forms of domestic waste effectively and in a sustainable manner.

In comparison with the other Latin American countries, Uruguay presents a higher proportion of the population, showing environmental, awareness according to the Latinbarometer data (Latinobarometer Corporation, 2017). The nationally representative survey asks respondents to what extent they agree with this claim: “There is no such thing as a problem of Climate Change”. In Uruguay, 88.8% of the population declared that they disagree or strongly disagree with it. Amongst Latin American countries, environmental awareness shows acute disparities, with countries reaching levels of awareness below 50%, namely, the Dominican Republic (47.7%) and Ecuador (43.5%). An analysis focused on the proportion of the population declaring acute climate change awareness shows that Uruguay is in the 3rd position (34.5%) in a ranking headed by Paraguay (38.6%) and with the Dominican Republic showing the lowest awareness (6.7%).

Table 4. Environmental protection concern by country. Latin America, 2017.

	Proportion of the population showing environmental concern (%)	Proportion of the population showing **acute** climate change awareness (%)
Uruguay	88.8%	34.5%
Argentina	79.5%	24.4%
Paraguay	78.5%	38.6%
Brazil	77.3%	26.2%
Colombia	76.3%	35.6%
México	72.7%	22.1%
Perú	67.7%	16.0%
Chile	67.6%	31.2%
Venezuela	67.3%	24.6%
Costa Rica	67.2%	15.5%
Bolivia	67.1%	13.6%
Panamá	58.3%	11.4%
Guatemala	55.0%	9.0%
El Salvador	54.2%	9.1%
Nicaragua	53.8%	10.6%
Honduras	53.3%	8.7%
Dominican Republic	47.7%	6.7%
Ecuador	43.5%	14.3%
Source: Personal collection, author´s elaboration using data from Latinbarometer, 2017.		

In Ireland, youngsters tend to be more concerned regarding the protection of the environment. A proportion of the 94.1% of the population aged between 18 and 35 years old declares that the protection of the environment is fairly or very important. They are followed by the population aged from 36 to 55 (93.1%), and finally, older people show the lower figures (91.8%). Despite the result showing an age related pattern, there are slight differences across age groups. In Uruguay, the middle-aged population, aged from 36 to 55 years old, tend to be more aware of climate change (89.3%), followed by youngsters aged from 18 to 35 years old (88.9%), and the oldest population (88.1%). There results show neither an age pattern nor big differences across age groups.

In Ireland, young women (95.6%) tend to be more concerned with the protection of the environment than young men (92.7%). Youngsters living in rural areas or villages are more concerned about the protection of the environment (95.4%) followed by those living in large towns (94.3%). Finally, inhabitants of small or middle-sized towns' display lower environmental concern. In Uruguay, young

women's awareness of climate change is apparently higher than men, with proportions of 90.4% and 87.3%, respectively. Youngsters living in the capital are more aware of climate change (92.6%), followed by those living in small towns with less than 10,000 inhabitants (88.0%), while those living in middle-sized towns or cities show less concern.

Conclusions

One of the main conversations of this twenty first century relates to sustainable development as a central challenge for human survival in a finite planet. There is enough consensus at scientific and multinational institutional level so as to affirm that we face an environmental crisis requiring urgent global coordinated action: climate change and direct pollution of habitats and livelihoods exert an effect not only for future generations, but also with existing human groupings around the world. If poverty or war are important issues on the global agenda, preserving natural conditions for life on the Earth is a prerequisite for everything else. However, any simplification of this complex challenge is not necessarily realistic, and possibly misleading across the global regions involved. Furthermore, a phenomenon like climate change remain especially challenging for its invisibility and the scientific literacy needed to thoroughly understand the issue.

To account for scale, features and interdependence of current environmental sustainability challenges and responses, the acknowledgement of the economic and cultural globalisation remains essential. In the organisation of the relationship among society and nature, a globally organised economic exchange with differentiated roles for core and periphery regions, has been determinant from colonial empires to modern capitalism. Furthermore, the first colonisation - or globalisation - resulting in early transoceanic empires remains central in understanding how different types of environmental activities on the ground have developed across the North and South of the planet, which are expected to permeate public discourses around the environmental crisis, while operating as facilitators or barriers to social change.

Besides the regional divide, all over the world, debates on possible solutions to the environmental crisis reveal different value systems mediating the perception and the interpretation of the problem of sustainability. For surviving and thriving in planet Earth, a common articulation of the experience is exactly what seems missing, and a vision that "provide the structure to be raised and to address sustainability issues in an integrated manner" (Gardner, et al., 2015, p. 196). Sustainable Development Goals created to provide this framework do not seem enough if meta-solutions as systemic thinking, attitude of stewardship of the planet, and a better democracy based on strong

citizenship are not robust and widespread. Transnational spaces where the local and the global converge might offer a new opportunity for this enterprise, as they are already breaking with physical and conceptual polarisations when analysing the world-system.

Since the Industrial Revolution, technical and ethical developments of modern societies are trusted to overcome environmental threats, while others pointed at the incompatibility of environmental sustainability with economic sustainability, suggesting a transformative path. Still, the first discourses are dominant, while the second position survives in the margins and within some intellectual elites. But what if the answers are actually in the margins, at the historically undermined sites usually associated with vulnerability? What if the harsh and the frugality of a post-peak society could only be surfed by the people who have traditionally lived and produced in close alliance with the nature, along with those who could eventually learn such way of life from them? There are places, like Malaysia and Durazno (Uruguay), where seasonal windstorms determined an adaptive way of building due to being constantly migrating, losing houses and belongings every year, and not seen as a tragedy, but as a normal dynamic. Furthermore, would more holistic local cosmopolitan visions help us all to understand the interdependence of the global world and also within the ecosystem, as apparently the film *Avatar* partially achieved? The interdependence, or connection, within different dimensions of the human experience in earth (between humans, with nature, with spiritual forces), is at the core of traditions, such as the ones underlining the guiding principles of "buen vivir"/good living.

The interdependence of the ecosystem, including of course humans, is a pillar of ecology, and the interdependence of economies is a main feature of globalisation, with cultural and social affordances as well. Media might play a central role in the new environmental ethics based on connections required by this time of risk. Environmental risk building depends on materiality but also on situated social dynamics where definition power has a role (Beck, 2009) as strong as cultural mediations in the side of citizens with their own environmental ideologies (Corbett, 2006). Political scientists also identified contesting discourses in their analysis of environmental public debates both in core and periphery countries (Dryzek, 2005; Hajer, 1995), which is the same as political ecology researchers did for ecological disputes (Martínez Alier, 2008; Martínez Alier, 2011; Svampa, 2008). Symbolic production both reflect and build these and other contesting perspectives, as shown by the long tradition of European and North American eco-criticism since their early analysis of literature in the nineteenth century (Hiltner, 2015) until recent pop culture studies on commercial cinema or video games (Brereton, 2016; 2018; Parham, 2016). It remains essential to analyse "processes and political

institutions playing a crucial role in the dialectic relationship of any society and its environment" (Viola Recasens, 2000, p. 31), as for instance communication processes involving media institutions.

This study has chosen to focus on citizens and not elite decision-makers, relying on a bottom-up approach that entails transforming lifestyles while also putting pressure in top-down decisions affecting sustainability. Therefore, some of the answers regarding what could media discourse specifically do - the matter of the following chapter of this dissertation - will we analysed from laypeople perspectives and experiences of audience reception. The emergence of transnational youth movements such as Fridays for Future or Extinction Rebellion suggest a need to pay special attention to new generations of citizens, whose future is more clearly at risk comparing to other living generations, while their online media reliance is generally the highest of all cohorts.

Ireland and Uruguay remain interesting case studies for an international comparison, while it was crucial to have an overview of both the material environmental threats they face and the generalised risk perception at the national level of public opinion. One of the countries belongs to a core region (Europe), while the other belongs to the world-system periphery, according to Wallerstein theory. However, they share a number of features that puts them in a similar position with regards to the environmental crisis, starting by their agrifood exporting country profile and their reliance in nature-based industries. In both countries, and linked to their situation of small dependent economies, the schemes and cases of the high carbon world coexist with pioneering initiatives towards sustainability, while the public opinion show high levels of environmental awareness. Besides economic globalisation, cultural links with the world have been historically ensured by migrations and are today expanded by a high penetration of Internet in their territories. In these less self-sufficient post-colonies, awareness of the world system interdependence had been understood (suffered and enjoyed) from initial stages until recent independences, as well as interdependences with Earth systems to produce for a living and feel at home. At the same time, the country small scale and the history of adapting to changes add another interesting feature thinking of innovative ways of responding to challenges like climate change. Therefore, these two distant countries seem a perfect scenario to analyse the interplay between the local, the regional and the global within current sustainability challenges.

CHAPTER 3. MEDIA AUDIENCES AND ENGAGEMENT WITH ENVIRONMENTAL RISKS

Introduction

This chapter presents the environmental communication approach of the study, along with the scientific niche where it situates. Media reception and engagement with environmental risks are discussed from a theoretical perspective and concerning recent empirical findings. If the previous chapter analysed macro trends potentially mediating the impact of pro-environment messages, this one would focus on individual and micro-social dynamics, especially concerning pop culture and young audiences.

The concomitant extension of media access and the changes in the communication paradigms has led to an increasing role of social networking sites (Boyd, 2010; Boyd & Ellison, 2008) in shaping audiences awareness and potentially facilitating a global eco-citizenship. Diverse platforms like Facebook, Instagram, Twitter or YouTube are the place of encounter of individuals who have Internet access, providing the opportunity to create communities of friends or followers who interact online, but also being prod-users of content in the shape of multimedia posts and comments covering private and public issues, among other functions like online gaming. Nowadays, amateur creations and grass-root level campaigns, share this arena with 'social' content produced by professionals for commercial brands, entertainment and news organisations (Anderson, 2017). Moreover, if creating lists of friends' profiles was a definitional feature originally (Boyd & Ellison, 2007), today some platforms like YouTube work within the logic of video search engines or video databases (Gil de Zúñiga, Jung, & Valenzuela, 2012) in parallel with users with an online profile that sign in and take active part in different communities around specific contents. In the opposite logic, it is possible to come across content that is not actively searched for, as is the case of incidental news exposure on social media sites like Facebook (Gottfried & Shearer, 2016), that end up shaping public perceptions of important issues (Anderson, Brossard, & Scheufele, 2014; Anderson, Yeo, Brossard, Scheufele, & Xenos, 2016). Regarding political participation, interactions with others in social messaging services and on social media encourage opinion expression and action on important social issues online and offline (Rainie, Smith, Schlozman, & Brady, 2012; Shah, et al., 2007). Nonetheless, in favor of deepening selection bias in public perception of important issues, some of these uses of social media create an ´echo chamber´ (Sunstein, 2007), created by both algorithms´ suggestions based on past actions and

intentional connections with like-minded people whose posts build the experienced online environment of an individual in social networking sites feeds.

Therefore, the audience is nowadays fragmented into multiple publics, potentially consuming a variety of available media contents, and this acknowledgement encourages an exploration of the phenomenon from the perspective of these particular insider experiences (Barker, 2006), while also trying to identify general trends. On the one hand, we can no longer refer to an undifferentiated mass audience such as the media effect theories of World War II asserted but instead, speak of fragmented and potentially more active audiences. These audiences are selective but committed to at least some content to the point that everybody lives in and through the media (Deuze, 2012), and fan culture remains a continuum where every media consumer might be allocated (Abercrombie & Longhurst, 1998). On the other hand, many audience researchers introduce a warning on celebrating user agency and activity or mistaking every use of new media to be uniformly creative or participatory (Bird, 2011; Carpentier, 2011). Among these two interpretations, the empirical approach to reception analysis that Barker recalls within the field of audience research (Barker, 2006) will certainly contribute to robust realistic research outputs in any project, instead of being prescriptively positive and celebratory or apocalyptic regarding new media' affordances.

When thinking of global environmental issues beyond the local reach of direct experience, mediatisation is unavoidable. Currently, in a growing portion of the world-system and despite digital divides, people are connected by social networks of global reach, immersed in a transnational social space as argued in the previous chapter, which potentially makes the mediatised experience of the environment the largest in our history.

Socially and culturally constructed, the notion of environmental risks (Beck, 2009) or threats varies across geographies and time, as discussed in the previous chapter. Julia Corbett reminds us that we are influenced by social institutions' communication (news media, environmental groups, government, business) and pop culture (advertising, entertainment). These various forms of communication "becomes part of the larger social fabric of this thing called *the environment*" (Corbett, 2006, p. 8). As previously stated, a long tradition of eco-critical studies have stressed the dialogue between communication and culture since their early analysis of literature in the nineteenth century (Hiltner, 2015), until recent studies on commercial cinema or video games (Brereton, 2005; 2016; 2018; Parham, 2016). Their focus has gradually moved to the popular culture, which was at the heart of the Latin American tradition of media reception analysis since its origins (Martín Barbero, 1987), while also incorporating audience perspectives in the eco-critical analysis of texts. These various types of communication circulate nowadays through the Internet-based social platforms just

described, not rarely channeled in the form of short-form video, while both off-line and online media remain essential when shaping individual opinions and attitudes regarding science and environmental issues (Metag & Schafer, 2018).

The literature revision aimed at identifying the state of the art for this study´ research questions followed some specific criteria that should be acknowledged, as publications in the field of environmental communication have been growing exponentially in the last decades. Initially, the search for empirical research focused on the impact of media consumption on environmental attitudes, as revealed through direct measures of public perceptions. It involved primarily public polls and surveys (but also interviews, focus group, ethnographic data and even media experiments), rather than proxy indicators of opinion such as newspaper coverage, internet searches, or membership of campaign groups, which are often used as measures of 'issue salience' or 'concern' among citizens. This broad updated portrait of the role of media was afterwards analysed with the focus on social network platforms and audiovisual media, mainly through audience research published studies included in scientific databases. General attitudes towards the environment, scepticism about the environmental crisis, along with affect, knwoledge and behaviour related to climate change and other environmental risks remain part of this map. Given the novelty and the dynamism of the phenomenon under study, the timeframe is limited to presenting a picture of the last decade (2010-2020) of research in the intersection of pro-environmental attitudes and media audiences, helped by useful meta-studies systematising previous research (Bamberg & Moser, 2007; Center for Research on Environmental Decisions and ecoAmerica, 2014; Stoknes, 2014; Capstick, *et al.*, 2015; Anderson, 2017; Chapman, *et al.*, 2017; Bouman & Steg, 2019).[13]

The approach of audience research will be theoretically mapped out in this chapter since it foregrounds this communication and media study. It will be done through a brief comment on Jesús Martín Barbero' model of media reception, connecting with other authors conceptualisation of culturally contextualised modes of audiencing processes (Fiske, 1992). Afterwards, a review of findings on media influence on environmental concern will be presented, departing from general assessments of exposure to media coverage of any kind while progressively focusing on environmental content, social network sites, audiovisual media communication, pop culture green media, and young audiences. Finally, the niche discovered for further research concerning online audiovisual environmental communications is discussed within the framework of engagement with environmental risks, which provides psychological insights at the individual and micro-social level to understand the potential role of diverse video stories in promoting not only awareness but also fruitful environmental action.

Media Reception as the Broad Communication Approach

Media is certainly not an immaterial industry (Starosielski & Walker, 2016), and its growing footprint on the planet has been gaining a strong focus in the last decade, along with a call to Greening Media Studies (López, 2012; Cubitt, 2014; Maxwell, *et al*., 2015). At the same time, media offer a concrete platform for promoting citizen actions on environmental protection, with the unprecedented scale and velocity of new technological developments (Parks & Walker, 2020). Moreover, in a broader perspective:

> People use audiovisual media to tell stories, to convey and persuade, to hail one another, and to document happenings—after or even as they are taking place. We also use media systems to sense and scan the surface of the earth, monitor vehicle traffic on roadways, open and close mobile gates and levees for flood control, and regulate the shutoff valves of oil pipelines (which companies assert can prevent or minimise leaks and spills). (Parks & Walker, 2020)

Fundamentally, and differently from many other businesses appealed to contribute with sustainable development (United Nations Environment Programme, 2021), media embody the possibility of symbolic contributions to a societal change concerning sustainable production, consumption and coexistence in planet Earth. Aligned to the latter aspect of media role, this study focused on the audience interpretations that media enable thanks to the stories they tell through their content.

The question which better represent the reception tradition is "how specific audiences differ in the social production of meaning" (Jensen & Rosengren, 1990, p. 218), while the meaning-making process is considered multifactorial and not necessarily homogenous, as Martín-Barbero proposed in a shift from a univocal meaning of media to culturally shaped mediations (1987). As Jensen & Rosengren explain about this tradition, it tries to understand the process of media reception by drawing "on methods of analysis-cum-interpretation from the literary tradition and the conception of communication and cultural processes as socially situated discourses from cultural studies" (p. 222).

These audiences are considered agents of meaning production as in the broad church of cultural studies, and taking into account active individuals who can make different uses of media (consumption, decoding, socialisation) with relative autonomy regarding political and economic structures, as in the 'uses and gratifications' tradition. Although the question of this research is clearly focused on what do people do with media, instead of what media do to people, the notion of "use" is not entirely privileged, because it does not consider the text as a differential object that enables interpretations (Livingstone & Das, 2013). While acknowledging how the digital media paradigm

imposes to a certain extent a user logic embedded in daily life (Livingstone S. , 2013), the present study certainly takes some distance from the exacerbation of individual freedom in the face of media, by considering cultural and social factors in the reception process.[14]

Cultural studies stress this need to "contextualise the active role of readers and viewers within the wider circuit of culture (...) the production and reproduction of meaning at the levels of the macro (political-economic), meso (groups, communities), and micro (everyday lifeworld) as part of a dynamic and mutually reinforcing cycle, in contrast with the linearity of the sender-message-receiver model more commonly adopted in audience research" (Livingstone & Das, 2013, p. 1). Furthermore, with the recent development of an 'empirical eco-criticism' (Schneider-Mayerson, Weik von Mossner, & Malecki, 2020; Hakemulder, Kuijpers, Tan, Bálint, & Doicaru, 2017; Schneider-Mayerson M. , 2018; Brereton & Gómez, 2020), green cultural studies have moved closer to reception analysis as audiences are no longer only implied or imagined audiences. Another contribution of cultural studies which matters for this exploration of online video consumption lies in the call to consider pop culture contents within media repertoires, which is a particularly relevant approach when dealing with film, advertising and other mass media entertaining contents (Martín-Barbero, 1987; Livingstone, 1998), while also acknowledging the contradictions that they bring along as part of the consumer capitalist culture (Ang, 1990; Parham, 2016).

From television to online texts, reception remains a suitable approach to audiences, as Livingstone argues (2004), even in the light of "the shift from mass to networked society, from push to pull media, from one-way to multiway communication" (Livingstone & Das, 2013, p. 104) because "only through recognition of the mutuality of texts and readers can we analyse the age of digital networks, as we did that of mass broadcasting" (p. 105).

To sum up, there are three central contributions of reception studies, which are evident in the work of the Spanish-Colombian communication theorist Jesús Martín-Barbero that frames this study: stressing the audience's role in meaning-making, the structuring importance of context, and the potential of agency.

> First, audience reception studies revealed that audiences' readings could not be predicted from knowledge of the text alone, which undermined the analyst's authority in presuming a singular, underlying meaning of any media text by demonstrating that empirical readers often do not mirror the expectations of model or implied readers. (…) Second, this enabled cultural and ethnographic explorations of empirical audiences (plural) that – far from opening the door to unfettered polysemy or radical resistance – emphasised that interpretation is situated in specific, structuring, social contexts that, however, may undermine totalising claims

> of media imperialism and dominant ideologies with evidence of counterflows and "glocalisation" (Tomlinson 1999). (…) Third, close attention to the contextualisation of media reception in everyday life identified not only the reproductive power of social stratification and forms of structured inequality but also the ways in which micro tactics of appropriation reshape and remediate media texts and technologies, it being through such contingent processes of mediation that universalising accounts of passive audiences and powerful media effects are contested. (Livingstone & Das, 2013, p. 110)

As Martín-Barbero argued in his 1987 foundational book *From Media to Mediations: Communication, Culture and Hegemony*, people negotiate the authority of media in the constitution of meaning which takes place daily, through several forms of 'sociality' (or sociability) practices, embedded in cultural matrices. [15] Amplifying the field of communication studies, mediation includes "production devices and consumption rituals, its technological apparatuses and exhibitions, its codes of assembly, perception and recognition" (Martín-Barbero, 2018, p. 9). Instead of focusing on media messages *per se,* the theory prioritises audience mediations and subjects; attention is given primarily to the process of social appropriation of media, where 'audiences' are not considered passive recipients or victims of a sort of dominance through media, which connects with Birmingham theories such as the one of Stuart Hall. Martín-Barbero argues that

> Sociality, generated in the web of everyday relationships that people weave when they get together, is in turn a place of anchorage of the communicative practice and results from the collective modes and uses of communication, that is, of interpellation/constitution of the social actors and their relationships (hegemony/counterhegemony) with power. In this process, the cultural matrices activate and shape the habitus that make up several competencies of reception. (Martín-Barbero, 2018, p. 17)

These neither non-linear nor cause-effect relationships between media and people have been later on emphasised by audience researchers like John Fiske. He affirmed that, within the teenagers he studied as audiences of the TV show *Married… with Children,* there were already tastes and practices, social relations and social identities which not only preceded the first episode but which constituted the social goal at which the text was aimed. Therefore, there are rather iterative audiencing processes where the media and the people exchange influences.

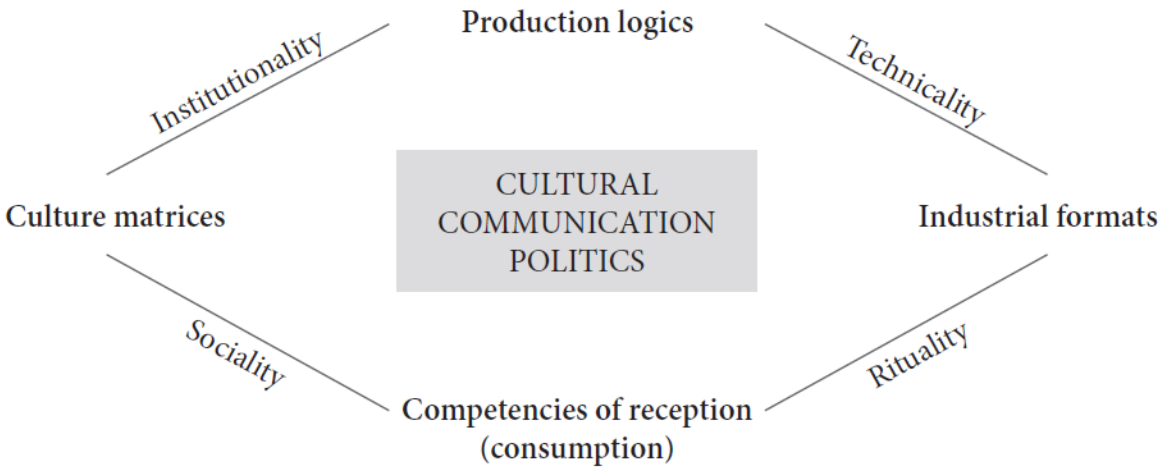
> The text is an effect of this audience, and the skill of its producers lies in their ability to respond to the ways of living within the category of 'the teenager'. In calling the text an effect of the audience, I am attempting to score a point in a debate, not to provide an essential definition, for a text is no more nor no less an effect of the audience than is the audience of the text. The relationships between them are not ones of cause and effect in which one spatially, temporarily or epistemologically takes precedence over the other: the relations are

> systemic ones of a complex of reciprocities in which contradictions and complicities struggle to gain ground over the other. (Fiske, 1992, p. 358)

This shift within communication studies from critical content analysis to audience studies, with particular emphasis on qualitative audience studies of all kind of media and not simply mainstream media, is also evident in the works of British reception analysts David Morley, Janice Radway, Ien Ang, along with Klaus Bruhn Jensen, Kim Schrøder, Kirsten Drotner and Birgitta Højer in the Northern countries (Gumucio-Dagron & Tufte, 2006). They all have in common a "re-assessment of the role of popular culture, storytelling and everyday life in processes of sensemaking" (Gumucio-Dagron & Tufte, 2006, p. 1147).

In the following scheme, it is possible to visualise the map of mediations that Martín-Barbero identifies, being the cultural matrices the major mediators in the communication process, thus abandoning the traditions that put media at the center.[16]

Figure 1. Proposal for a New Map of Mediations by Martín-Barbero



Source: Martín-Barbero, J., 2018. From Media to Mediations - 3 Introductions. Matrizes, 12(1), p. 15.

At the reception level, 'rituality' is the mediating process bidirectionally connecting a culturally influenced individual with industrial media formats in Martín-Barbero's communication model applied to the present study, instead of a more conventional linear relationship sender-receiver. As depicted by him, "the ritualities constitute grammars of action – of looking, listening, reading – that regulate the interaction between the space and time of everyday life and the space and time form the media" (Martín-Barbero, 2018, p. 18). Therefore, ritualities are not merely interpretative frameworks, instead, they are practices associated with media consumption, including the social uses of media

along with the trajectories of reading, which lead to giving great importance to the contexts of communication:

> Seen from the competences of reception, the ritualities refer, on the one hand, to the different social uses of media, for example, the productive consumption that some young people carry out using the computer before the markedly playful-evasive use of the majority. On the other hand, the ritualities refer to the multiple trajectories of reading connected to the social conditions of taste, marked by levels of quality and education, by possessions and knowledge formed in ethnic, class, or gender memory, and by family habits of coexistence with the literate, oral, or audiovisual culture, which carry the experience of seeing over reading or vice versa. (Martín-Barbero, 2018, pp. 18-19)[17]

Later on, Guillermo Orozco helped with the operationalisation of this scheme to be applied to empirical audience research, developing the multiple mediations model (Orozco, 1996). He identified mediation sources in the process of reception, as well as scenarios and communities of interpretation. Mental schemes, repertoires, frames and 'mental scripts' were considered individual mediations in Orozco's adaptation of Martín-Barbero's theory (Orozco, 2000). For Orozco, institutional mediations (family, school, work, churches, etc.); reference mediations (race, class, gender, age, etc.); situational mediations (space, company, mood); and mass-media or video-technological mediations, complete the complex web for the construction of meaning.

Besides structural factors in the field of politics and culture that authors such as Martín-Barbero identified for any reception process, ecological debates are a challenging arena in terms of meaning-construction. In the preface of the 1998 re-edition of his foundational book, the author recognised the ecological or human rights organisations as new social actors or movements acting as sociocultural mediators that introduce new meanings of ¨the social¨, understood as the social dynamics, and new social uses of the media (Martín-Barbero, 2018, p. 19).

Media, Audiences and Environmental Concern

The media enters the scene of the major studies on individual attitudes towards the environment only in this century: the effect of mass media coverage in general and the uses of a specific type of media have been analysed regarding the environmental concern at a national and multinational level, resulting in a mainly positive assessment of its role. However, the most representative and geographically extended samples test linear relationships departing from media access or exposure (to any media more frequently than environmental content), while more complex media reception processes are assessed in rather dispersed settings and applied to specific media examples that make

any comparison difficult. Research on environmental communication reception associated to video online reception or social network sites where they usually locate are even less frequent. Finally, regions like Latin America remain clearly under-represented in all these types of empirical studies. However, some general trends are identified through the literature review of recent publications in indexed scientific journals, along with confirming the important role of media in shaping environmental citizenship and the opportunity for more environmental communication reception research focused on new media.

Climate change undoubtedly remains a relatively new problem that developed from being a scientific and professional object of interest to becoming "a topic of daily and worldwide popular discourse" (Hulme, 2009, p. 174). James Hansen's testimony before the USA Congress in 1988 and Bill McKibben's book *The End of Nature* (1989) were foundational milestones in this matter. Nowadays, it has become the most salient topic in communication research among the many faces of the environmental crisis.[18] As Hulme notes, "we have allowed climate change to accrete to itself more and more individual problems in our world – unsustainable energy, endemic poverty, climatic hazards, food security, structural adjustment, hyper-consumption, tropical deforestation, biodiversity loss – and woven them together using the meta-narrative of climate change" (Hulme, 2009, p. 333). However, these and other environmental threats or risks, as well as for all types of pollution, are experienced and perceived worldwide as regional or local-level issues (Vlek & Steg, 2007), objectively or subjectively dissociated from the global warming phenomenon. When searching for existing literature, this variety of environmental risks were considered, although much more research has been donde lately on climate change specifically.

General Media

Greater general media use, news attention, and trust in information sources were positively associated with key global warming beliefs and policy support in a nationally representative survey conducted in India (Thaker, Zhao, & Leiserowitz, 2017). Regarding other environmental threats, a study conducted in China confirmed the hypotheses that the frequent use of news media or social media positively affects the perceived dread of air pollution (Huang, 2018). This influence has been found more substantial when it comes to 'unobtrusive' environmental risks (Ader, 1995; Coleman, 1993; McCallum, Hammond, & Covello, 1991), like the recent fires in Australia or the Amazon Forest - unless you live close by. However, TV effects even outperformed direct experience of environmental issues when it comes to risk perception like the case of Ghana (Ofori-Parku, 2014) and a severe typhoon in China (Wang & Lin, 2018). Not only the relative amount but also the diversity of media consumption is relevant for environmental risks concern, as suggested by Dahlstrom & Scheufele´

findings about television (2010), which is especially relevant if considering how Internet becomes the paradigmatic window for a potentially diverse exposure. Moreover, evidence supports the assertion that mass media remains "the most important sources for information about science and the environment" (Metag & Schafer, 2018, p. 1001).

A highly remarkable study that offers strong evidence of media centrality with regards to environmental concern is a longitudinal analysis of Swedish public opinion during more than 20 years. The study concluded that both the fluctuations of the economy and of media coverage have an independent effect on public environmental concern (Harring, Jagers, & Martinsson, 2011). As the independent variable was media coverage of environmental issues, it belongs to the group of studies asserting that exposure to environment-specific media content appears positively related to environmental awareness (Ostman & Parker, 1986; James, *et al.*, 1997; Holbert, *et al.*, 2003; Good, 2006; Lee, 2011; Östman, 2013; Huang, 2016; Wang & Lin, 2018).

Beyond awareness, the study of Takahashi *et al* (2017) found that media use (newspapers, print magazines, TV news, radio news, mobile phone, email and internet), positively predicted environmental citizenship at the individual level (taking part in environmental demonstrations or organisations). The findings confirmed a previous study, revealing that media use have a positive impact on public engagement in wildlife management and risk decision-making processes (Hart, et al., 2011). In Germany, representative survey' findings led to similar conclusions as the usage of informational media has a significant positive influence on certain climate-related behavioural intentions (Arlt, *et al.*, 2011).

Internet and Social Network Sites

In Lee *et al.* (2015) analysis of an unprecedentedly extensive global poll of 119 countries representing over 90% of the world´s adult population, the communication index included respondents´ access to electronic communication of any kind. According to their findings, communication access was found to be one of the main predictors of climate change awareness in the US. However, it did not correspond similarly worldwide, as considerable differences were identified among countries. For the US, there were previous studies (Zhao, 2009) where Internet use also appeared associated with greater perceived knowledge of climate change, and the Special Eurobarometer 364 (2011) concluded likewise for levels of knowledge on climate change related topics in Europe. However, a previous study conducted in the US, found a negative relationship between Internet use and climate change knowledge (Kahlor & Rosenthal, 2009). This also happened in Germany for individuals showing some traces of scepticism (Taddicken, 2013). Regarding other regions, Internet attention in general was found to determine intention of environmental civic engagement in Singapore (Ho, Liao, &

Rosenthal, 2014); in China, Internet-based media use was also found to have a positive effect on air pollution´ risk perception (Huang, 2018), as well as on global warming belief´ certainty (Wang & Lin, 2018).

Good (2006) is pointed as the pioneer study that empirically confirmed how exposure to environment-related Internet content has a positive effect on environmental concern, as happened in more traditional media outlets. However, on-line activities as video watching were not considered for measurement at that moment. Another study revealed that frequent usage of online versions of legacy media outlets was positively associated with intentions of promoting climate policy change in Germany (Arlt, Hoppe, & Wolling, 2011). Recently, a differential efficacy for Internet based media was signaled by the findings of personal surveys conducted in a Spanish region, as environmental messages delivered via print media and Internet were more likely to spur people's interest and lead to (self-reported) environmental activism, unlike TV campaigns/news/ads/series (Jimenez-Castillo & Ortega-Egea, 2015). If the balance might favor an internet effect on climate change awareness, empirical findings are not conclusive and most of the studies reported above do not isolate social media use from other online activities.

Regarding social network sites, the informational, relational, and experiential functions of social media are being widely used to foster environmental concern and action, broadly considered (Seelig, 2019). Exposure to information (videos, photos, texts) related to environmental sustainability in social network sites led to increased environmental awareness and social responsibility across diverse generations in Brazil (Severo, Guimarães, & Dellarmelin, 2019). In Chile, a representative sample of the online population found that consumption of information in social media and discussion about public affairs via this channel prompts users to become much more involved in actions against environmentally harmful projects than with less active social media users (Halpern, Rosengerg, & Arriagada, 2013). Different social media uses created the same effect in Hong Kong, more strongly when it comes to political use of social media and for environmental consumerism as a result. According to this study: "political use of social media is positively associated with both, environmental activism and consumerism, whereas relational use of social media is negatively associated with environmental activism, but positively related to environmental consumerism" (Zhang & Skoric, 2018, p. 380).

The crucial affordances of social networking sites when it comes to climate change communications in particular are indeed information, discussion and mobilisation (Anderson, 2017; Tandoc Jr & Eng, 2017). A recent study involving 20 countries revealed that news consumption on social media was associated with a decrease in climate scepticism, less strong for the case of conservative political

ideology, low trust in science, high gross domestic product and individualism at national level (Diehl, *et al.*, 2019). However, previous findings pointed to how online spaces like comments on newspaper stories (Jaspal, Nerlich, & Koteyko, 2012) or in YouTube (Porter & Hellsten, 2014) were fruitful arena for phenomena like climate scepticism, suggesting diverse uses across different online platforms. Furthermore, only issue-specific engagement on Facebook (energy for this case) is consistently associated with self-efficacy perceptions with regards to climate change related political actions (Vraga, *et al.*, 2015), resulting from a survey of Republican voters in the US.

Additionally, social network sites are enriching more traditional behavior change interventions and environmental education. They are giving citizens and consumers a stronger collective public voice to exert influence on environmental policies and business practices, and even allowing for citizen scientists to contribute to knowledge generation and environmental planning through non-animated nature and species' monitoring (Ballew, Omoto, & Winter, 2015; Pearson, Tindle, Ferguson, Ryan, & Litchfield, 2016).

Besides the quoted studies, research on environmental communication through social network platforms is still scarce and has mainly focused on quantitative analysis of tweets from Western countries (Cody, *et al.*, 2015; Jang & Hart, 2015; Lineman, *et al.*, 2015; O'Neill, *et al.*, 2015), that might help to understand mainly elite cues (Park, 2013; Anderson, 2017). Some other studies indirectly referred to the role of social networking sites in environmental concern through the performance of specific online campaigns that will be discussed in another section as part of pop culture advertising content.

As explored above, media have an influential symbolic role in the environmental crisis that still need more empirical analysis from the perspective of audiences, especially with regards to new formats and distribution logics as video online and social network platforms. It is also necessary to assess non-linear processes of mutual influence between media and audiences that might help reinforcing environmental engagement. Along with supplementary theoretical frameworks from psychology, the studies reported next will help to better understand the general trends and somewhat obscure processes of influence which led to the empirically detected media impact on audiences reported in this initial literature review section.

Disavowal and Environmental Communication: Individual and Micro-social Sources of Audience Mediations

Public opinion has progressively aligned with scientific consensus compared to the initial public conversation on climate change (Nisbet & Myers, 2007; Pew Research Center, 2019; Yale Program on Climate Change Communication, 2020), with the help of media and communication efforts. Currently, despite periods of decline in environmental awareness (Stoknes, 2014) and in spite of the remaining scepticism in specific sectors (McCright & Dunlap, 2011; Dunlap, 2013; Fagan & Huang, 2019), there is an extended awareness of the environmental crisis, especially in young citizens. However, there is neither massive mobilisation worldwide (or even in specific countries or regions) nor any kind of significant environmental behaviours widely extended so that a shift to sustainable living appears ensured within the timeframe of the foreseen tipping point. Therefore, the value-action gap present in more sophisticated forms of denial (Weintrobe, 2013; Stoknes, 2014) seems even more relevant as an object of study than denialism or simply lack of awareness. Consequently, environmental communication scholars need to better understand individual and micro-social psychological barriers for engaging with environmental risks, besides considering broader cultural sources of media reception (see Chapter 2) since contextual factors and processes are strong regarding environmental risks (Norgaard, 2011).

There is no doubt that a lack of accurate information might drive public disinterest and disbelief (Boykoff & Boykoff, 2007), but many studies noted the limits of addressing only lack of knowledge, media bias, and attempts at objectivity in communicating climate change (Kahan, et al., 2012; Center for Research on Environmental Decisions and ecoAmerica, 2014). Furthermore, a lack of individual or collective efficacy will act as a barrier to action, even when people are knowledgeable about, for instance, climate science (Kahan, Jenkins-Smith, & Braman, 2011). Consequently, it seems crucial to avoid over-relying on 'myth of the ignorant public' – the belief that people would act better if only they were more informed (Kelsey & Dillon, 2010), while devoting efforts to further explore why and how "many people who accept anthropogenic global warming continue to locate it as a problem of the future— for our children and grandchildren—and one that is still largely avoidable and reparable" (Weintrobe, 2013, p. 2). Or alternatively, why well known pollution cases or disasters related to environmental degradation do not provoke massive reactions of any kind on the side of the citizens, beside specific activist organisations.

Climate Change, for instance, has been tagged as an 'unthinkable' issue (Ghosh, 2016), and diverse psychological barriers for engagement have been identified (Lertzman, 2015; Orange, 2016), suggesting the relative intractability of environmental risks from a human perspective. The

framework developed in Sally Weintrobe´s book *Engaging with Climate Change* (2013) usefully tackle the psychological dimension of the current challenge when facing climate change, which could be extended to other well-documented environmental risks to which human responses are still weak or inefficient. Using an interdisciplinary psychoanalytical perspective, Weintrobe identified three types of denial, acting as barriers when engaging with the environmental risk. 'Denialism' would be the strategically planned campaigns of disinformation about climate change led by commercial and ideological interests, while 'negation' can be regarded as the transitory personal defense mechanism against anxiety and loss in facing a painfully shocking reality. 'Disavowal' – or 'true denial'– remains the third and most interesting category, involving knowing and not knowing at the same time, as the reality of climate change is accepted but tends to be minimised. This latter inconsistency leads to a kind of anxiety for which we need support in order to bear with it, when facing climate change. The anxiety arises because "one of the consequences of disavowal is an increasing difficulty in thinking with any sense of proportion about issues of guilt and responsibility for our share of the damage" (Weintrobe, 2013, p. 9). According to this framework, communication strategies, and planned interventions from any stakeholders, must provide leadership and public space for facing off conflicts and working through private feelings: people "do need to face reality and experience their feelings of anger and grief at what they have lost, before they are able to move on" (Weintrobe, 2013, p. 14).

The Norwegian Psychologist, Per Espen Stoknes (2014; 2015) supplementse the perspective focused on denial and addresses communication challenges by offering an analysis of five major barriers to effective climate change communication, after the analysis of two decades of research from four traditions within psychology. The first barrier is *distance:* where climate change seems remote in time, space and influence. The second barrier refers to counterproductive issue´ framings emphasising cost, loss/sacrifice and *doom.* Another psychological barrier appears when low capacity of changing behaviours or embracing other meaningful actions end up weakening environmental attitudes over time, because individuals need to solve *dissonance* between knowledge and action. *Denial* of threatening realities as an ancient defense mechanism of refusal favoured by dissonance, while strengthened by fear and guilt, is the fourth barrier identified by Stoknes and, of course, where his categorisation meets the types of denial signaled by Weintrobe. The last challenge for effective climate communication points to *Identity* - where people unconsciously select environmental communication, looking for information that confirms our existing values and notions while filtering what challenges them. In his words, these barriers "prevent the facts about climate change for being internalised and influencing behavior" (2014, p. 162), while clear parallels with other environmental risks can be established.

These two connected frameworks will be further analysed in the following sub-sections, while helping to organise other findings obtained through the literature review on psychological and micro-social phenomena associated to environmental media reception.

Individual Dynamics

Disavowal is generally associated to the acceptance of human destructiveness or even to the guilt or pain involved in this destructiveness to others and the Earth. The creation of 'distant others', as described by Cohen (2013), facilitates this kind of disavowal and this idea could be traced through Stoknes' notion of 'distance'. Disavowal through a deceptive assessment of the environmental risks might also be manifested through an optimistic bias, which helps solving dissonance between the three components of attitudes: behaviour, knowledge and affect (Eagly, 1993). Recent surveys conducted in Spain suggest to also consider an optimistic bias at least for some specific media reception processes (Jimenez-Castillo & Ortega-Egea, 2015). "The larger the size of the optimism bias, the less likely people would adopt environmentally responsible actions encouraged by TV documentaries/interviews or radio influence", while it may not "hinder the effect of print media and Internet on the adoption of pro-environmental actions" (p. 222). Confirming the strength of the optimistic bias, a Germany based study found out that neither the proximity of an environmental risk nor the journalistic style of media reporting had a significant effect on it (Rogers, *et al.*, 2017). "An optimistic bias is present even if a risk is not threatening humans themselves, but, instead, nature. Thus, also regarding a change in nature, people tend to think that others are at greater risk of being affected than themselves" (p. 1480). People living in infested areas are less likely to perceive the nature change as affecting others more than themselves (first-person perception), without variations when there is no change in either infestation level, or article style. [19] This psychological operation applies in particular to the case of climate change, which most people regard as a non-urgent and distant risk (van der Linden, Malbach, & Leiserowitz, 2015).

Regarding the dissonance factor signaled by Stoknes, which also feeds into the Weintrobe´s broad notion of disavowal, the findings of the numerous climate change communication studies developed or summarised by the Center for Research on Environmental Decisions (CRED, 2014) emphasise the challenge of knowing the target audience in terms of mental models. Mental models are the dynamic frameworks into which people fit new information, and they are affected by a confirmation bias that often leads individuals to misinterpret or even to refute scientific data that challenges their previous ideas. Mental models are individual sources of mediation, according to Orozco´s operationalisation of Martín-Barbero´s model of audience mediations (Martín-Barbero, 1987; Orozco, 1996).[20]

Contextual sources of individual mediation in audience reception have also proved relevant, according to recent environmental communication research, while confirming mutual influence between text and audience. Both risk perceptions and self-efficacy assessment might be influenced by news media exposure; a survey in rural North Carolina showed that non-white respondents facing the greatest objective environmental risks in the state, were not perceiving the risk as high, while "watching local TV news increased perceived risks, whereas national TV news usage and newspaper reading increased individuals' environmental self-efficacy" (Watson, Riffe, Smithson-Stanley, & Ogilvie, 2013, p. 134). Alternatively, in China, a study was able to identify a mechanism of political trust associated to environmental (in)justice: "for individuals who strongly perceive the unfair distribution of risks, frequent use of news media or social media increases their belief in the likelihood of negative consequences, which in turn, strongly decreases their trust in local governments" (Huang, 2018, p. 99). Furthermore, a reinforcing spiral model of relationship was confirmed empirically as media use mediated the effects of age, race, and education on perceived knowledge about global warming, while perceived knowledge and concern over global warming also predicted future information seeking about the polar regions (Liao, *et al.*, 2016).

Weintrobe's analysis of apathy, as another central part of the phenomenon, could also be related to Stoknes' doom factor, where hopelessness and futility are central, whether as depression or as the perceived lack of political power and a clear voice to make a difference. Regarding strategies to shorten the distance perceived with environmental risks, while also preventing the doom effect that could lead to negation, the CRED's guide explains how "despite evidence that proves that the experiential processing system is the stronger motivator for action, most climate change communication remains geared towards the analytical processing system" (2014, p. 2). Consequently, personal or anecdotal accounts of climate change experiences are encouraged, instead of giving much priority and space to statistical evidence. However, related to the call for using concrete images and human experiences that illustrate the importance of the issue', experts warn against the overuse of emotional appeals. "Although an emotional appeal may increase an audience's interest in a climate change presentation in the short run, it may backfire down the road" (Center for Research on Environmental Decisions and ecoAmerica, 2014, p. 2). The limits of the strategy relate to the 'Finite Pool of Worry' a human can handle at once, alongside the emotional numbing "which occurs after repeated exposures to an emotionally draining situation"; and to the single-action bias, which describes how humans employ only one response when reacting to a threat, "presumably because their first response succeeded in reducing their feeling of worry or vulnerability" (CRED, 2014, p. 3).

As it has long been insinuated by environmental communication scholars, strategies of fear and loss do not necessarily help pro-environmental persuasion goals. The main reason points to the fact that people are most likely to adopt recommended behaviour to protect themselves against a threat when perceptions of both threat and efficacy are high (Witte & Allen, 2000). Messages of doom and gloom which often accompany instruction on climate change, are regarded by many studies as simply disempowering (Bamberg & Moser, 2007; O'Neill & Nicholson-Cole, 2009; Stoknes, 2015). The study of *climate change messages* by O'Neill and Nicholson-Cole (2009), for instance, shows that such messages captured attention and generated a sense of importance of the issue by using dramatic, shocking, or scary images regarding climate change. However, they generally produced feelings of helplessness due to a lack of efficacy components. More recently, the inconclusiveness of the discussion fear *vs.* hope has been confirmed: "alarm is not the same as fatalism, hope does not demand silence about scarier challenges, and fear can motivate too. Such was the finding of a 2017 *Nature* paper surveying the full breadth of the academic literature: that despite a strong consensus among climate scientists about "hope" and "fear" and what qualifies as responsible storytelling, there is not one single way to best tell the story of climate change, no single rhetorical approach likely to work on a given audience, and none too dangerous to try. Any story that sticks, is a good story" (Wallace-Wells, 2019, p. 157). The author refers to the scientific article "Reassessing Emotion in Climate Change Communication" (Chapman, Lickel, & Markowitz, 2017).

Micro-social Dynamics

Despite such a focus on the individual self, Weintrobe's theoretical framework does not exclude the social dimension of environmental risks' engagement process; instead, she acknowledges influence of the cultural context of Western developed societies in particular. For example, "in the West, we feel narcissistically entitled to consume whatever we want, wherever and whenever we want it, and simultaneously we also want to protect the environment. Facing this conflict and working it through, would involve facing our destructiveness towards the environment and towards our minds" (Weintrobe, 2013, p. 9) - where 'our minds' refer to self-destruction in psychological terms through various forms of instability. Therefore, the disavowal version of denial can arise in individuals and groups, and it can even characterise a whole culture.

Shedding light on that middle terrain between the self and the broader culture, a meta-analysis of 57 academic studies that examined the relationship between pro-environmental behaviour – or responsible environmental behaviour - and its psycho-social determinants (Bamberg & Moser, 2007), confirmed the centrality of social dynamics. Their results "confirm the view of pro-environmental behaviour as a mixture of self-interest and pro-social motives" (Bamberg & Moser, 2007, p. 21).

Drawing on the previous twenty years of published research, it was discovered that the three most substantial predictors of intent to take action were: attitude; perceived locus of control (or individual efficacy); and, finally, moral norms. At the same time, moral norms were highly determined by problem awareness, internal attribution, feelings of guilt, and social norms – all elements considered in Weintrobe's theoretical frame of analysis. Within these findings, social norms also influence other predictors that for instance, inform the perception of how difficult it would be to display certain behaviors, connecting back with self-efficacy. All the above supports the notion that taking action is partly an outcome of awareness but it also depends on attitudes, beliefs, and general norms.

Micro-social mediating factors have also been identified in cross-national and national research projects on media use and environmental concern. A relevant study from the last decade, investigated the role of informational media usage in public concern over the environment in China and the USA, using data from the World Values Survey (WVS) developed by Inglehart (Zhao, 2012). It was found that altruism predicted both informational media use and environmental concern in China and the US, lending empirical support to the conjecture that "people concerned about others should be more likely to monitor current events in both their countries and other parts of the world" (Zhao, 2012, p. 153).

Likewise, social norms are believed to be a powerful influence on individual decision-making because of the ever-expanding power of identity within a group (Kahan, *et al.*, 2011). Recently, the analysis of large empirical studies concluded that "to unlock the full potential of people's biospheric values, people need to recognise that biospheric values are widely endorsed within the groups and society to which they belong" (Bouman & Steg, 2019, p. 3). For instance, Östman´s survey of Swedish adolescents discovered that news media use had an impact on pro-environmental behaviour through raising awareness, mediated by interpersonal influence from parents and peers (2013). Furthermore, another important mediator of media effects in environmental behaviour identified by recent research, is that of the perceived media influence on others, enlarging the amount of evidence pointing to the centrality of social dynamics. A representative study carried out in Singapore empirically tested the perceived media influence on others, and found that it accounted for direct and indirect media effects on attitudes, social norms, and pro-environmental behavioural intentions:

> In particular, our study has furnished evidence that people who hold stronger perceptions of perceived media influence on others, tend to hold a more positive attitude toward pro-environmental behaviour" (…) They will also tend to perceive others to be pro-environmental, and also perceive that others expect them to carry out pro-environmental behaviour. In turn, they tend to exhibit stronger intentions to engage in pro-environmental behaviour. (Liao, Ho, & Yang, 2016, p. 65)

Certainly, media framing strategies born from the deep knowledge of human psychology are not enough, as evidence shows how social and cultural dynamics remain crucial in understanding the audience of climate change. A supplementary framing process of setting an issue within an appropriate context to achieve a desired interpretation or perspective (*i.e.*, climate change as a religious, youth, or economic issue) must take place (CRED, 2014). The process involves considering the audience's membership within specific subcultures, such as groups of people with distinct sets of beliefs, or groups based on race, ethnicity, class, age, gender, religion, occupation, etc. Experiments have shown that using frames that are considered directly relevant to people's particular social groups, can greatly increase pro-environmental behaviour (Bain, *et al.*, 2012). The strategy not only overcomes the barrier of identity signaled by Stoknes, but it also uses it for the benefit of communicating climate change.

For instance, political identities have been found crucial. Lakoff's theory of environmental framing describes a process where individual political ideologies (2010) 'frame' human's understanding of any new information. Incidentally, this was further developed by Naomi Klein for USA, in her book *This Changes Everything. Capitalism vs. The Climate* (2014) and the related documentary released under the same name in 2015. A study of selective political exposure to a news event about the reduction of Arctic sea ice -'Walrus haul out' from October 2014 in the USA - added more evidence for considering ideology as a relevant factor in the relationship with media contents (Hennessy, *et al*., 2017).[21] This predisposition not only works on a subconscious level; as in an assessment of how viewers responded online to YouTube videos, Shapiro and Park found "clear evidence that people are likely to respond to claims about the science of climate change in ways that politicise the issue" (2015, p. 16).

The recommendation of tapping into 'Social Identities and Affiliations' does not overlook the fact that individuals have multiple identities, and that their goals could conflict between one another when facing climate change (a parent who is also a successful CEO of a highly polluting company, for instance). Without underestimating conflictual identities, as warned by psychological approaches (Weintrobe, 2013), environmental messages must prioritise interrelated identities and "bolster audience members' sense of affiliation with each other, the environment, and the society that enjoys the benefits of its natural resources" (Center for Research on Environmental Decisions and ecoAmerica, 2014, p. 1).[22] Furthermore, many scholars perceive engaging with climate change as part of a wider engagement with issues of social justice (Weintrobe, 2013).

The issue of agency in ‘solving’ the environmental crisis is a key aspect in the process of engagement, which relates to perceptions of environmental threats and self-efficacy, as just reported. Additionally,

audiences are sensitive to who is specifically delivering the message in environmental communications, so the growing diversity of message emitters needs to be incorporated in the audience reception analysis as well, within the framework of engagement with environmental risks. On the one hand, the identification with idealised figures "to big ourselves up when we feel small, dependent and anxious" (Weintrobe, 2013, p. 11) and the reliance on idealised distant leaders that might take care of the issue in response to a bit of protest (Steiner in Waintrobe, 2013) are common disavowal defenses. Nowadays, campaigns led by celebrities (Rojek, 2001) and microcelebrities (Jerslev, 2016) add another node in this process of delegation of audiences' responsibilities regarding climate change. Affective identification with celebrities (Van Zoonen, 2005; Hills, 2002; Yockey, 2012) might push in that direction. On the other hand, this 'relationship' might work as a necessary containing support for change, if it turns into the un-idealised and genuine leadership demanded by Weintrobe for real, long-lasting climate change engagement (2013).

Green Media and Popular Culture: Catalysing Engagement with Environmental Risk

As just exposed, considerable attention has been given in media studies to the role of news and journalism in fostering an eco-conscious citizenship, finding positive correlations which suggest the convenience of extending the reach of informational contents so that it meet audiences that still lack basic environmental literacy. Instead, research on popular culture media such as films and advertising usually highlights its high environmental impact production and distribution processes, or its undeniable links with a capitalist consumer culture, while not analysing enough its unique potential to "translate ecological principles and philosophies in ways that engage the audience and make these ideas significant for their lives" (Parham, 2016, p. 1). Deploying fictional creative imaginaries, documenting the wonders of non-human nature or the struggles of humans, or applying persuasion strategies from the field of advertising and promotional communication might offer supplementary audiovisual stimuli for overcoming barriers in citizen engagement with environmental risks.

Brereton argues that mass audience film, through their creative imaginary and universal narratives, help engaging with cautionary tales that speak to human's ethical responsibilities toward the environment, and might even help to construct new modes of popular engagement with nature (Brereton, 2005; 2016). Empathy and emotion are key factors in the privileged approach of pop culture narrations, as Alexa Weik von Mossner affirms (2017). As analysed by Parham (2016) and Brereton (2018) with numerous pop culture media examples, these assertions could easily be extended to a wide range of audiovisual online stories presenting a fluid combination of information and entertainment, as well as to further situating editorial and commercial content. Some selected examples covering for diverse genres and formats are reported next as a potential source of

supplementary insights on audience reception that could help understanding the performance of online short form video, which still lacks of significant empirical scholarship.

The eco-film *Avatar* (2009) might be seen as a milestone in terms of influential pop culture narratives reaching massive and dispersed audiences worldwide. It inspired empirical audience research (Holtmeier, 2011; Michelle, *et al.*, 2012), as well as numerous expert eco-readings (see, for instance, Brereton, 2015, or Erb, 2014). Nature documentaries have been also been signalled as important sources of environmental literacy (Boissat, Thomas-Walters, & Veríssimo, 2021; Shiau, 2016), which might be currently on the raise, given the numerous releases of *BBC Earth* and Netflix in the last years, including the bio film of David Attenborough. When not centered in the message itself (Marwick, 2015; Parham, 2016; Hunting & Hinck, 2017), studies of short-form audiovisual entertainment content in social media has been focused on climate change (Shapiro & Park, 2015; 2018; Meza, Shapiro, & Park, 2018), alongside segmented audiences as fan communities or young students (Arendt & Matthes, 2014; Weik von Mossner, 2017; Brereton, 2018; Brereton & Gómez, 2020). Promotional campaigns add supplementary examples in the arena of advertising that are also worth considering (Terracina-Hartman, et al., 2013; Katz-Kimchi & Manosevitch, 2015; Demetrious, 2019).

The blockbuster film *Avatar* (2009) has been object of various audience research with an environmental perspective, which is especially interesting to analyse the translation of indigenous alternative environmental ethics into universal Hollywood codes. Na'vi Sympathy, "a seemingly immediate, productive change in the spectators' worldview", and Post-Pandoran Depression, resulting from "an unachievable desire for the hyper-real techno-spiritual world of Pandora", were the two trends of audience's responses identified by Holtmeier's study of Avatar Forums (2011, p. 414). A 2013 book named *Avatar and Nature Spirituality* (Taylor, 2013) offer multidisciplinary readings and some empirical studies concluding that "to some audience members, the film was inspirational, leading them to express affinity with the film's message of ecological interdependence and animistic spirituality. Some were moved to support the efforts of indigenous peoples, who were metaphorically and sympathetically depicted in the film, to protect their cultures and environments. To others, the film was politically, ethically, or spiritually dangerous" (p. 1). Therefore, indifference is the only excluded outcome of being a spectator of the film *Avatar*, despite the critique to its simplistic or cliché based approach.

Offering a more quantitative picture, cross-cultural reception of the abovementioned blockbuster in 27 countries was analysed through Q Methodology with responses from fans, casual viewers and haters (Michelle, Davis, & Vladica, 2012). "The largest group of 47 subjects (53% of all significant

Q-sorts) expressed a high degree of narrative transportation, suspension of disbelief, emotional engagement, and strong agreement with the film's core messages" (p. 125-126). Alternatively, "sixteen respondents (20% of the significant sorts) expressed the view that while *Avatar* contained serious messages, it was basically boring commercial hype that recycled material and themes already abundantly exploited by Hollywood" (Michelle, Davis, & Vladica, 2012, p. 128). In thirteen (15%) of the 89 significantly loaded Q-sorts, "*Avatar* was interpreted from a perspective which was framed by recognition and assessments of textual realism, and as an allegory for real-world events" (p. 129). Finally, thirteen respondents (15% of significant Q-sorts) celebrated "*Avatar's* technical prowess and the resulting visual spectacle, while lamenting weaknesses in the storyline and characterisation" (p. 130). It would be interesting to find out mid-term effects in Avatar´s audiences as the emotional impact of another Hollywood blockbuster widely studied - *The Day After Tomorrow* (2004) - backfired because of the negative effect in perceptions of self-efficacy in the face of the catastrophe (Svoboda, 2016).

Exploring environmental issues far away from fictional narratives, the emergent popularity of local nature documentaries in Taiwan is the topic of a study regarding the reception of *Beyond Beauty: Taiwan from Above* (2013). The reasons for its popularity were found in NatGeo-quality images that surprised the audiences, who were aware of the Taiwanese origin of them, while the film "successfully articulates a distinct sense of Taiwanese identity through repetition of the bonds among its residents and the imageries" (Shiau, 2016, p. 7). The film is compared to other documentaries screened during the same period with the same marketing strategies and distribution circuits to find that its popularity was the most sustainable one. Another finding points to the diversification of audiences that now include new groups, such as seniors and high school students, which adds to the hypothesis that there is a renewed opportunity for environmental communication in the local version of the nature documentary genre.

The same year, the documentary *Blackfish* was released, portraying human–orca interactions at the US-based marine park SeaWorld. Findings of a multistakeholder study on its effect confirmed a change in people's perceptions of captivity which resulted on the decrease in attendance at the park, partially given it timely appearance to catalyse a decades long movement against marine mammal captivity. The other key factors identified in its pro-environmental success were the support from major distribution channels and the emotional impact of the content (Boissat, Thomas-Walters, & Veríssimo, 2021).

An audience study focusing on the climate change documentary *Before the Flood* (2016) remains especially relevant for the present research as it focused on the YouTube trailer for the film, where

public comments from a potential global audience were examined. The results showed “an acute politicisation of comments”, alongside “polarised views in favor or against the view that climate change is real” by influential users, while “sentiment regarding climate change remained stable” and the leading topic among comments was the presence of Leonardo Di Caprio (Meza, Shapiro, & Park, 2018, p. 1697). It built on previous findings of the authors from the analysis of comments to 10 popular YouTube videos related to climate change. They have concluded that, while the media individualize and dramatize climate change, YouTube users target videos by theme and YouTube discussion spaces are not viable for balanced deliberation related to climate change (Shapiro & Park, 2015; 2018). More interestingly and despite the reduced sample of individuals responding, both studies revealed how audiences identified in this trailer and in most popular climate change short-form videos (an animated Polar Bear video, the Human Art video, and a National Geographic one) a ´shared moral challenge narrative´ (Nisbet M. , 2009).

Regarding extractivism related environmental risks, the case of coal serves to identify the potential to foster activism, or at least click-tivism, through promotional campaigns in social network platforms. In the US, the reaction to The Sierra Club’s “Beyond Coal” campaign focusing on YouTube (mostly short-form animated explainers) was analysed with a sample of college-age students, confirming previous findings of the general public (Center for Research on Environmental Decisions and ecoAmerica, 2014). Participants who reported high fear levels and high perceived efficacy levels were more likely to report higher environmental behavioural intent (Terracina-Hartman, Bienkowski, & Myers, 2013). The study of a different online campaign on the same environmental issue and relying only in social media concluded that it was productive in mobilising a broader set of activists outside of the professional activist realm; it was Greenpeace promoting protest in the Facebook platform to Facebook’s use of coal as a primary energy source (Katz-Kimchi & Manosevitch, 2015). Social media was also the arena of environmentalist resistant responses to a company-led campaign trying to install a ‘clean coal’ perspective of the industry in Australia, as Twitter conversations revealed high levels of criticism to the public relations greenwashing attempts (Demetrious, 2019).[23]

However, regarding private-sphere behaviours, a recent experimental study on the effects of promotional short videos about home irrigation and fertilisation practices in the USA, found out that their appeal to environmental values was largely ineffective, probably due to environmental issues fatigue (Warner, Lamm, & Rumble, 2018). “That the only message that was somewhat effective was a loss frame, implies environmental videos may only engage the viewer when they are frightening or extreme” (193-194), which confirm the conclusion of CRED’s meta-analysis of climate change

communication research, pointing to the prevention focus and the tendency to avoid losses rather than seeking gains (Center for Research on Environmental Decisions and ecoAmerica, 2014).

Therefore, audience based research reported in recent publications confirm the potential of pop culture media in its various forms for contributing to environmental awareness and (sometimes) even behaviour, mainly through the emotional and ethical appeal to their publics. Nonetheless, the many variables involved in each media example, ranging from the topic, the imagery, the production values, the link with existing cultural and social trends, and the target audience where they were tested impede easy generalisations. The self-efficacy factor stressed by the literature might be the Achilles heel of these pop culture media, which poses an interesting challenge for the analysis of media repertoires.

Young Adults, Media and Environmental Risks' Engagement

After this brief account of recently published empirical research linking environmental concern and media audiences, with special consideration for advertising and film, a focus on young audiences is prioritised in the summary of findings below, as justified by the centrality of this particular audience in the research at stake.

This critical group of citizens constitutes the 18% of world population if only considering the 18-24 year-old range (United Nations Population Division, 2018), but can include people up to their early thirties. Although environmental communication has moved away from only age and other sociodemographic segmentation indicators (Metag & Schafer, 2018), this stage of life remains fundamental in terms of acquiring autonomy as individuals, citizens and consumers (Visser & Krosnik, 1998) that might make decisions towards a sustainable life in these three areas. According to many researchers, they find themselves at a critical stage in development due to their possible (re)-education (Östman, 2013; Visser & Krosnik, 1998) with regards to creating a more sustainable relationship between human and non-human nature. As Ôstman summarises from an analysis of previous studies, "the extant research strongly suggests that media use is a positive political-socialisation resource during adolescence and young adulthood" (2013, p. 6).

At the same time, the young public remains the most connected within media globalisation, being defined in the literature as the main actors of digital connectivity and participatory cultures (Jenkins, 2006; Boyd, 2010; Olsson & Dahlgren, 2010). The network society (Castells, 1996; 2013; van Dijk, 2006) is the natural mode of engagement and context of young people today, and it remains the main contributor to the phenomenon of the so-called social networks such as Facebook, Instagram or Snapchat (Boyd & Ellison, 2008; Bauwens, 2007; Haddon & Mante-Meijer, 2016; Rushkoff, 2002; van Dijck, 2013; Olsson & Dahlgren, 2010). Consequently, investigation into this growing

phenomenon implies fixing our eyes on this new area of interaction where, in addition to exchanging messages, they potentially intervene and even create content which was previously only present in 'mass' media such as TV, radio or cinema (Boyd, 2010; Das & Sahoo, 2011). However, it is important to consider the convergence of all media experiences (Medianou & Miller, 2013), young adults' broad range of media repertoires, and their social uses of media.

When it comes to environmental issues, a diverse set of findings build the available portrait of young adults' performance. Some scholars, and numerous marketing researchers, identify a global green culture forged by electronic interaction within younger generations (Díaz Estévez, García de Frutos, & Pena Moya, 2014; Eckersley, 1999). They refer to a kind of 'eco-cosmopolitanism' instead of the localist emphasis of North American environmentalism (Heise, 2008; Weik von Mossner, 2012). Notwithstanding, the global issue of climate change is somehow perceived by young adults as distant and separate from their lives (Ballantyne, Wibeck, & Neset, 2016). Distance is perceived not only in its geographical dimension, but also associated with the moment where they expect risks to become concrete, which is often situated in next generations' scenarios (Threadgold, 2012; Weik von Mossner, 2017).

Adding to these controversial findings and interpretations, other shreds of evidence question the role of environmental awareness as a behaviour predictor for this cohort, thus emphasising a value-action gap. For instance, findings from a study conducted among university students in Brazil and Cuba, show that they "hardly take part in ecological/environmental activities, despite acknowledging the importance of the environment and having a critical perspective of global and local environmental problems" (Gallardo Milanés, Satié de Olivera Pataro, & Mezzomo, 2017, p. 297). Stronger processes of disengagement with environmental risks might be taking place among youngsters, despite an extended and critical awareness that suggest advanced environmental literacy. For instance, young citizens present high levels of environmental concern in Ireland and Uruguay (European Commission, 2019; Latinobarometer Corporation, 2017), as signaled in the previous chapter.

Another gap remains between young people's view of the global future, including environmental problems, which is often quite bleak and pessimistic, and a corresponding view of their own personal future, which is often quite optimistic (Eckersley, 1999; Anttila, *et al.*, 2000; Threadgold, 2012). "The 'dreams' of their individual future do not seem to include the very 'fears' respondents consistently expressed about the future of the Earth", explains Threadgold (2012, p. 21), who studies the phenomenon across social classes. Eckersley's assessment of young Australians showed that optimism is generally perceived as higher in older respondents. Still, the exception to this trend was with regards to the environment, "where the proportion believing it would improve rose from 20%,

of people aged 15 to 17, to 34%, of people aged 22 to 24" (Eckersley, 1999, p. 4). These findings might demonstrate a progressive process of solving the dissonance problem as people grow older, while a sense of ambivalence could be another way of knowing-and-not-knowing, as Weintrobe describes the disavowal type of denial (2013). This two-track thinking could be explained by familiar pressure on forging an individual future that characterises the 'high school' stage of life in Western cultures (Threadgold, 2012).

In Sweden, for instance, survey data from teenagers (N = 1148) demonstrates direct as well as indirect relationships between frequency of news media usage, discussing about environmental issues with parents and peers, and the extent of pro-environmental behaviour (Östman, 2013). "The findings are consistent with the notion that news media usage promotes behaviour by raising awareness of environmental issues" (p. 92), while the novelty could rely on the mediation of interpersonal communication. Interpersonal communication "translates environmental information gleaned from news sources to the reality of adolescents' everyday life, thereby motivating pro-environmental behaviour" (Östman, 2013, p. 92). A subsequent study among urban Sweden adolescents showed that media usage is not significantly associated with scepticism about climate change either (Ojala, 2015). The findings indirectly confirmed the positive influence of the media on environmental awareness and in diminishing the potential effect of excess of (scientific) information as causes of scepticism (Corner, 2012).

A similar attempt to analyse environmental attitudes and participation along with media consumption have taken place before in Latin America, through a representative survey of the online population in Chile, who also happened to be young adults ranging from 18 to 34 years old in the 55% of the cases (Halpern, Rosengerg, & Arraiagada, 2013).[24] Regarding the role of media as sources of information, "when young adults were consulted on how they learned about the major environmental issues, 98% said they received the information through social media" (p. 746). Regarding activism, more than a half (52.9%) of the respondents "claimed to have talked about environmental issues in their social media accounts at least once during the past year, 63.4% said they had seen a YouTube video about an environmental project, and 48.4% indicated having joined a Facebook group created to protest on the subject" (p. 745). These figures are consistently high, which is an interpretation highlighted by showing how they surpass the engagement with massive contemporary protests of students against the educational system in Chile. Finally, and more interestingly, the study showed that "consumption of information in social media, and discussion about public affairs via this channel, prompts users to become much more involved in actions against environmental projects than is the case with less active social media users" (p. 748).

Another set of recent empirical studies of young audiences analyse the potential environmental engagement of specific media formats and strategies (Corner, 2012; Terracina-Hartman, Bienkowski, & Myers, 2013; Kortenkamp & Basten, 2015; Vraga, Tully, Akin, & Rojas, 2012; Brereton & Hong, 2013; Arendt & Matthes, 2014; Greitemeyer, 2014; Ballantyne, Wibeck, & Neset, 2016; Scholtz, Calitz, & Tlebere, 2017). Most of the research that is available was conducted among Third Level students, as a convenience sampling choice of many university-focused researchers.

For instance, a survey targeting Communication college students aged 17-24, analysed the reaction to The Sierra Club's "Beyond Coal" campaign in the USA by focusing on YouTube material (Terracina-Hartman, Bienkowski, & Myers, 2013). While the research did not provide significant insights into how young people respond to differently framed environmental messages (informative *vs.* fear), it did confirm previous findings of the general public's assessment (Witte, 1992). Specifically, "participants who reported high fear levels and high perceived efficacy levels were more likely to report higher behavioural intent" (Terracina-Hartman, Bienkowski, & Myers, 2013, p. 152).

Regarding the impact of message construction on young audiences and uncertainty in particular, an experimental study conducted in Wales with young Psychology students (Corner, Whitmarsh, & Xenias, 2012), measured participants' scepticism about climate change before and after reading two newspaper editorials that made opposing claims about the reality and seriousness of climate change. They found out that participants "who were less sceptical about climate change, evaluated how convincing and reliable the editorials were in a markedly different way than people who were more sceptical about climate change, demonstrating biased assimilation of the information" (p. 463), as previous studies asserted. Another important finding was that attitudes towards climate change became significantly more sceptical after reading the conflicting information from both, sceptical and non-sceptical participants.

Those kinds of findings justify the claim for consensus-based communication made by university students from five countries taking part in another study about climate change, namely Brazil, Spain, Italy, China and the United States (Díaz Estévez, García de Frutos, & Pena Moya, 2014). They attribute the "duty to construct a specialised message, in accordance with the discourse that the scientific community agrees on and which is free of business, economic or ideological interests" to the media (p. 51). Participants also identified interdisciplinarity as being key to tackle the causes that generate climate change and its long-term consequences.[25]

The credibility of the media is, of course, a pre-requisite for this influence to take place, which leads to research about the factors affecting it when it comes to environmental communication and young audiences. In an experimental study of the issue of biofuels within members of biofuels-related interest groups and college students enrolled in topically relevant classes, "exposure to a media literacy video led to increased ratings of story credibility, as well as increased trust in the media to cover both the issue and the news more broadly" (Vraga, Tully, Akin, & Rojas, 2012, p. 942).

As previously stated, audiovisual media of the entertainment pop culture, such as film and advertising, are considered as a privileged space for environmental communication. However, the findings of recent empirical studies portray a more nuanced scenario around effective environmental communications, at least when it comes to young audiences.

Few recent academic studies on audiences have analysed pro-social or public good advertising campaigns. For example, in a South African higher education institution, where a social media campaign (Facebook and YouTube) was conducted to improve environmental awareness, "the findings revealed an increase in environmental knowledge during the campaign and a positive correlation was found between activity on the social media campaign, and environmental knowledge" (Scholtz, Calitz, & Tlebere, 2017, p. 5). Along with time and a fast internet connection, the attitude was one of the three factors that influenced the usage and acceptance of the campaign.

Coincidentally, Ballantyne *et al*. warn against overemphasising the power of new media as "audiences' preconceptions of climate change influence their interpretations of climate messages, which may function as a constraint to climate communication" (2016, p. 73). Nonetheless, their study found that immersive visual representations of climate change helped Swedish students to understand complex aspects, and had an overall positive influence on their reception of the message (Ballantyne, Wibeck, & Neset, 2016).

In the case of audiences who feel close to the non-human natural world, it seems that spectatorship experiences can influence not only the understanding, but also the environmental behaviours. An experiment with Austrian university students revealed that a mediated nature experience is not sufficient to elicit an increase in connectedness to nature, but exposure did increase actual donation behaviour for animal and environmental protection organisations in those already having a strong sense of connectedness with nature (Arendt & Matthes, 2014).

Sceptical and non-sceptical conditions and frames were also tested within film audiences. Two studies employing different films and different scales to measure environmental concern were conducted

with Austrian university students (Greitemeyer, 2013). These studies examined to what extent and why climate change affirming films and climate change sceptic films are successful in affecting people's environmental concern. "Relative to a neutral film condition, watching climate change sceptic film decreased environmental concern", partly through the decreased consideration of future consequences, "whereas watching a climate change affirming film did not affect participant's concern" (p.105).

The effectiveness of eco-cinema in young audiences was also the focus of a study conducted within Irish Third-level students, exploring how they perceive and decode both, non-fictional and fictional evocations of the environmental agenda (Brereton & Hong, 2013). In fact, the multi-method approach found few differences regarding the effects between fiction and non-fiction environmental films, both considered by these young adults as too abstract, fictional, or too complex for ordinary people to relate to with their everyday life experiences. One of the most interesting findings is that agency and predisposition are "core determinants with regards to response to either non-fiction or fictional eco-cinema" (Brereton & Hong, 2013, p. 186), opposite to the general assumption that they reach out to a large target (non-green) audience and trigger awareness of environmental issues for everyone.

Conclusion

The communicaton approach of this study involves considering the interaction between an interpretative audience of many media contents, at unprecedented scale due to narrowcasting dynamics substituting broadcasting modes of communication, and a polysemic ´text´ which nonetheless can be designed to make sure it speaks to needs and desires revealed by users´ digital traces. The provoking question of Fiske about which one influence the other -media or audience- guides to a theoretical framework useful for analysing the new communication paradigm, as the one of multiple cultural mediations developed by Martín-Barbero and Orozco.

The generally positive media effect on environmental attitudes is confirmed after the literature revision of audience based empirical studies, especially through the analysis of representative country samples and some remarkable cross-national public opinion surveys. The trend is confirmed for Internet based media, especially news coverage of environmental issues, while there are only dispersed findings regarding social network sites, revealing mainly positive effects of environmental online content. However, large-scale studies often test linear relations in a predetermined direction (media as the independent variable, for the case of this search) and keep in the obscurity the actual processes of reception that leads to a pro-environmental outcome, not rarely the specific media content that provokes the "effect" or the narratives involved in the "uses" more generally reported. A

step further towards mapping more complex relationships between environmental content and audiences is represented by mostly case studies or non-representative explorations of specific publics.

The extensive analysis of climate change communications concluded, along with studies concerning some other environmental risks, that useful strategies include: segmenting audiences according to their multiple identities, bridging the distance with environmental risks through experiential accounts instead of abstract statistics requiring analytical processes in the side of audiences, considering confirmation bias leading to selective exposure to media along with particular interpretations to solve dissonance, identifying how persuasion and problem-solving approaches are clearly more appreciated by some audiences, while factual information remains a need for other regions where levels of awareness are still comparatively low. Overall, psychological mechanisms and micro-social dynamics acting as barrier to effective communication around the environmental crisis are emphasised in the literature aimed at discovering what impedes pro-environmental activation in spite of the current well-documented urgency of the environmental crisis.

According to the latest evidence and despite some sceptical traces, levels of environmental awareness in laypeople are generally high worldwide and even attitudes reflect a generalised concern over the destiny of the planet (and its inhabitants). However, there seem to be strong barriers at a psychological level that discourage the massive engagement with environmental risks in a way that could potentially lead to radical social change towards achieving new levels of sustainability. Recent literature helps to find out how not lack of awareness or a bold denialism is the widest problem, but a value-action gap better explained through the disavowal type of denial. Authors such as Weintrobe and Stoknes help in understanding these individual or psychological sources of mediation, that also involve situational sources of mediation related to mood and the company or absence of support from others when bearing with contradiction, instability and anxiety. Weintrobe´s procedural approach to the engagement with environmental risks might offer a framework where both emotional appeals provided by, for instance, images of disaster, can play a role together with subsequent opportunities to visualise much needed individual and collective action alternatives.

Young citizens seem especially drown into this knowing-and-not-knowing stage of engagement with environmental risks, while more research on green pop culture is needed to find out how media like YouTube videos might help overcoming this condition –especially, how emotions and ethical appeals might associate with self-efficacy for audiences to respond to a call to action. The map of findings of young audiences and environmental engagement reveal a greater challenge of disavowal, as they are the most concerned although the most optimistic about their own future, in the midst of a world at serious risk for the human species.

The attention to pop culture media contents such as film or advertising is therefore justified by the confirmed need to better understand modes of environmental communication that could influence the affect component of attitudes, supplementing the efforts of informational media aimed at altering the knowledge factor. Furthermore, in close relation with the scope of this study, audience research around climate or nature documentaries, promotional campaigns of companies or non-profits, and eco-fiction shed some light on otherwise obscure processes of green media reception that could be relatable to the consumption of short-form online videos. When they succeed in promoting environmental literacy or engagement with environmental risks, the key factors are the capability of producing all kind of emotions in the audience, along with helping spectators connect with ethical appeals, while there is less evidence of their potential to strengthen self-efficacy perceptions that need to counterbalance fearful emotions for resulting in sustained pro-environmental attitudes.

Presumably, the geopolitical and economic factors discussed in Chapter Two might operate in media reception of pro-environment messages, through the cultures they forge. Additionally, this third chapter focused on individual and micro-social dynamics which should be also considered sources of audience mediations. A necessary process of engagement with climate change, and with other environmental risks, that hopefully leads humans to a position of making radical changes might include facing self-idealisations, mourning one's illusions, bearing difficult feelings and understanding the sort of defenses we use to deny facing reality. All that does not seem attached to old school socio-demographic indicators, thus the value-belief-norm approach seems more suitable to understand the phenomenon, and especially to help when producing a nuanced evaluation of the media influence. Along with adopting an integrative approach to media repertoires, multidimensional concepts, especially those of worldview or 'environmental ideologies', would help this enterprise better than unidimensional approaches. This complexity certainly needs qualitative methods that could help the existing quantitative explorations through surveys and experiments, while opening up the possibility of assessing the mediating role of culture.

The current academic research on media and environmental engagement is widely focused on climate change as the most pervasive issue in the global agenda. The relationship with other environmental risks is scarcely discussed, although general explorations of environmental knowledge, attitudes and practices are conducted at a national and cross-national level, along with the study of local issues and specific media formats. Concerning social networks sites, there have been large-scale studies that only consider access to electronic media as an index without major distinctions and, on the other hand, in-depth studies of certain cases, with little power of generalisation. In between, measurements are lacking that offer a few more coordinates to understand the major trends in the consumption of social networks and their relationship with environmental awareness. Future studies should contribute

with aggregated data that considers the differences between the diverse social media platforms and its differential affordances, considering that it has been argued for instance that YouTube is more similar to a search engine or a database than to Instagram or Twitter.

Some of these findings around effective communication might be highly dependent on the nature of climate change as a dispersed phenomenon. However, most of the conclusions could be easily applied in order to deal with localised environmental threats, which usually involve the challenge of scientific communication to a certain extent and which can certainly enjoy the benefits of an approach that is experience-centred and that takes into account the complexity of the human psyche and social dynamics in place.[26]

Therefore, further research is needed to sort out how this operates for young audiences located in distinct and under researched countries and communities, as this study seeks to uncover. Environmental communication generally lacks of international comparative research (Anderson, 2021). While some remarkable efforts of analysing transnational audiences have been made, they focus on long-form audiovisual narratives which, moreover, are not usually made up of eco-films, with the exception of *Avatar*. Furthermore, audience research focused on exploring the reception of pro-environmental narratives presenting the three global currents of environmentalism identified by Guha and Martínez Alier (1997) was not found in scientific databases, thus confirming also the novelty of merging political ecology with media reception studies.

Last, but not least, the focus on people´ psychological mechanisms and micro-social dynamics involved in media reception process does not overlook the role of elites and the structural factors delineated in chapter 2, but do consider citizens as a powerful force to put pressure in decision makers besides their own domestic pro environmental initiatives.

CHAPTER 4. METHODOLOGY

Introduction

The task of researching an ongoing and multidimensional phenomenon such as the environmental crisis is challenging, especially when it comes to choosing a fieldwork that could make concrete and empirical contributions to the main questions posed from a communications and media studies perspective. If chapter two provided a 'big picture' scenario of environmental sustainability as a global challenge and its regional responses, it also took a big step towards limiting the physical scope of the study: Ireland and Uruguay. The third chapter introduced the role of media from the perspective of audiences, along with particular stress on environmental communication and young publics. Now it is time to explain the methodological approach resulting from the theories and circumstances reviewed in previous phases of the research.

The main fieldwork which this thesis engaged in consists of sixteen focus groups with young adults (18-35 years old), half of them conducted in Ireland and the other half, in Uruguay, in 2019, comprising 109 participants.[27] Each group consisted of, on average, eight research participants and the audio-recorded face to face discussion lasted approximately 1 hour. Each participant also completed an individual questionnaire, recording various sociodemographic data (see Annex), which helped towards the selection of suitable groups for analysis following the criteria of the study that will be explained in this chapter.

The sample covered a wide range of different young populations in Ireland and Uruguay, as the groups were selected in order to explore various forms of diversity, rather than to establish any kind of objective 'representativeness'. As in Kitzinger's AIDS media research project (1994), this sample included not only so-called 'general population' groups such as students, but also some groups who might be expected to have particular perspectives on environmental risks, like farmers and inhabitants from eco-villages. Within the focus group discussion, the participants were confronted with specific examples of eco-videos (25 in total) retrieved from YouTube, following a selection process using various theoretical and empirical considerations. Therefore, two processes of sampling take place within this research: the selection of the young adults who take part in the focus groups and the selection of the online videos as both the media corpus under investigation and the 'trigger' that help to understand participants' cues and preferences.

The following chapter opens with the presentation of the research problem in terms of questions and objectives, followed by a review of the foundational decisions informing the research design. Subsequent critical elaboration of focus group discussions explains its suitability as a central method within contemporary audience studies dealing with environmental communication. After that, the phases and procedures involved in the fieldwork are outlined: pilot explorations, sampling of participants and videos, groups' recruitment, instruments of data collection, and findings' analytical strategy, along with comments on the limitations of focus group design and execution.

Research Problem: Questions and Objectives

The main objective of this study is to assess how young adults "receive" audiovisual environmental messages and how it relates to their engagement with environmental risks. What type of video remains relevant for this audience? What features of short-form videos are perceived as helpful for engaging with environmental risks? What kind of (perceived) influence do short-form YouTube videos exert in these audiences? How it connects with the broader phenomenon of engagement with environmental risks and how it situates within their media repertoires?

As mentioned in the introduction, the specific objectives of this environmental communication study are:

1. to describe and analyse online exposure to and interpretation of short-form pro-environment videos in young adults (18-35 years old, living in rural and urban areas, with diverse educational and socioeconomic backgrounds) across Ireland and Uruguay;
2. to identify cultural sources of audience mediations through social representations of the environmental risks, the human responses to them, and the role of the media in environmental risk engagement;
3. to compare the young audiences across two regions, as a potential large-scale reference mediation source in assessing global media reception of environmental communications.

The study involved reported and performed selective exposure to a wide variety of pro-environment short-form online video texts, together with interpretations and assessment of the perceived (first person and third person) influence of these contents. Engagement (Weintrobe, 2013) and distance (Stoknes, 2015) with regards to environmental risks (Beck, 2009; Urry, 2013) were further analysed through participants' issue awareness, together with their perceived responsibility (Clarke & Agyeman, 2011) and agency (Bourdieu, 1972), all of course framed against the environmental crisis.

Research Design' Foundational Decisions

Studying online video was the first choice when starting this research, directly related to young adults' media consumption patterns in the twenty-first century while also contributing to an under-researched subfield of media activity. Regarding online video and as just exposed in the previous chapter, explorations confirm that "while YouTube has become a popular medium for disseminating some prosocial content, environmental communication efforts and their effects on this platform remain largely uninvestigated" (Krajewski, Schumacher, & Dalrymple, 2017, p. 1). Within media studies, "the age group of young adults between 18-34 is often located within that psychographic group characterised as 'Generation C' because of their higher propensity to include 'early adopters' of new communication technologies" (Starkey, Gazi, Dimitrakopoulou, & Cordeiro, 2014, p. 239). Older youngsters have been less studied and cultural variations in who is considered 'young' increase as age does, so here lies a clear niche for media studies. Except for marketing and consumer research (see, e.g., Pardee, 2010; Dolliver, 2010; Grønhøj, 2007), there have been relatively few studies of older young adults (aged 20–30), although they are often seen as innovative media users and early adopters of new media. (Brereton, 2016, p. 119)

Young adults remain also a clearly strategic public for social change. The concentration of experiences in a short period –potentially: attending Third Level education, starting to work, leaving home, creating a new family, etc.- situate young adults in a temporary window of openness to change. Therefore, this period is crucial for effective environmental communications and justifies the 'impressionable years hypothesis' (Visser & Krosnik, 1998). This hypothesis refers to how "individuals are highly susceptible to attitude change in late adolescence and early adult years, but this susceptibility drops soon after and would remain low for the rest of life", and, therefore, how this age group holds "perhaps the greatest willingness to explore new information and alter belief structures" (Terracina-Hartman, Bienkowski, & Myers, 2013, p. 145). In parallel, young adults have been "treated as scapegoats and blamed for all manner of things in the omnipresent media moral panics about them, and they are constantly talked about rather than to or with" (Threadgold, 2012, pp. 29-30). This study will certainly overcome this limitation by giving voice to young adults directly, while offering an opportunity to reflect on the environmental agenda and engage in discussions that could help drive attitudinal change.

Another foundational research decision was to conduct a cross-national study, linking the country of origin of the researcher (Uruguay) and the country where the PhD is institutionally rooted (Ireland). As explained in chapter two, similarities and differences enable a fruitful comparison between countries facing the 'sustainable development' tensions of small agricultural nations in diverse regions

of the world-system. Similar environmental risks' vulnerability and responsibility have set up a rationale for comparative communication studies (Schäfer, *et al.*, 2016), along with coincidences between public opinion trends regarding environmental challenges. It is often asserted how "selecting countries on the basis of theoretical considerations about the impact of the selection criterion on the outcome of interest ensures that cross-national differences can be interpreted in a meaningful way" (Schäfer, et al., 2016, p. 16).

The diverse, dispersed and convergent media consumption patterns of young adults, along with the cross-national approach to the phenomenon, leads to the prioritisation of the tradition of reception studies in audience research (Jensen & Rosengren, 1990), as explained in the previous Chapter (3). The qualitative path to understanding audiences, extensively developed in Latin American reception studies (Martín-Barbero, 1987; Orozco, 1996; 2000), remains particularly useful in this context while acknowledging that "there is no such thing as 'the audience', rather, there are a great variety of 'audiences' that nonetheless display patterns and processes which bind them into researchable communities of response" (Barker, 2006). Therefore, the cultural studies approach of Fiske acknowledging diverse ´audiencing´ (1992) processes of meaning production that individuals embrace in their daily lives might also serve as a reference.

After an initial quantitative phase aimed at discovering media effects, the method of focus group discussion was adopted later on within the context of contemporary theories of the audience, which are more concerned with "the way that active audiences contribute to the negotiation and construction of meanings" (Lunt & Livingstone, 1996, p. 85). Moreover, this specific study chose the less structured, 'naturalistic' approach to the qualitative technique of focus group to provide nuanced and dense descriptions of the phenomenon (Schäfer, et al., 2016). The qualitative approach helps the identification of environmental discourse as a complex process of articulated reality that punctual quantitative techniques as surveys, for instance, could only sketch (Höijer, 1990). If other qualitative techniques, such as interviews, provide the same outputs regarding the discovery of participants' meaning and ways of understanding, they nevertheless miss the social interaction that is central in environmental issues, along with exploring the group norms that focus groups help uncover (Kitzinger, 1994; Morley, 1980). Last, but not least, the dialogue appears as both a research tool used in focus groups and as a stimulus for transformation, within a broad-based communication for social change framework (Servaes, 2008).

As a result of the decisions previously outlined, this research meets the needs identified by Schafer *et al*. for the development of a more robust environmental communication field: more explanations of why and how communication operates in the way it does; more multimodal solutions that better

recreates media consumption experiences; more focusing on the use of TV and social media; more basic media theory (i.e. agenda setting, mediatisation, *mediaciones*); and more international collaboration (Schäfer, et al., 2016).

The Method of Focus Group Discussion in Reception Studies

The focus group method "involves bringing together a group, or, more often a series of groups, of subjects to discuss an issue in the presence of a moderator", who "ensures that the discussion remains on the issue at hand, while eliciting a wide range of opinions on that issue" (Lunt & Livingstone, 1996, p. 80). "Conversation, public discussion, and gossip are all important processes in the production and reproduction of meanings in everyday life", and focus groups can be potentially understood "as a simulation of these routine but relatively inaccessible communicative contexts that can help us discover the processes by which meaning is socially constructed through everyday talk" (Lunt & Livingstone, 1996, p. 85). In Martín-Barbero's term, these are the practices of 'sociality' or sociability practices through which culture shapes media reception (1987; 2018).

Within the study of environmental communications and as a cost-effective tool to obtain qualitative data, a wide range of topics, ranging from "community participation in natural resource management and governance, human-wildlife [and] conflict mitigation to indigenous ecological knowledge systems" had been investigated using focus group discussion - as evidenced by a recent bibliographical study covering publications from 1996 to 2017 (Nyumba, Wilson, Derrick, & Mukherjee, 2018, p. 30). More recently, focus groups were also used to discuss environmental risk perceptions, with a focus on responsibilities (Kaiser, Hand, & Pence, 2020).

Contemporarily, focus groups have sometimes been used as a stand-alone method of research, which underpins this study. Regarding the reception and the diverse uses of media, "while qualitative methodologies remain relevant as indispensable generators of insights and hypotheses, representatives of humanistic research traditions suggest that, in certain respects, qualitative studies may have independent explanatory value" (Jensen & Rosengren, 1990, p. 221). For instance, the study on climate change and sustainable consumption by Horton and Doron (2011) is completely based on focus groups data, alongside two media studies: Olausson's (2011) is focused on climate change representations (students, truck drivers, nurses, etc.), and Ballantyne, Wibeck & Neset' (2016), on perceptions of climate visualisation.

The present study follows Olausson' choice of the theory of social representations, developed by Moscovici (1984). As Moscovici (2000) argues, "material from samples of conversations gives access

to the social representations" (p. 62), while qualitative methods, in general, can yield valuable knowledge about the comprehensiveness and cultural embeddings of social representations (Whitmarsh, 2009). There are four conditions for the emergence of social representations that parallel features of the focus groups, including the ones in this study:

> (a) The representation of an issue must emerge through the conversation of ordinary people (the focus group); (b) a vital contribution is provided by "amateur scholars," who mediate between scientific knowledge and the laity (interested or knowledgeable parties may be found in the group or represented by the moderator); (c) the debate is typically held at a time of social concern or crisis (the topicality of the research); and (d) the social representation may emerge through a variety of debate forms, resulting in a vocabulary, lay theories, causal explanations, cognitive frames, and prototypical examples (qualitative data). (Lunt & Livingstone, 1996, p. 86)

Olausson argues that Moscovici's theory is especially useful for issues like climate change, and we could add environmental issues in general, as they involve concepts originally carved in scientific arenas:

> According to the theory, modernity is saturated by scientific thinking (…) Climate change is a topical example of a cognitive and discursive process where the originally strictly scientific discourse gradually transforms, assumes mundane characteristics as in expressions such as 'carbon footprints' and 'climate-friendly', and becomes integrated into everyday cognition and discourse as social representations. (Olausson, 2011, p. 283)

Concrete group dynamics are also important as many environmental decisions are revealed to be group decisions. "Norms about what happens in meetings are important because they determine who speaks when, how information is presented, and how people should disagree" (Center for Research on Environmental Decisions and ecoAmerica, 2014, p. 2). Opposite to the idea of a group interview where individual perspectives could be extracted at the same time, and where the group context could even act as a contaminating factor, the social situation is valued as a differential output of the focus groups in audience research (Lunt & Livingstone, 1996). Furthermore, there is an additional advantage in participants who already knew each other, as "they often challenged each other on contradictions between what they were *professing* to believe and how they actually behaved" (Kitzinger, 1994, p. 105).

The search for natural groups is a complementary feature of the use of focus group discussion in this fieldwork (see section “The Sample of Natural Groups and the Recruitment”, later on in this chapter), following Schroder's defence of the 'methodological imperative towards natural-group research

designs' (1994, p. 341). "Much of the innovation in focus group design has involved moving away from this survey sampling approach [a mixture of sociodemographic categories] to engage naturally occurring groups of like-minded people" (Lunt & Livingstone, 1996, p. 82). Examples of this strategy are Liebes and Katz (1990), Olausson (2011), Ballantyne *et al*. (2016), among other media researchers.[28]

Among the limitations highlighted in focus group discussions, low generalizability remains probably the most striking one, especially while trying to project the validity of the overall findings. However, the need to better understand diverse audiences and their particular reception processes encourages researchers to start this journey that could be followed afterwards until saturation of every cohort.

The second most important weakness to consider is the reliance on self-reporting of knowledge, attitudes and practices, shared with surveys of any kind. As links have been discovered between reported intentions and behaviours in previous studies on pro-environmental attitudes, asking people to record what they think remains a useful path to knowledge. Moreover, in-depth and first-hand open dialogue offers more opportunity to check reliability than closed-questions delivered through isolated surveys. Although psychological aspects challenge audience studies - especially unconscious activity regarding choices and perceptions - there seems to be an agreement that "the reception experience, for most people, is not so solipsistic or idiosyncratic that people cannot communicate important aspects of their experiences and discover shared viewpoints with others through talk" (Davis & Michelle , 2011, p. 561). Furthermore, many Y and Z generation studies (Boschma & Groen, 2006) point towards youth as active media consumers, aware of what lies behind the content and used to analyse media as audience and as (co)producers as well (Carpentier, 2011; Bird, 2011).

Last, but not least, when applied to environmental issues, the social desirability bias is a key factor to include in the interpretation of findings. However, even when the politically correct answer might prevail in a social situation, this is not necessarily only a circumstantial performance of the individuals but might have effects in actual decision making as social dynamics studied for the case of climate change evidence (see Chapter 3).

Complementary limitations always arise from the circumstances of the actual conduction of focus groups. Logistics of recruitment when researching with human beings remain a central challenge and always need to be taken into consideration. In order to account for these potential variations, the details of each group final constitution are reported, aiming at integrating them in the scope and the limitations of the final analysis.

Preliminary Explorations: Interviews, Surveys and Content Analysis

As a first stage approach to the Irish context, the researcher developed direct observation of young adults at informal settings in the city of Dublin (cultural and social events), coupled with interviews with researchers at DCU, and by giving interactive presentations at different educational environments (High/Secondary school, environmental non-profit training young adults, undergrad and postgrad students) across 2017. In the Irish flagship organisation ECO-UNESCO, a group interview was conducted with the technical team about environmental problems at the national level and assessing the role of young adults; furthermore, a content analysis of their Facebook fan page helped to flesh out and understand the interaction of young adults with a broad strand of eco-media more effectively. These preliminary findings informed the design of the the main fieldwork of the thesis.

In parallel to the literature review, Irish exploratory surveys of young students' environmental literacy and media consumption were analysed and subsequently mirrored and replicated in Uruguay by the researcher, aiming to test the best approach to target such audiences and identify significant media content. The outline surveys developed originally by Pat Brereton (Brereton, unpublished) have three groups of questions covering: a) Type and amount of media consumption; b) Attitudes toward environmental protection and climate change as public issues; c) Perception of media influence on Climate Change knowledge and attitudes. These modes of investigation have been applied annually on DCU' Media students during 2016, 2017, 2018 and 2019. In the 2017 round, the survey was translated and extended to Uruguayan Media students and, in 2018 also included Uruguayan Media and non-media students. Specific eco-media content signalled as influential by the students was identified in these explorations, alongside different approaches to self-reporting of what can be termed environmental literacy (Brereton, 2018), although focusing on climate change instead of environmental risks in general. One of the lessons learned through the surveys with regards to the methodology points to the low recall of online media content and the participants' difficulty in providing specifications that allow the researchers to find the exact online video they referred to (title, author, source) as being influential regarding climate change awareness. However, a list of the most salient online videoshelped design the video sample for the subsequent focus group discussion, including short animated films, documentary trailers, infotainment videos, explainers and music video clips29.

Inspired by these findings on young adults´ YouTube media preferences, a study on the salient video clip "Dear Future Generations, Sorry" was conducted with the PhD supervisor, which was included in a special issue of the journal of International Studies on Literature and Environment (ISLE). It

applied the emergent perspective of empirical eco-criticism through providing an expert close reading of the video along with young audience interpretations (Brereton & Gómez, 2020).

In 2018 and 2019, statistical data analysis regarding public opinion in Ireland and Uruguay was performed through the Eurobarometer and the Latinbarometer, with findings examined in chapter two of this dissertation. These representative surveys helps identifying general trends and situating the young adults constituency with relation to other groups. The comparable questions between the two countries are mainly policy ones around climate change, which is the specific environmental problem taken as reference for both surveys and it is possible to analyze the level of importance attributed to it, as well as socio-demographic features of the respondents who expressed deep concern. As explained in Chapter Two, this public opinion snapshot of the countries confirm similarities among them, along with the need to do more research to better understand the high support to environmental protection in terms of who they are and which are their motives. Findings regarding the age distribution of respondent with the highest environmental concern did not support the hypothesis that younger generations are the most 'environmentalist' and therefore strengthen the invitation to deconstruct the myth with updated qualitative data.

The Sample of Natural Groups and the Recruitment

The search of a set of natural groups that could offer diversity in terms of class, urban-rural divide, gender and native-migrant condition, leads to a limited number of addressed publics as potential participants. Along with students that share a classroom and a specific project, or some small sub-group at universities or in technical training programmes, other natural groups which were invited to take part in the study include farmers associations, volunteers at rural social projects, charity soup run volunteers, music bands or choirs, theatre groups, sport teams, political parties' young committees, non-formal cultural exchange programs groups, social inclusion programs' groups, language courses classmates, etc.

The selection of known members of a common social category, who meet regularly, became the criterion for selection of existing groups within this study. Furthermore, the planned discussions take place in the scenarios where they usually interact, like in the research project of Burgess *et al*. (1991) exploring local responses to environmental threats. This strategy opposes the original random selection criterion, associated with quantitative orientations of the studies to which focus group contributed (Merton, 1987).

Departing from the convenient sampling of reaching university students, a diverse set of young adults affiliated to alternative organisations or groups was added to the set target through a purposive

sampling strategy (Schäfer *et al*., 2016). This strategy resembles maximum variation sampling (Lindlof & Taylor, 2002) while aiming to cover different social experiences that possibly influence the social representations of environmental risk and media influence (see, for instance, Olausson, 2011). As a result, and as explained for the case of Bernstein' study of sub-groups of environmentalists, "the sample does not claim to be demographically representative but rather describes a suggestive set of groups that could be further operationalised. There is no specific normative objective with defining and exploring these groups, but rather the desire to understand how worldviews influence how different groups make sense of environmental problems" (Bernstein & Szuster, 2018, p. 1063).

Following saturation criteria and providing the researcher with confidence over the findings, "one should continue to run new groups until the last group has nothing new to add and merely repeats previous contributions" (Lunt & Livingstone, 1996, p. 83). This approach is often a challenge for academic research' planning and budgeting as also evident in this case. An alternative approach is to follow important previous studies' criteria. For instance, the last broad qualitative study on environmental attitudes in Ireland (Kelly, 2007) represented the whole country through 22 focus groups, and the general public was covered through 11 groups drawn from a variety of occupational and educational levels. Consequently, for a study of the young population, the initial goal of eight focus groups per country seemed acceptable to start obtaining significant outcomes and was therefore maintained. The same number of focus groups could also suit the Uruguayan case, given the similarities in population and geo-demographic features of both Ireland and Uruguay. Furthermore, when a researcher analyses the cases of two countries, one of which he or she does not belong to, the advice points to a small "n" of cases. "It is almost impossible for one research team to have enough cultural knowledge about all cases analysed. As a result, this analytical strategy is recommended for either relatively small-n analyses, or large-N analyses of objects requiring less in-depth knowledge of the countries in question" (Schäfer, et al., 2016, p. 17).

In a recent special issue of *Environmental Communication* (Metag & Schafer, 2018), the need to understand multiple publics is further stressed as an idea often referenced but seldom put into practice: “It is surprising how little systematic empirical work is currently available in science and environmental communication describing the nature and origins of different (sub)-publics in science communication” (Scheufele, 2018, p. 1124). He goes on to include a call to identify ‘underserved audiences’ (p. 1126), usually the poorly educated, and engage them in much-needed conversations about science and the environment.

This recruitment strategy implies that, by design, young adults alternative disaffiliated from collective activities related to education, occupation or leisure remained out of this sample. In terms of participation – a key issue regarding social change - the cohort studied points to the middle to high range of proactivity regarding either their future, their passions or community issues. Additionally, a group of environmentally oriented people was considered through the inclusion of inhabitants of an eco-village in each country, in order to offer a contrasting opportunity, without necessarily including activism organisations or media activism associations. Therefore, the young adults who took part in this study were already affiliated to groups related to what Giddens conceptualizes as "projects of the self" (1991, p. 99), working as sites of building and rebuilding life and sense, and resonating with what Becks calls "elective biographies" (2003, p. 40). Therefore, besides the search of discursive productivity, it happens that these affiliations and practices which refer to their (multiple) identities and lifestyles are more relevant to understand globalised social structures than class (Stehli, 2013), while identities have been acknowledged as central in environmental risks' engagement in previous chapters.

Table 5. Characterisation of Focus Groups Conducted and Selected for Analysis

Group Characterisation	Geographic Identification	Number of Participants	Age Range	Majoritarian Gender	Estimated Class	Place of residence
Young Farmers Organisation	Irish	12	23-40	Masculine	High-Medium High	Rural
	Uruguayan	13	18-34	Masculine		
Social Inclusion Programme	Irish	4	20-23	Balance	Low	Urban
	Uruguayan	8	17-22	Feminine		
Third Level Students (1st year)	Irish	8	18-21	Feminine	Medium	Mix
	Uruguayan	3	18-20	Balance		
Third Level Students (last year)	Irish	4	20-29	Feminine	Medium	Mix
	Uruguayan	8	20-33	Feminine		
Amateur Band of Folk Musicians	European / Expats (IE)	5	26-34	Balance	High-Medium High	Urban
	Uruguayan	4	19-28	Masculine	Medium – Medium Low	
Eco-Villagers	European / Expats (IE)	6	19-30	Balance	High-Medium High	Rural
	Uruguayan / Expats (UY)	5	28-33	Balance		
Refugees / Asylum Seekers	International / Immigrants (IE)	3	24-27	Feminine	Low	Rural
	International / Immigrants (UY)	7	19-40	Masculine		Urban
International Education Programme (Ireland)	International / Immigrants (IE)	9	25-33	Feminine	Medium - Medium Low	Urban
Technical Training	Uruguayans	10	18-21	Feminine		
Source: Personal collection, author´s elaboration with data collected in the fieldwork of this study (2019).						

The question of how many participants should take part in a focus-group discussion has not received a consensual answer between reseachers. After the highly heterogeneous choice of Morley (1980) – from 3 to 13 participants - specialists in the field of audience research identify a rule of thumb involving 6 to 10 participants as working best (Lunt & Livingstone, 1996).[30] Meanwhile, other researchers (Olausson, 2011; Wibeck, 2014) argue that the usual practice is to avoid oversized groups, designing for 3 to 5 respondents and working with four as an ideal size for all respondents to be heard. For this research, considering the lack of agreement in the field, the size of the focus groups conducted followed the size of the existing groups invited to discuss, ranging from 3 to 12 participants when counting after drop offs.[31]

Participants were recruited in alliance with the authorities or peer leaders of the natural groups they belong to. So, the details of the research aims and procedures was presented to these representative key actors as a first step, in order to attract their interest and obtain their commitment to the research project. If the leaders evaluated the study as a suitable activity to propose to their groups, they would share the information with the young members of their organisations and they were formally invited to take part in the focus group discussion. When the researcher could directly pitch the invitation to the potential participants of the focus group, they were approached as a group in the same scenarios where they usually meet. Finally, it was necessary to obtain individual informed consent to accept the ones that volunteer to take part in focus groups. [32]

The Sample of Eco-Videos

Regarding the other sample associated to the focus group discussion, the specific media examined for this study are short videos (less than 20 minutes) available in YouTube and usually distributed by complementary social networks (Instagram, Twitter, Facebook, etc.), including not only journalistic productions, but also modes of advertising, marketing content, and entertainment media of various sources. These eco-videos refer to a wide variety of environmental risks - climate change along with air/soil/water pollution and biodiversity loss - while also being diverse in terms of genres, authorship, leading voices, aesthetics, and environmental discourses. The set of selected media includes descriptive, critical and propositional perspectives on the environmental risks alluded to in the videos.

The core of the video sample reflected the theory on global environmentalism, offering examples of each current trend identified by Guha and Martínez Alier (1997) when studying cases around the world. As explained in Chapter 2, they offered a classification including three main varieties of environmentalism: the Cult to Wilderness, the Eco-Efficiency Gospel, and the Mantra of Environmental Justice, also known as the Ecology of the Poor. The values of local risk or local approach to the risk, for both Ireland and Uruguay, or for that matter international risk, or even an international approach to the risk, were central as another variable for selection. As a result of the combination of these two variables, nine video examples were selected, taking into account that locality was a different objective reality for each country.

Table 6. Original Sample of Videos according to Foundational Criteria

	Cult to the Wilderness	**Eco-efficiency**	**Environmental Justice**
Global Approaches	Video 1: "Nature Is Speaking – Julia Roberts is Mother Nature", a short film by Conservation International	Video 2: "4Ocean Bracelets Help With Ocean Cleanup", Insider' infotainment video	Video 3: "*Before the Flood* Official Trailer" of Di Caprio & NatGeo's documentary
Local Approaches **a) Ireland** **b) Uruguay**	Video 4: "IPCC- Protecting Ireland's Peatlands" Video 5: "Protected Area National Park Esteros de Farrapo"	Video 6: "Plastic bags – breaking the habit: Ireland's levy deemed a success" Video 7: "Uruguay, the most aeolian country" Hispan TV report	Video 8: "Oppose Irish Cement Plans to Burn Industrial Waste in Limerick – Protest" Video 9: "Protest against Mega Waste Dumping Place Solis Chico Creek"
Source: Personal collection.			

Given the enormous range of YouTube eco-videos, especially featuring global risks as climate change and taking a global approach to any risk, the choice of specific examples in each category gave priority to the findings of exploratory research, to include a young adult's perspective and recent examples. Furthermore, this empirical evidence led to cases where currents of environmentalism appeared in combination or were arguable explicit, while showing how diverse video genres (fictions, documentaries, speeches, explainers, infotainment pieces, talk shows, animation, etc.) belong to the same current and/or geographic approach. Consequently, the pilot surveys of young students in Ireland and Uruguay provided a variety of examples that seemed important to include, and it was carried out, taking into account both salience and diversity in the type of video being used.

The list climbed up to 18 short videos uploaded to YouTube between 2012b and 2019; seven of which vary from country to country in order to offer local approaches and because of availability in the national language (English or Spanish). The quest for a balance between audiovisual quality, aesthetics and tone of the parallel examples in both countries was another consideration in this complex sampling process. [33] Finally, a special case that entered the list is the teaser of the long documentary *Daughter of the Lake* (Peru, 2015, available on Netflix in multiple languages for 100 countries from 2017 to 2019); it offers another example of environmental justice discourse while also referring to the alternative Andean environmental ethics discussed in chapter 2.[34]

The Design of Focus Groups Discussion and the Collection of Data

Following one of the ad-hoc rules-of-thumb or good practices of the method (Lunt & Livingstone, 1996), the moderator uses a guide or discussion schedule as a list of key points to cover that usually

includes a majority of open-ended questions that promote complex personalised answers. Once in the focus groups situation, young peoples´ environmental concerns were discussed with the first set of questions. Secondly, their individual and social uses of online media texts were surveyed, discussed and tested, using the stimulus of eco-videos.

Regarding the first section, aimed at mapping social representations of the environmental crisis and the human responses to iti, it was designed following a public opinion survey approach to determine "whether potential interviewees were broadly pro-environmental based on the degree to which they prioritised environmental issues over other social issues" (Bernstein & Szuster, p. 1064). The first step is the assessment of participants' awareness, ranking and perceived distance (Stoknes, 2015) with environmental risks (Beck, 2009), along with their perceptions of responsibility and power (Clarke & Agyeman, 2011) in facing them considering structure and agency (Bourdieu, 1972). This is important to understand where do participants come from, what are their representations of the climate crisis, before potentially guiding or suggesting certain answers due to the exposure to eco-videos with a clear pro-environmental position. See, for instance, Ballantyne *et al*. (2016) with the mind-map model on climate change being developed before exposing participants to specific climate visualisations. [35]

Secondly, participants were asked about their 'media repertoires' (Hasebrink & Popp, 2006; Oblak & Luthar, 2017), assuming a somewhat selective exposure to media as shown in previous studies. This concept considers the use of media, which is both interconnected and combined, while it refers to the typical media use of individuals. These social uses, although not individually but collectively conceived by Martín-Barbero, could be included in a useful larger framework that Barker suggests with his' viewing strategy', whose identification is pursued all through this study.

> It (the concept of viewing strategy) is designed to bring together within one frame all the processes whereby members of an audience prepare for any act of reading, listening, or viewing; how these preparations lead to different kinds of attention, the ability to make sense of characters and events, a willingness to pursue possible connections and meanings; and how the outcomes of these result in both degrees of acceptance or rejection, satisfaction or dissatisfaction, and longer-term integration of the experiences into people's thinking, feelings, and lives. (Barker, 2006, p. 137)

The question of what kind of online eco-video (Parham, 2016; Brereton, 2018) these young adults engage with (sources, voices, genres, topics and environmental discourses) is answered through the exploration of their reported and performed selective exposure to a wide variety of online video texts within their media repertoires, together with their evaluation of these eco-media texts and an

assessment of their perceived (first person and third person) influence. Complementary to the focus group discussion, eco-videos referred to are the object of basic content analysis to help us further understand the interpretation process.

Differently from surveys conducted in the pilot stage of the project, a key aspect of this fieldwork is the possibility to discuss the interpretation of concrete examples of media contents. Moreover, the design offers the extra validity feature of the recreation of an individual YouTube scrolling process with limited time (around 5 minutes) and using participants' cellphones, where participants have to choose where to click and watch, before deciding which 1 or 2 videos are the most effective regarding environmental awareness. The choice of the best videos and the description of how the time was used to explore the 18 items list of eco-media contents is discussed subsequently. If it might resemble the historical exercise of pressing buttons to help gauge emotional reactions to radio programs at the very beginning of the use of focus group as a research method, the activity is not an experiment designed to test effects but a triggering resource to help obtaining more concrete information about participants´ short-form video exposure and interpretation. It also reproduces, at a micro-scale, the Q methodology strategy of asking participants to explain why they made certain choices in a first quantitative stage of the study (Davis & Michelle , 2011). According to Kitzinger's account of good practices, while conducting focus groups, this kind of quasi-experimental exercises is useful towards delivering some cross-comparisons between groups, by providing diverse session dynamics with a common external reference point (1994), for example, provided in other studies by a card game or the use of vignettes (Khan & Manderson, 1992).

Finally, supplementary socio-demographic and occupational data is collected through individual forms designed to help characterize the constituency of each focus group conducted, across age, gender, place of residence and place of growing up, occupation, and membership to voluntary organisations.

Within this study, a specific challenge involves the phrasing of questions to mirror comparable responses across both countries, despite language and cultural differences. Question sequencing was adapted in order to capture the attention of the diverse level of education and motivation of the groups. Still, the eco-video analysis was always the final part to keep the open logic of the initial sections, where participants could express even denialism.

The role of the moderator is focused on monitoring the complex social interaction taking place, "to encourage contributions, and manage disruption, diversion, and other problematic group dynamics" (Lunt & Livingstone, 1996, p. 82). Consistent with the problematic approach of engagement with

environmental risks, neither individual consistency nor consensus were encouraged. A balance in the distribution of voices among the group was promoted, along with encouraging the expression of hesitant or difficult viewpoints trying to emerge, but at the same time not pushing this to a point where the regular social interaction of the group could be radically affected. If the social dynamics of a certain natural group was, for instance, unbalanced in terms of gender or age, the moderator did not force the balance, so that the discussion would remain as spontaneous and similar to everyday life as possible. This moderating agenda follows the informing decision around investigating how interpretations are collectively constructed. Taking notes of the visual interactions that might not be recorded, with the sessions only being audio-taped, was also important and relied on by the moderator as well.

The Analysis: Describing and Discussing the Findings

The method of using focus group admits a diverse type of analytical strategies, among which this study privileged a qualitative approach that enabled the emergence of dense descriptions of participants' views and in recounting their social interaction, while helping to obtain a general map of country audiences through simple tabulation of occurrences across the sample. Moreover, basic content analysis of recurrent video examples was necessary to more accurately report and analyse participants´ interpretations.

The strategy required an iterative process of content analysis involving the transcripts, the guide for discussion and the original research design, in order to obtain significant findings. A thorough reading of the total of the transcripts along with a round of trial coding led to the final coding scheme applied through NVivo software to the entire sample of focus groups transcriptions. Thematic content analysis (Wibeck, et al., 2007; Ballantyne, et al., 2016) of the transcribed focus-group discussions was conducted, in order to identify passages where environmental risks´ themes and also other categories related to eco-videos reception' aspects were mentioned. These variable aspects reported and/or tested through the exercise involving the sample of eco-videos were:

- environmental issues considered,
- localisation of environmental risks,
- responsibility attribution to stakeholders,
- predictions of the future of environmental crisis,
- personal and collective agency,
- media repertoire and media uses
- representations of media influence on the environmental crisis,

- specific video choices for promoting environmental awareness
- interpretation of specific eco-videos,
- perception of eco-videos´ influence on themselves and others.

In opposition to fine descriptions which are also used in qualitative studies, dense descriptions "reveal or lead to discovering the subjacent knowledge, relationship structures which the person under study may or may not understand, and act accordingly" (Tonon, 2015, p. 8). Every occurrence is therefore described or narrated taking into account verbal and non-verbal details of the broader conversation, along with an independent assessment of media references that might be mentioned.[36]

Beside dense descriptions and following Ballantynes *et al.*'s study, a frequency analysis was added to count recurrent instances of participants references to particular media content that in turn feed into more general patterns of interpretation.

Regarding the initial discussion on the environmental crisis, anonymous quotations, of both individual passages and dialogues (Kitzinger, 1994), are used to illustrate how social representations emerge and are eventually challenged within the group conversations. Therefore, the quotation strategy in this study aims at showing the diverse interpretations, while signalling the ones that also represent recurrent perspectives within the conversations, as a simply tabulated and complementary quantitative point of view (Höijer, 1990; Liebes & Katz, 1990). Through the latter strategy, both consensus and dissent were signalled intra groups. Moreover, the work on coincidences was facilitated by the social representations approach which "builds to a large extent on consensus and are reproduced collectively in a commonsensical manner", as recalled by Olausson (2011, p. 284) following Moscovici (1984; 2000). These are critical process that must make sure that systematic analysis does not reduce the special qualities of the material or lose the insightfulness of the qualitative approach.[37]

Dissent among groups (inter-group dissent) was briefly analysed, incorporating the assessment of social and contextual factors potentially intervening in the media reception processes. Factors as the listed below are understood as 'mediators' in the process of reception, following Orozco's operationalisation of Martín-Barbero' reception theory (Orozco, 1996):

- gender balance,
- urban-rural situation,
- occupation,
- education,

- native-migrant identity,
- specific features of the natural group.

The 'labels' listed above might constitute cultural positions: "situation transcending factors that people carry and actualize in concrete situations such as 'those along the lines of gender, class, ethnicity, generation, and so on, as well as cultural ideologies as to the meaning of television" (Carpentier, 2011, p. 184).

In parallel, when analysing dissent, instead of generalising about the social categories to which the participants belong to (rural youth, refugees, Third Level students, etc.), it is necessary to "pay close attention to the composition of groups and how the characteristics of any particular group may influence what is said" (Kitzinger, 1994, p. 112).

Generally within small-scale empirical designs of a qualitative approach as this one, reception studies "have indicated how particular genres and themes may be assimilated by specific audiences" (Jensen & Rosengren, 1990, p. 222). Afterwards, within reception studies, results of this type of analysis are interpreted "with reference to the surrounding socio-cultural system which, again, is conceptualised as a historical configuration of social practices, contexts of use, and interpretive communities" (Jensen & Rosengren, 1990, p. 218). In this study, it is facilitated by the initial conversation about the environmental crisis, reported and analysed in Chapter 5, along with the media use exploration that preceded the viewing exercise, reported at the beginning of Chapter 6.

Complementary, content analysis of the sample of videos shed light on participants' interpretations of eco-videos, along with their expressions. As some researchers recall, mediated communication of climate change –or any other environmental risk - in media texts, might be analysed as an indicator for different phenomena, which includes being "a stimulus for audiences" (Schäfer, et al., 2016, p. 2). The content analysis (Krippendorff, 2012) of the video sample leading to better explain audiences' expressions within the focus group discussion included variables such as:

- environmental discourses (currents of environmentalism: the Cult to Wilderness the wilderness, Gospel of Eco-Efficiency, or Mantra of Environmental Justice-),[38]
- genre (documentary, fiction, news report, marketing ad, infotainment piece, video clip, other),
- authorship (media outlet – legacy or emergent - non- profit organisations, public national body, public international body, celebrity, prosumer, other),
- leading voices (intellectual, politician, celebrity, micro-celebrity, media presenter, activist citizens, fictional creature, other),

- environmental risk referred to (climate change – causes or effects, type of manifestations - pollution – air, water, soil - biodiversity loss, waste, other),
- geographic scenarios (global, local-which locality-),
- aesthetic features (visual effects, other).[39]

The identification of environmental discourses takes the specific conceptualisations of Ramachandra Guha and Joan Martínez Alier (1997), for varieties of environmentalism and their application. Within those classifications, special attention was given to capture transformative environmental ideologies (Corbett, 2006), or alternative environmental ethics, as the Andean good living perspectives (Vanhulst, 2015) and the traditional Irish sustainability knowledge (O'Malley Gannon, 2014; Slater & Flaherty, 2009).[40]

However, the attempt to distinguish environmental discourses following this classification was embraced prudently regarding participants conversations, as sometimes there was not enough evidence to sustain their existence but just possible clues in their direction, presented as isolated points of view of the participants.[41]

Through all the analytical process, as it was during the design phase, the language translation is a key challenge as participants have English or Spanish as their first language.

As a result, two chapters focused on findings were built: Chapter 5 and Chapter 6 of this dissertation. Chapter 5 captured the initial discussion about the environmental crisis and describes environmental risks in both countries, according to the representations expressed by the participants: what are the main problems (issue awareness), who are responsible and how (responsibility and agency). Although excluding references to media, these findings are key to understand the non-linear process of culturally mediated reception: they shed light on choices and interpretations that would later appear in the exercise with videos, while potentially reflecting the influence of environmental communication included in their media repertoires. If Chapter 5 might offer a broader picture of the participants as citizens, Chapter 6 is explicitly focused on participants as audiences, including their reported media uses, their representations of media influence on the engagement with environmental risks, their performed choices of specific eco-videos and the interpretations they reported of the top choices.

The comparison between Ireland and Uruguay was done following the description of the main findings per country in both Chapter 5 and Chapter 6: after reporting issue awareness, after reporting representations of responsibility and agency, and after reporting media uses and interpretations in

each country (Chapter 6). Country performance was assessed through the diverse voices of all the young adults surveyed there. Therefore, and for the same reasons of not generalising after one group potentially enacting specific cultural positions, no comparisons were done between similar profiles in distinct regions. For instance, eco-villagers or folk musicians across countries were not extensively compared in this study.

Countries are the most obvious delimitation of this socio-cultural system in this study, although cultural positions of migrants (Ang, 1990) and regional identities associated to a world system situation will be considered in comparative terms. The cultural studies construct of 'interpretive communities' (Fish, 1980) does not primarily apply to the groups which will be studied if considering the strict definition suggested by Schroder (1994) because what links them primarily is not the 'audiencing' of a certain media, although findings led to potentially indicate the presence of some interpretive community.

CHAPTER 5. ENVIRONMENTAL RISK ENGAGEMENT IN IRELAND AND URUGUAY: ISSUES, RESPONSIBILITIES AND AGENCY

Introduction

This chapter presents the findings obtained in the initial dialogue with young adults in Ireland and Uruguay concerning the environmental crisis and their engagement with the risks (see Guide for Discussion in Appendix A). Firstly, social representations of environmental problems and issue awareness across the groups will be presented for helping to understand "what are the environmental problems" according to Ireland respondents first, followed by respondents from Uruguay in the second place. These findings will be discussed and compared at a country level in a subsequent summary section before focusing on responsibilities and agency in the environmental crisis. "Who and how" are responsible, according to focus groups´ participants is reported, country by country, along with their representations of agency. Finally, this second set of findings is summarised, discussed and compared among Ireland and Uruguay. Therefore, audiences' voice is generally prioritised through direct quotes and ranking themes according to their agendas, leaving most of the analysis to the end of each section.

Environmental Risks and Issue Awareness: What are the Problems?

Respondents´ Representations of Environmental Problems in Ireland

When asked to mention which are the main environmental problems nowadays, participants belonging to each one of the eight target groups in Ireland have discussed a range of perceptions regarding the risks associated to the built and natural environment, which were close or distant from their personal and collective experience (see Table 7.)

Five themes were identified by the researcher, which stem from these observations and experiences: (1) climate change, (2) plastic waste, (3) food, (4) depletion of nature, and (5) pollution. Although such themes emerged across various focus groups, they were framed differently (see second column of Table 7), localised in different levels (see third column of Table 7), and discussed with diverse levels of intensity (bold text in Table 7, which signals high salience of the issue within the group).

Table 7. Environmental Risks Reported in Ireland

	Perceived Environmental Risks	Environmental Risks´ Localisation
Group 1: Folk Musicians	➢ **Earth pollution** ➢ **Water pollution** ➢ **Contamination of the food** ➢ **Plastics** ➢ Animal extinction ➢ Death of bees ➢ Climate change	Worldwide Worldwide Worldwide Worldwide/Personal Worldwide Worldwide Worldwide
Group 2: Inclusion Programme	➢ **Global warming** ➢ **Emissions by cars** ➢ Animals being killed and illegally traded ➢ Desertification ➢ Deforestation ➢ Plastic pollution in the oceans ➢ Overconsumption and poor recycling habits	Undefined/ Worldwide Worldwide/Country-wide/Personal Far region Far region Far region Worldwide Undefined
Group 3: University Students (First Year)	➢ **Global warming** ➢ **Fast fashion** ➢ **Plastic cups** ➢ **Industrialised meat production and consumption** ➢ Emissions by cars ➢ Icebergs melting ➢ Overpopulation ➢ Habitat destruction and animal depletion	Worldwide Country/Far region Worldwide/Country/Personal Undefined Far region Worldwide Worldwide/Far region
Group 4: English Students	➢ **Air pollution by factories** ➢ **Rubbish domestic disposal/non-recycling** ➢ Pollution by cars ➢ Water pollution ➢ Plastic bottles in the sea	Far region (home country) Worldwide Far region (home country) Country/Personal
Group 5: Third Level Students (Advanced)	➢ **Climate change/Global warming** ➢ **Transportation/Cars** ➢ **Meat and milk consumption** ➢ Plastic usage (bags, cups) ➢ Waste ➢ Soil health	Country/Far region Country Worldwide/Country/Personal Community/Personal Worldwide/Country Worldwide
Group 6: Young Farmers	➢ **Climate change** ➢ **Volatility of seasons** ➢ **Production processes** ➢ Water scarcity/Desertification ➢ Biodiversity	Country/Personal Local Worldwide/Far regions Undefined/Worldwide Undefined/Worldwide
Group 7: Refugees /Asylum Seekers	➢ **Changes in the weather/Seasons** ➢ **Deforestation** ➢ Plastic bags ➢ Housing	Country Far region (home country) Country/Personal Country/Personal
Group 8: Eco-villagers	➢ **Climate change/Justice** ➢ **Not growing own food** ➢ Oil extraction ➢ Plastic production ➢ Chemicals in farming ➢ Chemicals in clothes ➢ Human extinction ➢ Deforestation ➢ Loss of biodiversity	Worldwide/Personal Worldwide/Country Undefined/Worldwide Undefined/Worldwide Undefined/Worldwide Undefined/Worldwide/Personal Undefined/Worldwide Far region/Personal Far region/Personal
	Language reflects that of participants	Researcher´s categorisation
Source: Personal collection.		

As evidenced by the Table above and further described in the following sections presenting the themes discussed in Ireland, environmental risks were, in some cases, understood as exerting negative

impacts in the environment (i.e. global warming), and in other cases, as causes of environmental threats (i.e. beef production or consumption, or global warming.)

Climate Change (Theme 1, Ireland)

Environmental issues were instantly associated with global warming or climate change in 5 out of the 8 focus groups conducted in Ireland. Although this was not always extended beyond the listing of the issue through short definitions and manifestations of the problems; like "global warming", "pumping like millions and million tons of carbon in the environment" or "climate injustice." While being at the top in the collective mind in most of the groups, climate change was predominantly expressed without further explanations of its nature, with an almost perfect consensus that captured both its urgency, and its main causes; namely humans through the emissions of their various activities.

Among young Farmers, junior and Advanced University Students, the theme was extensively discussed through mainly the analysis of emissions. Also, the only consensual concern among Eco-villagers and the Social Inclusion Programme, was that it was considered as paramount for everyone as an imminent threat. Within the remaining three groups, comprised by non-native Irish residents, climate change was not spontaneously mentioned (refugees from Asia and Africa, English students who are native to Brazil and Mexico), or priority was not given at all to climate change in the discussion of the main environmental problems (Folk Musicians from France, Italy, and Spain).

Indirect references to climate change were provided through the discussion of a series of human activities contributing to it (for instance; use of fossil fuels in cars, flights, beef production and consumption), which was a much more recurrent approach than the one focused on the effects of climate change as a dominant environmental risk. Electric cars were mentioned across various groups, including the Social Inclusion Programme, even though it was usually taken for granted as an effective transport strategy to tackle the environmental crisis. For instance, take this reflection of an Advanced University Student:

> Well, if we look at something like climate change, we have a generation, multiple generations of people who want to act actively with regards to climate change and making a difference and stopping the damage that their parent's and grandparents' generations caused. But, in order to do that, it's at a higher expense. If you want an electric car, it costs three or four times more than a second-hand car you can buy that uses petrol or diesel If you want to take public transport, you have to spend more time because it is slower than car traffic, especially here in Ireland. In well-planned cities it might be different, but here in Dublin it is more of a time affordance to have to use public transport. And therefore, that means its less time

> to make money which is needed to pay for housing, pay for bills, taxes. It's a full circle unfortunately.

The mainstream perception specifically pointed to emissions coming from land transport and cattle as a central and urgent environmental problem that is being faced by societies, while the topic of cows brought about inter and intra group dissensus. While plant-based diets were the obvious answer for most University Students, young Farmers consensually offered an opposite risk-assessment, similar to marginal voices of University Students coming from farming families:

> **Subject A:** Regarding the climate problem, flying ... Like Ryanair and its emissions for 1-year accounts for the emissions of 84 million cattle, you know ...
> **Subject B:** But the society doesn´t want to hear that because everyone flies but not everybody is a farmer.
> Many subjects: Yeah.
> **Subject B:** So, people think that if they change their eating habits, they are making a change. And yes, they can, but they have no idea of what they are displacing with what they are replacing.
> **Subject C:** If you would look at the chart of sustainability report, a few weeks ago, it says that the average farmer in Ireland`s emissions are the same as 16 people, but how many people does the average farmer feed?
> Many subjects: Yeah.

Climate change was referred mostly through causal factors among University Students. Transport (not having a car, transition to electric cars, etc.) and meat consumption (part of the generational package previously referred to and developed in the subsequent theme of food) are broad paradigmatic examples. Meanwhile, some of them pointed to climate change effects when associating it with weather variations:

> It's kind of, like, a thing where all the future thing is climate change. Like, even today, it was quite warm. But this time last year, the start of March, it was snowing. And we were just kind of going: Ah, isn't the weather mad? But you're not really thinking ... Even, like, over in America, the Polar Vortex and things like that, people I know living over there, it is affecting people's everyday lives but they're looking at it as a fluke, as a one off. And they're kind of, like: we're going to look back at this in twenty years, remember that one time we had this? And it's becoming more and more frequent and people are still kind of looking at them as individual anomalies.

Refugees and Young Farmers also associated climate change to weather or seasons variations, which they did through their own testimonies. However, they pointed at concerning and not enjoyable alterations to climate that they suffered personally. One of the farmers reported:

> Well, the weather I think is a big one for us, with a drought last summer it has affected some areas of the countries worse than others, other years we had serious flooding in certain places, people´s farmyards and houses everything destroyed. So, the change and the volatility in the seasons, the seasons as we knew 15 or 20 years ago don´t exist probably now, because you have (unclear) blooming in January when they shouldn´t be ... and you see some other things happenings at other times of the year that shouldn´t necessary be happening. So, I think the whole ... and obviously that all feedbacks to climate change or some sort of climate issues.

Additionally, more severe rural effects of climate change witnessed in their home country were reported by some of the Refugees surveyed:

> It´s only 7 months since I came to Ireland so I´m not that much familiar with Ireland. But, in Ethiopia, the weather is not similar than before. In winter we have only 2 months but in winter whenever it´s raining, farmers are farming, but now it´s been so much sunshine, the terrain is not any softer. There would be droughts, most of animals are dying because of the draughts, because there is no rain. Too much sunshine. It´s not like before!

For Eco-villagers, climate change was a matter of human survival, which was partly accepted as a challenge we must be prepared to face and partly a reality of environmental concern that we need to fight against. The personal testimony of a resident of the Eco-village, who was also a member of the Irish chapter of the international movement Extinction Rebellion, reflected this frame of survival at risk which dominated this focus group discussion:

> I've always been very, very focused on human rights but more recently, I've been kind of looking for a new campaign and kind of landed on climate change and joining a group called Extinction Rebellion. So, I find it really good to be doing things and be active and to feel like I'm actually achieving something. So, I think for me right now, my main focus would be the extinction of humanity, I feel like that would be a pretty big one!

When discussed in groups where climate change was not a top priority, doubts and nuances about the centrality of the phenomenon emerged. For instance, as a matter of competing priorities, Refugees consensually argue that:

> Climate change is not the first problem in this world. It´s war between governments, not giving the rights for everybody, even in Syria we know what´s happening now, even in Ethiopia, so there is a lot of these things. For me, like, the main problems are, like, war, conflicts, religions conflicts, these all. Conflicts.

Furthermore, the only doubt about the anthropogenic origin of climate change was raised in this group as part of the initial discussion on environmental issues. One of the Refugees expressed very naturally, without traces of doubt and from the best of her knowledge, the incapability of humans for altering natural phenomena: "I don´t think we can, like, do anything for this, to change the climate, I don´t think we can do anything ... Like, can you control the rain? No."

English students coming from Brazil and Mexico excluded climate change from the list of the biggest environmental problems. Although they did not link it, some factors, such as car pollution, could certainly be related to the issue, and "melting icebergs" is a trope they mentioned. Although residing in Ireland and analysing their current surrounding environment in most of the questions, many other had their peripheral country of origin as a more vivid reference. Highly populated cities in their countries such as Mexico City or Sao Paulo are well known for air pollution, while the region they come from presents the peripheral kind of environmental threats analysed in the first chapter of this study.

Plastic Waste (Theme 2, Ireland)

The issue of waste, mainly plastic waste, was another prevalent theme raised within the focus groups conducted in Ireland. Such issue was paramount in five discussions (English Students, Refugees, Folk Musicians, First Year and Advanced University Students). Even though it was not always listed in the first place as a top concern, it finally permeated 7 out of the 8 focus groups through marginal references. The only exception was the Young Farmers, who did not discuss waste of any kind, including plastic production or disposal probably associated to their daily activity.

Plastic was the paradigmatic case of pollution associated with consumption of products that were not properly disposed or classified afterwards. Coffee cups, bottles, nylon wraps and even clothes – usually associated with micro-plastic pollution – were the examples afforded by these young adults. Plastic-wise, such practices seem to be a primary component of a generational package of environmentally conscious attitudes, emerging within both the diagnosis of the environmental crisis, and feeding into its potential solutions, as further discussed later. A First Year University Student makes this explicit conclusion: "I have the impression that our generation is aware of the fact that there is an issue: Don´t waste plastic, don´t eat too much meat, don´t buy stuff, don´t waste too much water ..."

The ban on plastic bags was mentioned by Advanced University Students, when identifying barriers and facilitators for adopting pro-environmental habits. Meanwhile, a participant from the Refugees focus group stated:

> I remember when I came to Ireland, 2 years ago, they started making these kinds of bags to protect the environment. These bags could be used just for the food you had left, so this bag is a very kind of healthy bag, so it would – I don´t know how to say it in English but I will try – it would mix with the food and it will be gone. So that won´t damage or cause any problem for the environment, which was a very good idea, I liked it, and I was using at home personally these bags for the food, and another one, the black one, that is just for papers or boxes, this kind of things. I liked the idea so much.

Among the top concerns of First Year University Students, even before the researcher specifically introduced questions of environmental challenges, a couple of voices pointed to fast fashion. Besides human rights issues, this trend was also associated with environmental impacts:

> I was watching something about fast fashion and how just in general people are buying things online and they are not very informed about who´s making them, like in countries where children sew clothes together … And fashion bloggers, particularly Irish ones, are prone to let´s say buy pretty girl things and be misguided. And they are so cheap stuff because of certain reasons, like, there is a reason for it. And it is contributing to the negative effects of the environment.

Participants were critical about over purchasing (and underusing) products, but also about the failures in disposal routines of non-compostable garbage in households, companies, and even in the case of entire communities. As a participant of the Social Inclusion Programme put it: "People are so wasteful ... I know a lot of people who reuse and recycle, but the majority wouldn´t care to do it". If a lack of will is pointed to by some participants, others argue that it is also a matter of cognition and knowledge. Some English Students, for instance, put it this way:

> **Subject A:** We always think about the big companies but not always everybody knows a lot about recycling rubbish and this stuff. Because we just have here the places and we would do, like, what we think it´s the best as we can but we don´t know what to do. I was talking with my boss recently and she said that in the recycling bin you have to put just things that are clean and they are dry and my boyfriend, like, he cuts little things as well and put inside of the bin as well, then I know a lot of people that don´t know about this. And I don´t know if we are doing the best we can as well, and I can see bottles in the sea, I don´t know if we are doing our best as well, it´s not just about companies ...
> **Subject B:** I think it´s a cultural thing because for example in here some people have this culture of separate properly all the rubbish and in some places, they

> don´t have that culture. It´s less in the countryside than in the cities. And we can encourage ... Like, now that I am here ... In my school we don´t do that of separating the bins for the rubbish, some companies do that and they told me it´s good because they have a day for the newspaper – they collect newspapers. So, there is a recycling culture, but it´s not like a general thing.

An Eco-villager described a nearby town in Bulgaria, adding a powerful rural example of the issue of waste disposal:

> It's a very small village but they don't have the thinking of saving the nature [sic.] They throw their garbage by the river. And they don't separate the garbage, it's everything on big piles. And what they do is, when the pile is very big, they throw it on the very big hole and cover it with soil and they think that the problem is over. But they don't realise that all of this plastic will stay for all the years there.

Some Folk Musicians, echoing similar sentiments as those of the Eco-villagers, located the problem of plastics not at the consumer end of the process, but at the (over)producers end, being unwilling to reduce it:

> **Subject A:** The plastic, for instance, as well; there is no interest to reduce because they have to manufacture to produce plastic ...
> **Subject B:** Yeah. It's cheaper.
> **Subject A:** ... It's cheaper and it's already there, so they just have to not change, they don't want to invest and lose money to change the technology to make another material that doesn't damage. The technology is there, there is people that don't want to invest in this. They don't change. We are now packaging fruit without peel, it's like ... really?
> Many subjects: Yeah!
> **Subject A:** They are putting plastic where plastic is not needed.

Companies using large amounts of plastic in order to provide services to customers, represented a middle ground between production and consumption. A First Year University Student argued:

> If only some companies would stop doing the plastic stalls, that would bring about such a powerful effect. I just think it takes one massive, like, multinational company, that could make such a difference in years, say it something like McDonalds, if they just change their stalls from plastic or they cut the cups from plastic to, like, compostable, it could, like, in the future change so much. It just takes one person in power like that, it could make such a difference, so like why are they not doing it?

An Advanced University Student added the cost-effective analysis carried out by companies regarding the correct disposal of waste:

> When I think of where I work, there's a lot of, like, unnecessary packaging of stuff so, like, I work in a shop and even before you buy the stuff, there's packaging already on it, are taken out of, like, two or three other boxes or bags of plastic and stuff like that. And, while we recycle some of it, a lot of it is kind of, like ... what we get our stickers on wouldn't be recyclable because it's kind of a plasticky, papery kind of thing so you couldn't recycle that. But when it was brought up to our manager: Could we possibly implement something? It was kind of like you said, about the money, it was just not feasible money-wise, because it will cost the company so much more to do that (…) Then why am I bothering to do that when, like even a small shop like I work in, they're just like: there's no point.

Plastics in the ocean are a recurrent image across the discussions, which is better analysed around the theme of nature depletion, as the problem is usually associated with affected flora and fauna in the sea.

Food (Theme 3, Ireland)

Food is the third most salient issue raised across focus groups in Ireland (discussed in 5 of them): Young adults report concerns about its quality, its availability, alongside the environmental impact of food production and consumption. While being a salient issue in the groups where it emerged, food was surprisingly not associated with environmental risks through the perspective of Refugees, English Students or even Social Inclusion Programme participants in Ireland.

Besides the evidence provided when discussing the theme of climate change, participants afforded differing approaches to food as a problem and evaluations, which certainly were diverse. For example, the issue of vegetarianism and veganism was widely discussed: As a trend among younger generations, especially cited for its eventual contribution to mitigating the environmental crisis, not to mention the problematic approach of those who promote it. These passages of First Year University Student's discussion offer some evidence of such perspectives, which certainly went beyond global warming in reflecting attitudes towards all kind of living creatures:

> **Subject A:** I also think it´s an industrial type of issue because the meat process that we get everywhere in our country is really, really bad and dangerous. And is affecting the environment terribly. But in Mexico it´s becoming so popular for the new vegan and vegetarian drinks that they are pushing farm into deserts and undoing deserts to make them fruitful. So, it's really on industries and how much they care besides profit for their land.
> …
> **Subject B:** Veganism, you know, they are so passionate about it, you know?
> Choir: Yeah, yeah.

> **Subject B:** It´s not only saying "oh, I don´t like animal products", which is fair enough, but then you see kind of how a friend of mine starting to be like "oh, it helps you feel better" but suddenly become "oh my God, why do you eat animals, that´s disgusting" and saying “how would you protest for sea health and you still eat fish.” And it´s all a sort of anger almost, and that´s the stigma about vegans being so passionate that they are angry, so then people almost get kind of … I don´t know … They will eat meat and be like "screw it, vegans.” It´s just, like, a kind of sign. So, there is definitely a stigma around, and at the same time other people is just "oh, vegan, cool, that´s your choice, that´s cool", while things online get much crueller.

Animal products are a strong focus of discussion in the two groups of university students and also for the young Farmers, with a clear divide between urban and rural perspectives. As previously analysed, young Farmers gave priority to the framework of emissions which brings about climate change, but they went further in suggesting other environmental and social risks of plant-based diets:

> **Subject A:** Not everybody has to produce food, but everybody eats food, and they think that they can substitute Irish dairy Irish milk with soya milk or veggie burgers or whatever the case may be ... But they don´t have any idea of the consequences of the miles through which the food is carried through land, the carbon footprint, the use of water ...
> **Subject B:** The loss of jobs.
> **Subject C:** They all think it´s, like, "oh, let´s reduce our dairy, let´s reduce our beef production in Ireland", and that´s going to solve climate change. But it will reduce our emissions and will increase emissions elsewhere around the world multiple times if they have to produce what we are producing. And I think that it is a missing link that we … as consumers are very very hard to be convinced of all that.
> **Subject C:** But it´s also the ethics of all of the food that´s been produced for let´s say, vegan diets ...
> **Subject E:** But people don´t see that.

Also, an Advanced University Student whose family owns a farm, brought dissensus into her group of discussion, where not eating beef had been mentioned once as a much-needed pro-environmental action to individually embrace:

> I hear the arguments about veganism and vegetarianism, like, saying killing cows or milking cows is wrong. But you have to milk cows or they become sore and they die. You have to milk them. That kind of thing, it’s just that they are bred for a purpose, but, aren´t humans bred for a purpose as well? Like, you don’t have a child for fun ... (Laughter.)

Further references to environmental risks associated with food did not focus on emissions or meat of any kind, while they did focus on destructive agricultural practices associated to cereals or vegetables.

Agrochemicals are a concern for Eco-villagers, who explicitly blamed farmers as "they use a lot of chemicals which are thrown into nature" in food production. At the consumer end, they expressed concern about access to healthy food, while portraying a clear position around food sovereignty, as expected, given their involvement in permacultural practices.

> **Subject A:** There are people who always need to go to the supermarket for everything or pay people for the food.
> **Subject B:** People who live in Dublin, I would say, inner city Dublin, who live in Council houses, who have concrete back gardens and no access to any sort of growing place. And those people would still buy all from the supermarkets just because they're poor but they buy more terrible food. They still are completely dependent.

"Pollution of the food" appears within the top environmental problems listed by Folk Musicians as well, which is better understood later on, when discussing responsibilities for environmental degradation:

> **Subject A:** Because it's cheaper, or because the people who manage the manufacture of this, Monsanto Bayer, is buying the politicians so they don't wanna ban it, I mean [sic] ...
> Choir: Yeah.
> **Subject A:** People who can control this are not controlling it.
> Subject B and C: Yeah.
> **Subject A:** We can take it as a personal issue but I don't grow corn, you know, and the people who grow corn the cheapest way is to do it with this kind of products ... Again, it's about profit.

Nature Depletion (Theme 4, Ireland)

Depletion of nature is never a salient topic in the Irish sample, but it appears at some point in most of the groups (7) showcased in diverse forms: Animal extinction, death of bees, habitat destruction, deforestation, desertification, and loss of biodiversity. Animals in particular appear as a heartfelt issue when this comes to the forefront, establishing empathy in most participants, although it does not usually lead to further discussions.

Inclusion Programme participants, Folk Musicians and First Year University Students raised the issue of animal cruelty or animal extinction. Only in the first of these three groups, was it a major concern, as passionately explained by one of the participants, while in the others, it was just a marginal issue. Even fossil fuel extraction was criticised within the Social Inclusion Group in light of how it affects wildlife: "It just kind of pisses me off because it's not even just humans we are hurting ..."

Furthermore, she convinced other participants that animals would suffer the most during the environmental crisis, suggesting a still anthropocentric attitude of stewardship with regards to certain species.

This highly engaged participant from the Inclusion Programme, developed her point of view when ranking the main problems facing societies while making clear priorities between her top concerns. Although she included homelessness, probably influenced by the fact that she was sharing the workshop with homeless participants, non-human animals were privileged in her concerns:

> So, illegal animal trade, homelessness, would be big issues in my view because I love animals so ... The pollution screwing up the oceans, so many animals are dying and then illegal animal trade, and cat runners are also doing their part, which is just disgusting to me, and we are burying so many creatures over the years because of that. An example of it would be the penguins, you know? Have you seen a picture of them? They are adorable! And the Chinese people have killed them all to extinction and they are now illegally capturing Australian penguins? And probably torturing the poor things. Then homelessness is just getting worse and no one do nothing about it for this.

Within Folk Musicians, there was also a recurrent voice pointing to other living creatures at risk:

> That's the thing, I don't think it's just about the humans at all. One of the most shocking things about, like, this environmental crisis is the way it affects all species and the fact that's all obviously our fault and we are not doing everything we can to fix it. We are always killing, like, I don't know how many, animals per second, a lot. For example, the plastic in the ocean and etcetera.

Within First Year university students, wildlife was not as much of an issue as farm animals were, since the overarching theme of their discussion was climate change in the dimension of the causes. However, some participants mentioned empathy towards animals in general as a complementary drive for vegan diets, while others clearly distinguished cows from “wild” species at risk because of the destruction of their habitats, or because of their being hunted or fished.

When asked to think beyond climate change, Advanced University Students also mentioned wild animals as a focus of concern, with a rather critical interpretation of this phenomenon:

> You know there´re ads about adopting polar bears and I think it’s, like, cases when people say: Oh, they’re so cute! And I’m touched when animals are becoming endangered and it’s kind of a thing where obviously it doesn’t affect people dramatically in their everyday lives if giraffes go extinct. But I think it’s that kind of thing were people are, like: They’re my favourite kind of animal, they feel like they are connected to it but not enough to actually go out and do things. They’re just kind of, like: I’m going to go, I’m going to give a couple of Euros to

> save a giraffe, that you're never going to see. But it's kind of getting to the stage now were your children are going to be looking back at giraffes like dinosaurs: Remember when we used to have them?

Non-animated nature was another approach to this theme, focused around desertification and deforestation. It emerged in the Social Inclusion Group for instance, as a major current environmental risk, and also within Refugees, who mentioned "deforestation, to build houses using trees", vaguely relating it afterwards to global warming as well, and not only as being damaging to specific ecosystems.

Desertification also appeared attached to the instrumental value of ecosystems. For instance, one of the Advanced University Students expressed:

> The health of our soil. I only know this from work, from last year. Around this time last year, the first ever like world soil survey was conducted. And it's kind of back to what you were saying earlier about if we all give up meat. But the majority of the Earth's growable soil is fecked as well, so maybe vegetarian is the answer - vegetarianism or veganism is the answer but once again, if we don't act now, or yesterday, there'll be nowhere to grow vegetables and plants.

A couple of Eco-villagers when introducing themselves, offered early personal testimonies of concern for the loss of biodiversity, where instrumental value was expanded to include leisure activities in nature and sentimental values as well:

> **Subject A:** Also, there are far fewer trees in our region and we should save them because they're the last big trees there. But we have also a problem with, maybe I can say, the government that doesn't care about it. And they cut these trees, every year, little by little and now, I'm not sure when I return, if there will still be some trees! Maybe we will try to plant more trees with my partner and some volunteers to make new forests and to make the area around the river not a garbage dump, but make it a beautiful park and more friendly for new people.
> …
> **Subject B:** It's a small valley, small village yeah. But I would like to protect that place because I have some people, older people that said that in the past, it was full of plum trees, full of chestnut trees, full of bees and now, not any more. So probably we need to do something to bring back the biodiversity there.

In contrast, within Folk Musicians, the concern for certain species was rapidly put into question because of its anthropocentric and instrumental foundation:

> **Subject A:** But, at the same time, when we are trying to ... The main motor or fuel – fuel is not the right word (laughs), but the main fuel for us to try to fix it - it's our survival.
> **Subject B:** Of course, yeah.
> **Subject A:** It's the same, for example, the example of the bee. Like, the bees are dying and we are all worried because, if they die, we can't really produce the food that we need to survive.
> Many subjects: Yeah.
> **Subject A:** We just don't want to save the bee just for the sake of saving the bee.
> **Subject C:** But we should.
> **Subject A:** Absolutely.
> Many subjects: Yeah.

A further eco-centric point in their discussion reflects another perspective of this theme: How the human species is at risk, not only animals and not really just the planet. An Eco-villager referred to "human extinction" as the top threat nowadays, while a final but strong clarification, aligned with this perspective, emerged within Folk Musicians, when discussing global warming. They recall various extinction events and even Gaian notion of humans needing the earth rather than vice versa:

> **Subject A:** For me it's important to notice that climate change I wouldn't call it an environmental issue. The environment will be fine. The environment was fine ...
> **Subject B:** Yeah.
> **Subject A:** ... Millions of years ago and there was just lava or just oceans.
> **Subject C:** Yeah.
> **Subject A:** The environment is kind of a neutral thing and there will be other species.
> **Subject D:** Or no species at all …
> **Subject A:** It's not an environmental problem, it's a problem for us!
> Many subjects: Yeah (laughs).

Among young Farmers, a minoritarian perspective pointed to water as a concerning issue with a global scope. Along with critiques on water use for vegetable production, or in meat production in less responsible countries than Ireland, water scarcity appeared closely associated to the process and problem of desertification:

> I think, on a big scale, water is probably gonna be the most important thing that we have to care for in a couple of years. There are studies saying that 50 percent of the population would be living in desert areas in the next 30 or 40 years so, you know ...

Furthermore, water in natural areas and biodiversity in general was discussed as an easily perceived environmental risk that could engage both rural and urban populations:

> Another environmental issue is that of biodiversity, which is going to become a huge one because ... Like, climate change is [also] a hard one. Water is very obvious for people – they could go into the field and there´s a stream there, they can imagine it happening – but it´s much harder to imagine the atmosphere heating up and, you know. I think people seeing less biodiversity in their own fields or driving into the countryside and seeing less biodiversity, it´s an easier thing to imagine so it´s gonna be the one thing that they are going to cling into. And it´s much easier to put a picture of that in front of a middle-class urban population and they are gonna latch on to this.

Pollution (Theme 5, Ireland)

Pollution, in its various forms, is another theme discussed within the Irish sample of young adults. It was mentioned in three groups where it was vaguely discussed, with the exception of English Students from Brazil and Mexico. Direct pollution of water was the sub-theme referred to in all of these groups, while isolated mentions to air or soil pollution were added to the list of the top environmental problems registered in a couple of cases.

Within the discussion held in the Inclusion Programme, focused on how "the pollution screwing up the oceans" was listed as a top priority and was associated to plastics affecting wildlife. Within Folk Musicians, however, the pollution of livelihoods (soil, water) was listed as a practical concern for the survival of humans, without further discussion of this specific approach to the theme.

English Students were focused more on pollution as the dominant characterisation of the current environmental crisis, including personal testimonies across both their country of origin and in Ireland. Their discussion included pollution in both the natural and the built environment, affecting water in coastal areas and the air quality of the cities. Their references to the issue started early in discussions, when asked about what were the main problems that societies face today:

> **Subject A:** I think that depends on the country also. Because for example now in Mexico there is a big problem because of the contamination ... and because of the overweight [nature] of the kids, like in USA also. But over the world I can´t really see ...
> **Subject B:** There are a lot of things happening regarding the environment.
> **Subject C:** Yeah, the environment.
> **Subject D:** Like in Mexico City.
> **Subject E:** Yes, but today there is another problem because [of] the pollution, at least in my city, the increase of illnesses because of the atmosphere, it´s not really clean air, my city is an industrial city so there´s a lot of companies and factories.
> **Subject F:** I think that with respect to this situation as well, because you usually have these big companies, they just want money and the environment, what we want, what we like … For example, if you want to do some sports ... Like, I was

> yesterday at the beach doing kite surfing and it was really nice, but we could see the water was not clean, because we were close to the city centre. It was horrible and I feel really bad after that, like my whole body. And this is the thing, if you want to do something to have less stress because of your week and then you want to do some surf then you can´t because everything is polluted.
> **Subject G:** Pollution. We all see a lot of countries in the world, in some countries more than others, a lot of cars. And, for example, USA and Brazil said they don´t agree with the treatment needed to reduce the pollution, so I think that is the biggest problem.

In the meantime, industries that could be considered as polluting agents of soil or water, were sometimes only associated with emissions causing climate change or overproduction of disposable goods. Alternatively, as for the case of oil companies, they were associated to undefined industrial damage, or the growing need to produce more plastic. A Folk Musicians offered an example of these latter references which focused on the unspecified environmental impacts of extractive companies:

> I think there can be a way for the big companies that want to make money with other products. I mean, they are making money subtracting petrol from the underground, why can't make profit getting it from the air or whatever. They have to build the mills, they have to have the technology, I mean I know they have to take until the last drop of oil from the underground because they already have the structure, but there is another way to get profit. I don't know if they are interested in this, I don't know if it is the old style who is controlling or whatever but I can imagine another way of making a profit, if it's necessary.

Respondents´ Representations of "The" Environmental Problem in Ireland

In parallel with specific risks identified and discussed in Ireland, "the" environmental problem is defined as a more general situation or as an intertwined phenomenon involving economic, political, cultural and socio-structural conditions in 6 out of the 8 focus groups conducted in Ireland. These two levels of thought found across the sample of young adults, is explicitly acknowledged within the group of Folk Musicians. One of them summarised the diverse set of opinions by explaining that earth, water and food pollution are the environmental problems from a practical point of view that is regarded as "what keeps people alive." However, at the structural level, "in the big picture", the main environmental problem is "the fact that the environment and the economy have taken a different path, and the whole economy is not counting on the limited resources of us."

In the following chart, it is possible to identify how these broad perspectives are expressed, pointing to the roots of environmental risks which are distributed across the groups, and how central these concerns were in their initial account of the environmental crisis. (For clarity, bold text signals

salience within the discussion, while regular text signals isolated mentions.) Each group taking part in the research tended to focus on one of the levels of discussion, at least at the initial open question teasing out the environmental problems. The discussion of structural issues instead of specific environmental risks remained central in 4 of them. As exposed in the chart, those groups were the Eco-villagers, the Advanced University Students, the Folk Musicians and the young Farmers.

Table 8. Structural Conditions Creating Environmental Risks in Ireland

Group 1: Folk Musicians	➢ **Capitalism** ➢ **Economy that dismisses natural limits** ➢ Impossibility of bottom up change, without the States acting
Group 2: Inclusion Programme	No comments
Group 3: University Students (First Year)	➢ Increasing inequalities among populations ➢ Capitalism where profit displaces noble causes
Group 4: English Students	➢ Companies polluting while carrying out the process of producing goods we need ➢ An unsustainable world, producing too much waste
Group 5: Third Level Students (Advanced)	➢ **A money-driven world** ➢ **Lack of compassion**
Group 6: Young Farmers	➢ **Wrong assignment of responsibilities and courses of action to reduce the environmental impact** ➢ Not debating on how to produce what is needed
Group 7: Refugees / Asylum Seekers	No comments
Group 8: Eco-villagers	➢ **A profit-oriented society** ➢ **Individualism and disconnection from each other** ➢ **Elites don´t care and keep business as usual** ➢ The extinction of humanity
Source: Personal collection.	

The (capitalist) economic system, involving unsustainable dynamics of production and consumption of goods, along with a profit-oriented culture, were the main explanations of "the" central environmental problem as broadly considered. In this regard, they mirror early concerns of Marxist analysis regarding the treadmill of production, signalled in Chapter 2, while also sketching a critique that identifies the existence of a dominant culture along with other cultures based on alternative values. Secondly, power inequalities were identified as a critical factor in correctly understanding the reach, nature, and building process necessary to assess overall environmental risk. Therefore, the acknowledgement of asymmetries that mark the environmental crisis, as argued in the second chapter also prevail in these discussions, although no region divides are clearly articulated except for one or two interventions. Finally, with less prominence, social factors were signalled, in the form of non-beneficial relational values held by individuals – relatable to a capitalist culture or as social dynamics essentially misleading the evaluation of the environmental problems and their potential solutions. Again ethics, in its relational dimension, appeared as the potential root of environmental problems.

Quotes and discussion passages illustrating these three types of environmental crisis representations beyond specific issues will be presented below.

Capitalism, as the simple label for categorising the underlying problem, appeared quite rapidly within Folk Musicians, Eco-villagers and University Students, while it was surprisingly not mentioned at all by the remaining groups. For Folk Musicians, it is the best synthesis of the many structures creating all the problems that we face today as societies, including the environmental crisis:

> I would not call it capitalism necessarily before hearing Subject A's answer. Now I think I could as well, it's about, like, capitalism, because it's about people wanting to have gains [which] have become more important than morals. For example, there's a lot of inequalities, economic inequalities, because, for example, we want to keep having good business relationships with China, which treats its workers pretty poorly. And just also with regards to the environment most of the time there are things we keep doing or not doing just because it's too expensive and the big companies are locking it for you.

The strong agreement within Folk Musicians on capitalism as the root of the environmental crisis – "the craziness is the pursuit to maximise profits" – was coincidentally echoed also through an isolated voice within the First Year University Students who argued:

> In the way I see it, it`s also into the capitalism we are into and which is the way we have always been functioning, that is for me like an endless run to gain profits, but there is not really a goal or point in it besides gaining more power and gaining more money and that´s it. And the more noble causes or goals are just not being put at the centre.

Among Advanced University Students, the identification of profit as a cross-sectional factor associated to the environmental crisis, was the first answer obtained when asking about the most pressing problems nowadays. "I can only really give a broad answer by saying money. In that money is the cause and solution to all of life's problems at the minute." However, this participant was not referring to companies or abstract notions of the establishment, but to the individual goal of making money, and the naturalisation of inherent modes of personal behavioural practices, which alternatively competes with more altruistic modes of pro-environmental behaviours that are both communally driven and more resource-intensive. This understanding of capitalism, not only as an economic system promoted by institutional and corporative agents, but as the mainstream culture embraced by (a majority of) humanity, is confirmed by an Eco-villager:

> People at home, they are concentrated on how to gain more money and how to make more business without thinking about the future generations. They just think

> about now to be OK and not if their children will be fine. The next generation, they don't think about it, only to be, to feel good in this moment. I mean in a materialistic way, it´s all about the money, they think. And also, because the situation in the world now is always connected to money and business. I don't see that money is bad but, it should not be the goal.

This notion of people not understanding each other, disconnected from one another and being self-centred was part of the initial diagnosis of the main problems nowadays within Folk Musicians, Refugees and Eco-villagers. A participant from this last group explained:

> If you go to the root of the problem, at least what I think, it's that we are so disconnected from others, from everything. So, ... I think that the main problem is that we are going [sic], well I'm outside the box but I see lots of people inside this box. It's now, like, they see the TV and they are very angry about lots of things and they are disconnected from themselves so yeah, about that, yeah. Also, individually a lot. I don't know if it's due to capitalism or … Yeah, I see lots of individualism and that's a reason for not worrying about the others or worrying a lot about the environment: If I am OK, everything is OK. Now I live in this bubble, it's not the whole reality, it's only my reality.

These highly criticised ethical values and morals of the current (capitalist) system are first revealed in human inter-relationships, before reaching the relationship with non-human nature, according to a considerable portion of the participants focusing in this structural level analysis. They offered broader explanations of the phenomenon that pointed to culture and society as central factors. Within Advanced University Students, the following interpretation obtained the consensus of the group:

> Overall, I think, in a sense maybe airy-fairy, but a lack of compassion for ourselves and how that kind of translates into choosing … I guess making choices that (…) But it's easier to make kind of the right choices for the environment when ... like, people don't understand each other. Like, you're saying money. Obviously, the big kind of debate between mainstream capitalism and that kind of way of life. And obviously it's much easier to just kind of slot into that way of living, you know because the system is there. And there's kind of, like, a real rough spot in terms of communication between people who would maybe want to carve a different path, that's maybe more compassionate as they would see it. And there's just a big clash there and I would say compassion is a good way to start remedying that in a really broad sense.

Connections between the economic, the social and the personal level, from profit-making activities to spiritual self-care were explicitly acknowledged in another group, the Eco-villagers, who happened to choose and ecologically centred way of living. A resident explained:

> Everything is connected, economy connected to environment, connected to humanity and like so, the thing is: if we have an environmental issue, then we will have a social issue then we will have an economic issue. So, for me, it's really hard to find one main problem because I see, like, all this inter-connection and also, as you said, there is this big connection with ourselves and our humanity.

More concrete relationships between the economic system and the environmental crisis could be found in those who pointed to unsustainable production and consumption. An English Student proposes, supported by his group, that the main environmental problem is sustainability or, in other words, the unsustainable system where we all live in, instead of the disruptions in it. He passionately argued in similar terms as those of other voices in other groups: "We live in a world that produces a lot of waste so we have to take quick actions to reduce it, to permit that the next generation have it clean as well, clean enough." In the meantime, sustainability of production is proposed as the real issue to consider, instead of boldly changing eating habits, regarding young Farmers: "How we are actually producing the whole of what we want to produce".

While the system, and humanity as a whole, were at the centre of the perspectives just presented, there were also recurrent annotations about articulating unequal structures of power at diverse levels that in turn remain essential to understand the ongoing environmental crisis.

Considering the global level, the only First Year University Student who introduced herself as a political activist pointed to the following environmental justice situation: "Environmental issues are also linked with the increasing amount of inequalities like the wealth difference between the most lacking population of the world and the richest people are increasing. And the rights and the opportunities of random populations are not evolving as well".

Furthermore, for some Eco-villagers, (economic, political, and religious) elites enjoying privileges and with no environmental consciousness are the problem:

> Every government is kind of, like, a company, or a family or a guy or a group of people, ok? And those three things, they don't really, like, people who are in those groups, they don't really care about other people in the society. This is the main problem actually, and if [sic] ... but in there, on high, they are happy, they say [sic]. They don't really see the problems because they are happy, they can have everything and they don't care about the others basically, because they are fine. The connection between those three things and people are not really aware this is the main problem. And also, like, those people ... basically politics and economists ... like the rich people. They don't care about nature and they are basically killing natural things and this is another big problem for all of us, I can say that that.

English Students also raised the issue of powerful companies "disrespecting" common people, expressed by their lack of care for keeping water clean for human usage, but they also embraced the contradiction that these companies were producing goods that people need.

Folk Musicians went further in developing this perspective by identifying a perverse mechanism hiding this asymmetrical power definition of the situation:

> We say to people that they should individually do something ... Even, like, there was this sentence that even [a] small river makes big stuff, but the truth is actually [the] State doing stuff, State doing the law, you cannot really go against that. There is a big movement going on, so ... In that point of view, the worldwide States did nothing really, they just say they will do – which is not the same, they just rely on us to just continue to try to do something at the small scale but it doesn´t work like that. You cannot have something from the bottom to the up, I don´t believe so.

Believing the urgent need for 'top down' approaches to help drive 'bottom up' transformation, Advanced University Students identified not only structural inequalities, but also highlighted perceived daily life power asymmetries as "the" underlying problem in the environmental crisis:

> **Subject A:** I think what comes to mind is kind of power dynamics and how ... I don't know, it's, like, I'm thinking really abstractly now but you know the way if you're in a lecture and you're there with everyone else? I don't know if it's the same in other countries, but for Irish people, for me anyway, it's nerve wracking to speak up in a big lecture. I don't know ... I think, a problem that comes to mind with climate change is always assuming the person above you has the answer. Which kind of relates to a lot of other problems as well ...
> Interviewer: Do you feel that ... Would you include yourself in this?
> **Subject A:** Yeah, [I´m] definitely aware of it now. And it's not true that those above you have the answer. It's only since I left school that I'm saying, shit, they don't know. The onus is like on all of us.

Finally, what could be considered an environmental meta-problem associated to the structural rural-urban divide is identified in one of the groups. As previously detailed (see Theme 1, Climate Change, and Theme 3, Food), the consensus at the basis of young Farmers' discussion points to a generalised social phenomenon attached to the risk building dynamics of climate change. From their perspective, the real environmental problem is the misleading interpretation of the problem and its solutions, determined by people's roles in the economy and society; whether they are food producers or consumers.

Given that most of the spontaneous references to the very roots of the environmental problems captured in this section allude to agency and responsibilities in the face of environmental risks, they will be further analysed in the following section. Later on, when discussing videos, some of these ideas and arguments appear again, but fall out of this non-guided approach to environmental concerns.

Respondents´ Representations of Environmental Problems in Uruguay

When asked to mention the main environmental problems nowadays, participants from each of the eight target groups in Uruguay discussed a range of perceptions about the risks associated with the built and natural environment, close or distant from their personal and collective experience (see Table 9.)

From these observations and experiences, five themes were identified by the researcher in spite of vast areas of overlapping convergence. In descending order of importance: (1) pollution of natural goods, (2) waste creation and disposal, (3) agrochemical-based agriculture, (4) wildlife and biodiversity loss; and (5) climate change. While these themes emerged across various focus groups, they were framed differently (see second column of Table 9), located in different spatial levels (see third column of Table 9), and they were discussed with diverse levels of intensity (bold text in Table 9 signals high salience of the issue within the group.)

Table 9. Environmental Risks Reported in Uruguay

	Perceived Environmental Risks	Location of Environmental Risks
Group 1: Folk Musicians	➢ **Car pollution** ➢ **Waste in streets** ➢ **Climate issues** ➢ **Plastic** ➢ **Volatility of seasons** ➢ **Pollution by factories**	Undefined/Worldwide Undefined/Worldwide Worldwide/Country/Personal Undefined/Worldwide Country/Personal Undefined/Worldwide
Group 2: Inclusion Programme	➢ **Pollution in cities** ➢ **Waste in the streets** ➢ **Oiled/Polluted animals** ➢ Factories pollution ➢ Animals being mistreated and killed ➢ Smell ➢ Cigar butts	Undefined/ Far region Community/Neighbourhood Far regions Undefined Far regions/Personal Undefined Far region
Group 3: University Students (First Year)	➢ **Global warming** ➢ **Water pollution** ➢ **Single-use plastics** ➢ **Pesticides** ➢ **Food pollution** ➢ **Pollution**	Worldwide Worldwide/Country Undefined/ Personal Undefined Undefined Undefined
Group 4: Technical Training (First Year)	➢ **Pollution** ➢ **Over exploitation of plants and animals** ➢ **Animal extinction** ➢ **Biodiversity loss** ➢ **Deforestation** ➢ **Water pollution (rivers, ocean)** ➢ Waste ➢ Holes in the ozone layer ➢ Wars causing depletion and also responsible for the lack of natural resources ➢ Climate change ➢ Use of plastic, not recycling ➢ Chemicals in the food, pesticides	**Worldwide** **Undefined** **Undefined/ Worldwide** **Undefined/Country/Personal** **Undefined/Personal** **Community, Far region, Personal** Undefined Undefined Far regions Worldwide/Personal Undefined

	➢ Air pollution	Undefined Undefined/Personal
Group 5: Third Level Students (Advanced)	➢ **Pulp mills (UPM)** ➢ **Intensity and nature of production and consumption system** ➢ Climate Change ➢ Fires in the Amazonia ➢ Ozone layer holes, gases ➢ Destruction by industries ➢ Waste (batteries, etc.) ➢ Water pollution (ocean and cyanobacteria) ➢ Acoustic pollution in households	Country Worldwide Undefined Far region Undefined Undefined Undefined Undefined/Country Undefined
Group 6: Young Farmers	➢ **Pollution of soil, water and air by agrochemicals** ➢ **Water pollution** ➢ **Rice mills waste disposal and emissions (dust, smell)** ➢ Pulp mills ➢ Wildlife pollution and depletion ➢ Plastic bags ➢ Individual pollution when throwing papers	Country/Community/Personal Undefined/Personal Community/Personal Undefined Community/Personal Country/Personal Undefined
Group 7: Refugees /Immigrants	➢ **Pollution of soil, air, water by chemicals in food production** ➢ **Non-recycling plastic and nylon (individually, companies, scavengers)** ➢ **Climate Change** ➢ **Waste in cities** ➢ Water pollution (rivers) ➢ Air pollution (smoking) ➢ Chemical waste from factories ➢ Carbon emissions by transport ➢ Individual waste not recycled ➢ Acoustic pollution with noise ➢ Deforestation for extractive activities (Amazonia)	Worldwide Country (Uruguay) Worldwide/Planetary Far region/Country Undefined Far region (home country) Undefined/Far regions Undefined Undefined/Personal Undefined/Personal Far region (other)
Group 8: Eco-villagers	➢ **Transgenic grains agriculture** ➢ **Monoculture agriculture** ➢ **Pollution of (fertile) soil and water (i.e. desertification, agriculture)** ➢ **Water pollution** ➢ Limitless extraction of natural goods ➢ Pollution ➢ CO2, climate change ➢ Air pollution ➢ Waste management (liquid, solid, plastic …) ➢ Fires	Region Region Undefined/Worldwide Undefined/Worldwide Undefined/Worldwide Undefined/Worldwide Undefined/Worldwide Worldwide/Cities Worldwide Undefined/Worldwide
	Language reflects that of participants	Researcher´s categorisation
Source: Personal collection.		

As will be further described in the following sections presenting the themes discussed in Uruguay, environmental risks were sometimes understood as exerting negative impacts in the environment (i.e. air pollution), and sometimes as the causes of environmental degradation (i.e. emissions from cars or factories.)

Pollution of Natural Goods (Theme 1, Uruguay)

The only common theme across all groups surveyed in Uruguay, was the direct pollution of

livelihoods. Included in every group as one of the main environmental problems that humanity is facing, the direct pollution of livelihoods appears usually focused on water issues (6 groups, including direct witnessing), while "pollution by factories" and air pollution are other recurrent statements (5 groups each), which are sometimes intertwined. The remaining statements refer to noise and soil pollution.

Participants described water pollution in "rivers", "the sea" and "oceans", stating the origin of the problem always close to them and not simply in a distant region. The sources of pollution could be chemical waste of industries with an impact in sea creatures worldwide – plants, animals – and human beings, as expressed in the focus group of Immigrants. It could also be manifested in the ocean´s cyanobacteria, as it has been happening in recent summers in Uruguayan beaches, according to an Advanced Third Level Student´s perspective. Furthermore, an Eco-villager states that water pollution is a visible phenomenon that, along with soil pollution, seems underestimated when communicating the range of environmental issues.

Water pollution is indeed a strong concern among Third Level and First Year Students, who locate the issue at country level and offer testimonies of the problem. Within Technical Training students, diverse uses and relationships with water were reported as being under threat, which is best reflected by the following excerpt:

> I feel related to water pollution, because I live by the Río de la Plata River, there is the Santa Lucía River there, and, for example, I know there are many people who complain about the pollution of the water of the land where they plant. In addition, many animals died or no longer come to the wetland because it is polluted. On top of that, water pollution is harming you, because most of the drinking water comes from the Santa Lucía … Also, where I live there is a beach and many people complain that when they come out of the water they get like hives or they get itchy, then you can't go to the beach either.

Within the same discussion, another participant reports a light disease ("grit") derived from drinking water from the tap, because the water came from a river nearby polluted by minerals and chemicals originated in rural activities taking place in the area. "In my neighbourhood, you open the tap and you can feel the strong smell of whatever chemicals and ingredients are used. It is very noticeable". This experience happened in Uruguay, but a similar response in Spain was reported by another participant of this group: "You would put the water in a glass and see white things that remained unfiltered. You couldn´t drink water from the tap, you had to buy big bottles instead."

On top of these mostly urban groups, young Farmers also identified water pollution as a major threat. However, it was usually included together with other types of pollution due to agrochemicals, which appears also among Immigrants, and will be analysed later as another recurrent theme. The following quotes of the rural group discussion offers some evidence of this framing of water pollution:

> **Subject A:** Water, for me the worst is water pollution.
> **Subject B:** Air …
> **Subject C:** Both, you actually pollute both when you don´t apply a fertiliser properly (…)
> **Subject A:** Yes, thinking of saving money, you pollute the soil and the water, and all who consume the water [sic].
> **Subject D:** The main thing is water, as vapour feeds water, right? Air indirectly affects us … It´s all a chain.

Among young Farmers references, air pollution appears also in the form of localised effects in rural or semi-rural areas where industries develop their activity. Within what could be considered environmental (in)justice events. Participants from areas where rice mills operate, share their experiences and let the following rumours be heard as well:

> **Subject A:** I knew about many people who lived close to the rice dryers that were now removed. All the products they used were bad for these people. I mean, from agrochemicals to the smell and the dust, all makes me feel really bad although I didn't live that close; all in my home absorbed a lot, we have asthma and we g*et al*lergic reactions in the skin. And we don't drink water from the tap anymore, it's horrible.
> **Subject B:** I know there were lots of people suffering from cancer and people who died who were living close to the dryers that are now gone, because that was one of the reasons. They were all kind of people, people who live nearby and workers, everybody.
> **Subject C:** Similar to what happened in La Teja, in Montevideo, a neighbourhood that we always have heard of. And people who lived close to the Pantanoso Creek, which was polluted.

Besides these references to pollution by productive or industrial activities, other participants refer to pollution by factories as a major issue without further explanation (Folk Musicians, Social Inclusion Programme participants). The conversational context suggest that it refers to air – the fumes of chimneys – and, with less frequency, water pollution.

Air pollution is also raised as an important issue in other focus groups. In big cities, such as Montevideo or some cities in Cuba, emissions by transport, cigarettes smoke and smell are signalled and they are not linked at all to climate change. Furthermore, someone in the group of the Eco-villagers contributed with an urban example of environmental injustice in terms of differential

impacts of pollution: “Even within the same city, it depends on where you live, the air that you breath. It is the air that gives you more or less quality of life.”

As made explicit by one participant, ozone depletion seems like an old established issue that remained as the typical environmental issue discussed at school when these young adults were kids.

Waste Generation and Disposal (Theme 2, Uruguay)

Another recurrent theme, discussed in 7 out of the 8 groups, was that of waste emphasised as a specific problem, although sometimes under the umbrella of a general notion of pollution. When considering the references to single-use plastics as a part of the discussion on waste generation, it is a major concern that reaches all of the groups surveyed in Uruguay, while it occupied a prominent role in the discussion of specific groups as the Social Inclusion Programme or the Immigrants.

The following discussion among youngsters of Piedras Blancas, the peripheral neighbourhood of Montevideo, where the Social Inclusion Programme takes place, involved at least half of the participants of the focus group. It best reflects the trend of identifying pollution with the presence of waste in the urban environment also raised in other groups.

> **Subject A:** Why would pollution be our fault? No.
> **Subject B:** Willingly or unwillingly, we also pollute.
> **Subject C:** Yes, we cannot talk on behalf of others but for ourselves.
> **Subject D:** For instance, you have waste containers to dispose your waste, but there are people who throw it outside it, or when they are already full of garbage.
> **Subject B:** Exactly.
> **Subject A:** Yes, but the problem is the people who are supposed to come and empty the containers.
> **Subject C:** But, again, we cannot think of others’ tasks: If I see it full, then I won’t put my waste there.
> **Subject E:** They must come once a week at least …
> **Subject B:** Sure, but if it is full, you shouldn’t throw it there.
> **Subject E:** But I cannot leave my waste at home, I would be polluting my home.
> **Subject C:** So, you pollute the street? It’s the same.

For them, disposal of family waste is a daily concern and a risk experienced first-hand, with which responsibility and agency appeared intertwined. Lately, in this group, waste disposal was discussed again and someone added complexity to the issue by putting on the table how garbage provides an essential source of living for scavengers, which all agree to consider as a scenario where they could eventually end up being at. As highlighted in the socio environmental conflict identified in Montevideo by the Environmental Justice Atlas, wastepicking is an extended activity for making a living in big cities peripheries.

The same perspective of garbage as an opportunity of making a living was emphasised by young participants from Cuba and Venezuela. They were the majority in the other focus group where waste was considered a central environmental problem. While Immigrants coming from rural areas would report a similar experience as that of the young Farmers highlighting the pollution of livelihoods, those coming from cities would focus instead on waste management at different levels as being a central environmental risk. A passionate discussion about recycling and how it should or should not be done, either in their domestic domain or in Uruguay as a whole, marked the predominantly urban focus of the discussion within this group.

> **Subject A:** We need to start from our little environment, what do we do with our closest environment the ones that live in guesthouses, what kind of things do we do, how do we separate our garbage …
> …
> **Subject B:** The companies using row materials recycle everything, the aluminium, the paper, the plastics, the copper … I don´t see [it] here … At home, there are even people who are dedicated to collecting that; when at parties at night people drink, buy canned beer and throw it away, there are people who pick it up, then [they] go and sell it. It is purchased by weight. Here I haven´t seen that, that kind of business or particular individuals doing it, or the State. When I travel around, I see that people have lots of scrap that is not recovered, it is not recycled.
> **Subject C:** In Cuba, there are people devoted to that activity, they depend on it for making a living. I see here people getting into the garbage containers to search for clothes to sell, but I don´t see anybody collecting beer cans, milk boxes, nylon that takes centuries to degrade in the environment.

Not recycling household waste and plastic in particular were identified as major environmental problems in many other discussions, with less of a trace of personal engagement and at a general level, suggesting a national or worldwide scope. Besides reflections on how plastic bags, paper or nylon (even cigarettes butts) are not recycled as much as it is technically possible, there is criticism concerning consumption of single-use plastics or simply consuming too much plastic. Within this second trend of focusing on wasteful consumption, lifestyles are under the scope of investigation including their own, while reflecting on how the production lines and the consumption habits necessarily create more and more garbage. Moreover, it is stressed by some participants how, in the process of consumption, humans are “the only animals who produce garbage” and do not know how to handle it.

While most of the groups presented a discussion focused on environmental risks, either at the production or at the consumption end of the process, Advanced Third Level Students agreed on a more complete analysis of the current waste generating system:

> I believe that if we measure it in terms of impact, beyond the shocking news, our production and consumption system leaves an environmental footprint that is astonishing. That is, we exploit natural resources generating pollution, we process the production after … You have stages and you pollute in all these stages, and you produce waste through all the stages to produce disposable products, increasingly disposable, which ends up being waste. So, if we are polluting in all these stages, in different ways, and the product has a fairly short use, ends up being garbage, then what do we end up doing?

A reference to mismanagement of industrial waste was one of the relevant issues within young Farmers, who even provided personal experiences of this problem: "I used to work in a rice mill company and, well, I had this interdict with my boss because of throwing filters, the gutters, gas oil disposal …".

Agrochemical-Based Agriculture (Theme 3, Uruguay)

Cereal and vegetable production was at the background on some of the discussions about the pollution of livelihoods by factories or farmers, or were specifically mentioned as examples of bad management of industrial waste. This third emergent theme among the Uruguayan sample refers, instead, to agrochemicals as the primary response to the question of the main environmental problems, which sometimes included the criticism of the whole agricultural system in place. If no environmental conflict around agrochemicals is mapped in Uruguay, as reported in Chapter 2 (Atlas of Environmental Justice, 2021), environmental organisations as Friends of the Earth Uruguay have extensively reported on the issue, which is a salient one close by in Argentina.

The use of chemicals in agriculture was signalled in 5 out of the 8 groups as a major issue, and it proved to be the most striking issue for the majority of Young Farmers, and one which was inextricably associated to the mainstream agricultural system for Eco-villagers, in particular. Any use of pesticides was problematic for Eco-villagers, who were instead practicing organic agriculture, and growing food without the use of artificial chemicals. This was mentioned as an interesting idea for some Young Farmers. Other participants focused their criticism on the increased usage (Immigrants) or the bad management (some of the Young Farmers) of agrochemicals.

However, agrochemicals were not listed among the top environmental problems within the Inclusion Programme, Folk Musicians, or the Advanced Third Level Students. Instead, the youngest students of Third Level Education apparently did not perceive the issue as so significant and labelled this risk as "food pollution". This perspective, located at the consumer end, was reported as a personal

experience in various groups. For instance, a First Year Student of the Technical Training Group signalled the toxic substances used for growing plants as an environmental issue she felt close to:

> I had problems in the intestine and there was food that made me sick when having too much of it. Then I realised that, when I ate fruit which had this little powder of the chemicals, it was even worse. So, I was always trying to wash very well the fruit, choosing and cleaning it so that it would not have much chemicals. Where I live, there are some greengrocers where you can ask and they tell you, look, this is a more natural fruit, so with that I was always very careful.

The large majority of Young Farmers shared this concern about the dangers of agrochemicals use in food production, especially vegetables besides the previously cited case of the rice dryer. Their own activity must have been more related to animal farms, as their perspective kept some distance from plants production processes:

> **Subject A:** We sold oranges for a country (I don´t remember which one), they tested them and found agrochemical, products that are not used there, that are forbidden, so they rejected the oranges.
> …
> **Subject A:** For instance, nowadays we have a Senator, in politics, who is from the Green Party, who is an Agricultural Engineer. He owns a farm, he grows vegetables and he does everything naturally. With him we discussed the effects of agrochemicals.
> **Subject B:** It happened that at home we had many vegetables, people would go and buy from us because they said we had something natural, not using anything. I mean, they would choose to buy from us, right? It changes the taste of the things
> …
> **Subject C:** More natural!
> **Subject B:** Of course
> **Subject D:** Sometimes there are processes …
> **Subject E:** … Like an orange that only gets the colour inside a chamber!
> **Subject B:** Once, we were cooking French fries with a friend and she told me that her hands were red because of all that is put in the potatoes to treat them.

Eco-villagers include pesticides in a larger frame that puts the agricultural system at the core. Their social representations of environmental risks mirror Young Farmers´ focus on the impact of industrialised food production on natural resources and in human health, but they offer a structural analysis instead of the eye witnessing approach of young Farmers.

> **Subject A:** Transgenic agriculture as a big problem today. It occurs also in this territory, right? Argentina, us, Brazil a little bit up North. I mean the exit of grains through the Río de la Plata River.
> **Subject B:** Well, I was going to talk about monocultures. The first thing that came to mind, like, this was monocultures, but I agree with them.

> **Subject C:** The symptoms that most alarm me, at an environmental level, are soil degradation, the loss of fertile soil, which goes hand in hand with the increase in desertification, which is connected with climate change. Agricultural practices.

Wildlife and Biodiversity Loss (Theme 4, Uruguay)

Natural ecosystems and wild animals under threat remain a clearly different theme that emerges in 6 out of the 8 groups surveyed in Uruguay, distinct from "natural resources" sustaining their daily lives as water, air or soil. The recent fires in the Amazonia were the events fuelling this discussion that depended mostly on mediated experiences of distant places, although some groups offered interesting first-hand testimonies on affected landscapes and wildlife. Deforestation and habitat destruction or alteration were the recurrent concerns within this theme, followed by extinction of species and pollution of wild animals.

The Amazonia was frequently mentioned as an example of an especially valuable ecosystem that must be protected for the sake of humanity. A participant in the group of Refugees / Immigrants uncovered one of the most intense defences of this perspective shared also by University Students, Technical Training Students and young Farmers:

> For example, in Brazil now recently, the Amazonia was burning. There are people who did everything they could to recover it, but what we cannot allow is that, for example, 30% of the Amazonia has been degraded. Because, for the search for gold and things like that, they illegally cut it down and the Brazilian government knows that. Recently, now, Bolsonaro declared at the United Nations I think and what was the response? And these are things, these are things that we cannot allow, because if we spoil the largest reserve of forest in the world, then ...

For participants in other groups, deforestation in the Amazonia and elsewhere was linked to destructive agricultural practices including cattle raising. Eco-villagers also associated it with climate change, in a global scope analysis, while also discussing the challenge of serving themselves from the close native forest without depleting it.

Besides a spontaneously reported emotional response to images of wild animals harmed by the fires in the Amazonia, young Farmers reported direct experiences of slow but undoubted alterations in ecosystems around them. Instrumental reasons are in place when reporting wildlife losses, as for instance: "We used to go fishing goldfishes, in the Río Negro River. Now there is no more goldfish, they don't go up any more, they don't come any more."

Young Students at the Technical School also pointed to a directly experienced generalised degradation of nature, early in the conversation. They rapidly agreed on how "many lives are being lost, plants, animals are being lost, because of overexploitation", based on their own observations of green fields along the roads that are now "empty." When further discussing their relationship with these environmental problems, they hold the position of either concerned observers of natural landscapes at risk, or of nostalgic "users" of nature for leisure:

> **Subject A:** When I was little, I liked to get into forests and places full of trees. I always loved to get into places like that so, something so daily for you that you like so much, has been knocked down, makes you sad. Mostly because the places I used to go when I was younger, I go now and they have less animals, plants, trees, with almost nothing that made them as beautiful as when you visited them before.
> **Subject B:** And deforestation, in any case, affects the air, like, you do not feel it the same way in your city. Before in places like that, forests and everything, you would feel it purer but now it costs more to feel it the same, I, for example, have asthma and there are many places in the city that are very hard for me: The cigarettes, the smoke feels too strong. You don't feel, like, what it was before on the beaches, in the forests, in the mountains, you don't feel the same freshness.

Participants of the Social Inclusion Programme presented a different approach to animals and environmental risks. They expressed concern about the harm to certain animals and due to pollution: "a turtle full of oil, and a duck which some people was helping". The sympathy towards suffering creatures was put into question by other participants referring to the dissonance of these expressed feelings with the behaviour of eating cows ("beef barbecues"), which could not be discursively solved within the discussion.

Across all groups where the theme was discussed, these environmental risks were not usually perceived as a direct threat to their health or an obstacle for making a living. In certain groups, wildlife and ecosystems at risk were associated with a major systemic problem. Eco-villagers labelled this as "unlimited extraction of natural goods", while "over exploitation of nature" garnered consensus among Technical Training Students. This seemingly distant perspective of analysis appeared alongside emotional displays concerning the well-being of living creatures and the loss of meaningful natural scenarios from their childhood.

Climate Change (Theme 5, Uruguay)

The theme of climate change is raised in 6 out of 8 groups in Uruguay, but without further explanations, and it is slightly discussed among various participants. It was a salient environmental

issue only for First Year University Students, Folk Musicians, and Refugees/Immigrants; while three more groups included it in the conversation without giving it much attention (First Year Technical Training, Advanced Third Level Students, and Eco-villagers.) Therefore, it seems like a widely generalised idea that remains unclear or even meaningless in ways for the young adults that report being nonetheless aware of its great importance.

In one of the two groups, where climate change was the first issue they could think of when asked to signal the main environmental problems nowadays (Folk Musicians), it remains unclear how thoroughly the phenomenon is understood. Within their discussion, extreme weather events are mentioned, along with changes in the seasons, and sea level might serve as the converging point of other intervention, as noted here:

> **Subject A:** We are seeing it, the issue of climate. Whether you like it or not, it is affecting … The tornado, the storms, the hail this year, right? I believe that we ourselves are creating all this.
> **Subject B:** Yes. Sometimes you think that winter will come at a certain time of the year and that it will get colder, but then it remains hot … Or that the summer will be hot but then, it´s cold. It happens to me that now I can´t to go to the open theatre in summer wearing short sleeves, I need a hoodie or a coat. It´s not normal that you have to use a coat in summer!
> **Subject C:** There are just like stupid details but that you say "wow", they open your eyes. You go to the beach, let´s say, and you never see someone drowning as it could happen, I mean that is what I would picture in a beach in Montevideo.

Climate variability, as a phenomenon characterising climate change, also appears in another group, the First Year Technical Training Students. Refugees/Immigrants from Venezuela and Cuba also pointed out to the effects of climate change, while stressing its underestimated importance:

> **Subject A:** Climate change is important in this era, in this century. It is affecting nature, all human beings, mainly the planet.
> **Subject B:** If there is something that I recognise is, how our historical leader Fidel Castro was called crazy in the year 95´ – in the year 95´! – at the UN. He predicted [about] climate change, in the new century, and many called him crazy. It's happening. Nobody was talking about it. The biggest mess starts as the more you modernise, the more it affects nature. And they called it crazy, do you get it?

First Year University Students develop the issue even more in depth, while revealing climate change awareness in terms of both, its importance, and its nature.

> **Subject A:** I don´t know if [simply] considering global warming [is enough] because it is, like, the consequence of everything else, I don´t know …

> **Subject B:** Well, if you think about it, I´m not sure if it is the most important problem, but [it] is the most general one. So, I wouldn´t know if including it in the list …
> **Subject C:** Well, let´s put it on the first place …
> **Subject A:** The problem is actually the CO2 emissions, the main cause.

Furthermore, on a different note, as regards all the optimistic assertions on how much time do humans have to act, the whole group of these students agreed on a timeframe of 11 years until the tipping point.

Although transport or factories emissions were mentioned across the groups, they were mainly associated with air pollution. Therefore, the link with climate change was not identified until the pre-experimental exercise with videos was conducted.

Probably, because of the complexities of climate change awareness, revealed by the passages previously analysed, the issue was no more than a hot topic in the remaining statements across the Uruguayan sample. Sooner or later, it appeared listed within the main environmental problems by these six groups, as reflecting an assumed consensus, and as it also recurrently happened across the groups in Ireland, but generally displaying less specific knowledge.

Respondents´ Representations of "The" Environmental Problem in Uruguay

As well as in Ireland, in 6 of the focus groups conducted in Uruguay, "the environmental problem" reported initially was at least for some participants, a more general situation or an intertwined phenomenon involving economic, political, cultural and socio-structural conditions. Eco-villagers explicitly signalled the different levels of analysis and pointed out to the deep roots of the environmental crisis. The distinction they provided helps understanding the various perspectives converging in this last thematic section:

> **Subject A:** The image that comes to me is that of taking nature as a resource, and seeing it as a resource and not as goods, or as life itself. That is, seeing it as something, that can be extracted and it can be processed and sold in the industry. Not having that notion that it is something that, if not there, we do not live, I mean, we are extinct. Like, I see the strong image of the infinite super extraction and I am aware that it is not infinite. I suppose I feel it as a life-giving thing, as goods, as something that gives us life, I guess I feel that way.
> **Subject B:** The problem is not, like, the pollution, the CO2, the earth, the fires. No, that is what we can see but, in depth, it seems to me that the problem has to do with that change in perception.

However, the focus on the structural level tensions and crisis appeared with less intensity in Uruguay than in Ireland, being central in only three of the groups: Eco-villagers, Advanced Third Level Students – as happened in Ireland - and Technical Training Students. Furthermore, this level of analysis never displaced the detailing of specific issues in the discussions, while it was completely excluded from the initial diagnosis of the environmental crisis in two discussions (that of Social Inclusion Programme participants, as has happened in Ireland, and also among young Farmers.)

In the following chart, it is possible to identify how these broad perspectives, pointing to the roots of environmental risks, were distributed across groups, and how paramount they were in their initial account of the environmental crisis (bold text signals salience within the discussion, while regular text signals isolated statements.)

Table 10. Structural Conditions Creating Environmental Risks in Uruguay

Group 1: Folk Musicians	➢ Humanity ➢ Exaggeration of how bad the situation is ➢ People don´t care as it will not affect them
Group 2: Inclusion Programme	Not mentioned.
Group 3: University Students (First Year)	➢ Conflict instead of collaboration among politicians ➢ It really depends on which country you are in, the power you have to affect change ➢ Psychosis about environmental issues, leading to thinking that all are lies
Group 4: Technical Training (First Year)	➢ **Separation among people** ➢ **Lack of respect among humans** ➢ Lack of empathy and mutual help among humans ➢ Wars
Group 5: Third Level Students (Advanced)	➢ **Consumerism** ➢ **Unsustainable production and consumption cycle** ➢ Failures in producing last-longing or reusable items ➢ Population growth demanding more products ➢ Political use of environmental issues
Group 6: Young Farmers	Not mentioned.
Group 7: Refugees/Immigrants	➢ **Lack of consciousness** ➢ **The problem of the costs of eco-friendly products** ➢ Disconnection from the natural environment ➢ Consumerism ➢ Fast technological developments
Group 8: Eco-villagers	➢ **Disconnection from nature, from other humans, from ourselves** ➢ **Lack of awareness and education** ➢ Seeing nature as a commodity instead of a life source ➢ Global South, especially the poor, will be more affected ➢ Uneducated or underinformed populations are in a worse situation
Source: Personal collection	

Acros groups, instead of focusing on the economy, the most recurrent perspectives pointed to social and cultural dynamics that cause and eventually prevent uncovering solutions to the environmental crisis; ranging from incomplete education to ethical challenges, such as a generalised lack of

consciousness and respect. Furthermore, misperceptions and public framing of the problems were identified as underlying challenges; exaggerating the crisis, creating a form of psychosis leading to scepticism, political abuse of the environmental agenda, and also the commodification of nature as the dominant vision, as Eco-villagers early explained. Another emergent discourse across groups remains that of power inequalities associated to environmental problems. On the one hand, differentiated effects and agency are attributed to low-income populations and relatively under-developed countries. On the other hand, in a longitudinal perspective, the imbalance registered between actual and future generations is discussed, covering for example differential responsibilities and negative impacts of the environmental crisis. Lastly, and especially intense in certain groups, "the" core environmental problem was fundamentally associated with the unsustainable consumption system – although not explicitly labelled as capitalist, as happened in Ireland - involving technologies and alienated powerless people. Wars, or simply abusing more holistic and ontological notions of being "human", were considered new phenomena that was marginally discussed by the groups in Uruguay. Quotes and discussion passages illustrating these three types of environmental crisis representations beyond specific issues will be presented below.

Among Eco-villagers, the strong consensual answer to what are the main environmental problems that we face today, is spontaneously focused on this level of structural analysis which in turn offers a clear diagnosis; namely disconnection from nature being the real problem that lies behind all the "symptoms" - not only of the environmental crisis, but of all the problematic issues in society (education, economy, politics, etc.). Commodification of nature, endless extraction of resources, and blindness to the life-giving essence of nature, were articulated as examples of humans´ alienation from the natural world, within a clear eco-centric perspective.

> **Subject D:** I would summarise or add to it, the separation with ourselves, the fact of being disconnected from ourselves.
> **Subject B:** I fully agree, especially in the last idea, in a deeper analysis. There is an economic and ecological impact in this world which has a deep root in the disconnection of the human being with everything that surrounds him and with himself as well. I occasionally believe that the imposition of this way of being human, based on disconnection, is in fact not allowing us, at this time of needs, to be in connection but is putting a lot of emphasis on symptomatic things. As we are not tackling the root of the problems, they remain there.
> **Subject E:** Yes, I think so, and also what brings about society not doing the job because of not being able to see the root, focusing just on the aspects and not in all the causes. So there lies the problem for me, the lack of integration, the lack of knowing that we are not the centre of, but we are someone who can give an energy in movement. We are not the ones who have the truth or, in the opposite viewpoint, to take the truth of the cycle, of nature, of the rhythms … We are missing that, that kind of humility, I mean.

Also, among Refugees/Immigrants, who put the lack of conscious individuals at the centre, as being of major concern, it was early reported on, calling out the problem of consumerism, while disconnection from the natural environment was signalled as the source of the persistent deficit of environmental awareness:

> For me, climate change and pollution are a lack of consciousness, of the human being, with respect to the place where he lives. If the human being becomes aware, in connection with the land … One of the areas that should be taught in school, topics such as consciousness, the consciousness of risk, of the space where you are, destroyed or not, where you are living. You see movement, not so much in the social part, but in the natural part. It would be very important and of course the contamination would end when people change their consciousness.

Technical Training Students also provided a discussion attentive to failed connections. However, they stressed the division among the community of humans, which they perceived associated with a lack of empathy, mutual support and respect. Essentially differently from Eco-villagers, their argument is not that the relationship with non-human nature was treated with the same ethical codes as inter human relationships, but that this social fragmentation debilitates any possibility of taking communal care of the planet. This anthropogenic stewardship model and focus is reflected in this passage:

> **Subject A:** I think that the most important problem would be how the place where we are is being neglected too much and the fact that people are destroying everything, even each other. Because they are killing each other, they are stealing and hurting all people.
> **Subject B:** It could be the other way around too: People first.
> **Subject C:** Change ourselves, then change the world.
> **Subject D:** Or maybe you do not have to prioritise, the planet or the people, but when one is interested in the other, it takes care of everything.
> **Subject E:** Of course, I think the same as her. If you do not respect your partner or a person who is similar to you … I don´t know … If, among humans, we don´t respect each other, then how could we take care of everything that is around us?

Alongside this generally caring perspective, the division among humans was specifically analysed in relation to ecological problems within this group, given that violent and over-competitive modes of conflict-solving were identified as sources and possible consequences of environmental damage.

When discussing the main environmental problems, some participants across the groups provided another layer of analysis: They identified challenges in how the environmental risk is socially

constructed and especially when it comes to the public conversation. An Advanced Third Level Student suggested:

> It could be something politically incorrect, but it seems to me that there is also a debate on the political use that is given to environmental problems, right? And that many times that discussion is quite anesthetising, from the point of view that we can take highly eloquent measures at the level of messages, right? Beautiful but, at a pragmatic level, at the level of a real problem, it does not move the needle.

Within the few interventions which make scepticism explicit, this one of a Folk Musician, provides another perspective of the mismanagement of the environmental crisis conversation: "From my point of view, it is as real as [it is] overstated. I mean, we see something that we feel is very wrong, but, really [sic] … Yes, it is bad, but I don´t feel it as being as exaggeratedly bad as it is presented by environmentalist groups, for instance." Besides how realistic might be the activist claims about the environmental crisis, it seems that a moderated approach might favour acceptance. The complaint of a University student might shed more light on this type of rebuttal in young adults:

> **Subject C:** And another thing, maybe as a critique, is how the media – not sure if the media or in general, everybody … They place great weight on young people for having to solve the problem, but it actually comes from a long time ago. And I think that we need to raise awareness that we are all of us who [sic] … I mean, it came from before. Really, it is lack of empathy, of thinking about the future, and your grandchildren. It´s like we, generation "Z" or whichever is the name, pollute twice as much so we should solve it, we should fix it or find solutions afterwards. I think this, in some way, is promoted by the media, that pressure towards young people.

However, for a First Year University Student, it is a dynamic a bit more complex, where the psychological effects of taking seriously the upsetting information on the environmental crisis, leads to the undesirable rebuttal effect of creating scepticism:

> **Subject A:** According to the UN, we have 11 years left …
> **Subject B:** Yes, until 2030 and then ...
> **Subject A:** To the point of no return ...
> **Subject C:** I would say that it is urgent, very urgent, especially for countries that have more industries, it is very urgent that they try. At the same time, it seems to me that there is like this psychosis around, that people begin to think that everything is a lie. And not everything is a lie! Sometimes, when someone tells you this is serious, it is serious. What happens is that, since you are not warned at the beginning, everything is a fuss about the world ending tomorrow, and the people begin to discredit everything about the issue. That is the problem, guys.

Along with these generalised assertions about the role of humans in the environmental crisis, other perspectives pointed to inequalities that are key to understanding the problem, aligning themselves with an environmental justice perspective without mentioning the concept. A selfish response to a supposedly privileged position of not suffering the worst consequences of the environmental crisis is the underlying reason for indifference or inaction, from Folk Musicians viewpoints:

> **Subject A:** The real issue is, and that´s also why I´ve said so little, that this has little importance for us, because we know, as a society, and it is in our collective mind, that it will not affect us 100 percent. The fact that, I don't know, we can have 40/50 years to live and I don't know … I think that we kind of have this idea that is not going to go down the tubes in 50 years, as the biggest mess is going to happen in centuries. And, above all, there is the selfishness we have about the future.
> **Subject B:** Obviously, no generation of ours is going to get there, to suffer. That´s people who think of ourselves and, ok, yeah …

Besides the aforementioned claim for intergenerational justice that they make on behalf of their generation, First Year University Students referred to inequality among countries as an important factor for understanding the current situation:

> **Subject A:** In Uruguay there are not as many things as on a large scale, as you say, you are polluting on such a large scale, as that pollution or the environmental issue here is more like for us, affecting us. That is, the water is polluted …
> **Subject B:** Or rather to be part or the collective to say Uruguay is also collaborating with the world of the environment.
> **Subject A:** Yes, I believe that every drop counts, every little thing counts, in an issue, like, the environment. We should all try to pollute less and so on, but with more policies that … Many times, they forget that we need policies to regulate the industries, but I think that if Uruguay starts doing things like that, we are going to do bad economically. I am not saying that you do mining but that countries more developed should first be occupied, and we could later follow their steps.

Eco-villagers introduced the inequality inside countries as well, while having a debate on whether poverty or knowledge determines who will suffer more, or would instead help them thrive in a post-peak society:

> **Subject A:** Likewise, what we also observe today is that we put everything under the umbrella of climate change, right? As if all the related effects were affecting all sectors of the population in the same way. But the Global South, and the poor in the Global South are the first, as you see how the economic power and the

> wealthiest statuses will always be able to have access to the services or the tools, right? For example, if tomorrow they start to sell us the water, if they start to sell us the air, if the system continues in this way … The less affluent class, speaking of classes, will suffer more if what we need is not free. We do know that future generations will all be affected, but within that you must recognise that exists, there is inequality. I am sure that people do not even know about this.
> **Subject B:** I was going to say, at the same time, more than the amount of money, or the less money they have, I think it is also related to the information they have. Like, we currently live with two dollars, we do not live with a lot of money, although it is true that we come from a well-off society. That is, we are well-off, but what we have is the notion of let´s cultivate, let´s collect rainwater, let´s take care of the soil, this kind of things. Lately I have met people who are in little towns, like grandparents, and they have a better diet, they have better water, but because they are aware that this is important. While being in Europe and in the city, people eat horrible food that is tasteless and also some things with a bitter taste that I cannot describe, creating these little things in the skin … I mean, misinformation, because those people still bought it with money, they had a salary. But it is very true that the poor will suffer, because the poor also lack information.

"Consumerism is the root of everything", expressed an Advanced Third Level Student, obtaining an immediate consensus in his group. It leads to doing whatever it is needed to get oil, plastic, in an ever-increasing basis and far from being a "conscious consumption." Furthermore, they pictured humanity as trapped in a senseless consumption:

> The new slavery, actually. We are like completely messed up in the matter of consumption, and with relation to social issues. Like we are unconsciously quiet, not being able to find a way out, or either taking the fastest, easiest solutions … And we conformed to that. I think that, as human beings, it is our duty to be aware and to find ways to tackle things. It´s philosophy …

For some voices among the Refugees/Immigrants, though, it is not only humans´ lack of reaction, but also the pace of technological development what leaves people stuck in consumerism:

> The technological advance happens at an extreme pace, we are sleeping, and technology goes faster than light, bringing along degenerative change in soil, plants, in all the processes. All the accelerated processes in factories, at the industry, everywhere, all is very difficult to stop even if we sit [down calmly] and claim that.

Not only unsustainable consumption is discussed but also production. For most of the participants in the focus group of Advanced Third Level Students, the greatest environmental challenge is to stop this reinforcing cycle of production-consumption, which presents the same type of alienation at both ends of the value chain:

Subject A: For me the problem has several aspects. Like, life is organised in the service of producing things that we do not use, to be able to consume those things and it is, like, a nonsense, like, permanent …
Subject B: We generate a need, permanently.
Subject C: And production is organised in the same way, right? (…) Things are not produced as a result of ´well, we want to have this lifestyle´. No, this is what is produced and then we see what happens with the planet. We will sort out from where to get it next. If energy is needed, let's get it from where it is within reach, and then we will see, a solution will appear. It´s endless.
Subject B: We are already exploring Mars, let´s see when can we move there …

The need for another planet is considered not only because of excessive rates of consumption; there is also a problematic growth in the mass of consumers or, in other words, overpopulation is another issue to consider. This fact is accepted without discussion in the only group where it emerged (Advanced Third Level Students), signalling the practical dilemma of legitimate needs and consumption needs to be fulfilled.

These broader representations of the nature and the roots of the environmental crisis usually involved attribution of responsibilities and assumptions about human agency, which was explicitly inquired in a subsequent phase of the guided conversation, and it will be further discussed in following sections of this chapter. Some of these ideas and arguments appeared again when evaluating videos close to the end of the focus group discussion, but fall out of this preliminary approach to environmental concerns, aimed at better understanding the mediation sources of interpretation brought about by participants.

Summary and Discussion of Findings on Environmental Issues Awareness

As the notion of environmental risks involves the perception of threats and its articulation by the subjects, the uncovering of what participants do consider as environmental problems, is a key question to start a significant conversation with them that could help assessing their interpretation of media contents. Furthermore, it is essential to map out what exactly is it that they consider "environment" in the first place, given that it is a broad and abstract notion that could refer to the domestic domain or to the whole planet, through a variety of issues. As Corbett states, one of the first challenges when studying environmental concern is to fully understand "the environmental component" (Corbett, 2006, p. 61.) As in previous research of environmental risks perceptions of laypeople through focus groups (Kaiser, Hand, & Pence, 2020), after stating their main concerns, perceived causes or contributing factors to these issues are spontaneously expressed, reflecting participants' worldviews, experiences, and assumptions.

The mapping of environmental risks in both countries is aligned with the official diagnoses, since the three faces of the ongoing environmental crisis are represented in the discourses of the young people investigated: Climate, biodiversity and pollution emergencies (United Nations Environment Programme, 2021). Built and natural environment at risk, in urban and rural contexts, local and global portraits of the crisis, personal experiences and abstract ideas, causes and effects, events and structures appear in their social representations of the current environmental problems. Environmental concerns were expressed at a top-level policy approach – the usual one evident in public opinion surveys, and also at the personal level of knowledge, affective expressions and behaviours, or behavioural intentions (Corbett, 2006). Young adults´ discourses articulate these components in diverse ways under the same label of "environmental problems." Furthermore, topics such as "pollution" could mean both industrial impacts in natural resources leading to human health problems in the case of rural participants, while for urban participants it designates household garbage inappropriately accumulated in public areas of the city or air pollution due to traffic. First-hand testimonies of how local industries impact on health quality, found a place in the conversation along with empathy for wild creatures running away because of the devastating Amazonian fires, as specifically highlighted through the focus groups conducted in Uruguay. In Ireland, inefficient activism and immobilisation were early foregrounded as an intrinsic part of the environmental problem in the predominantly anthropocentric perspective provided across all the sample studied.

Table 11. Environmental Issues Ranking in Ireland and Uruguay

Ireland	**Uruguay**
#1 Climate Change	#1 Pollution of Natural Goods (mainly Water and Air)
#2 Waste (mainly Plastic)	#2 Waste (creation and disposal)
#3 Food	#3 Agrochemical Based Agriculture
#4 Nature Depletion	#4 Wildlife and Biodiversity Loss
#5 Pollution (mainly Water)	#5 Climate Change
Source: Personal collection	

If 'the environment' as a notion is always abstract, changing and therefore difficult to apprehend or objectify in a comparable way (Dryzek, 2005), the global scope of climate change, as both a material threat and as a topic of daily and worldwide popular discourse (Hulme, 2009), is always an interesting topic for cross-national comparisons. Regarding social representations of climate change, a phenomenon that is difficult to understand in its entirety while remaining often invisible, the issue is the least relevant for young adults in Uruguay. Instead, direct contamination of natural life sources (water, air, soil) takes priority in their discussion of environmental problems, followed by other prominent issues (waste generation and disposal; agrochemical-based agriculture; wildlife and biodiversity loss). Alternatively, in Ireland climate change remains the top concern (followed by

plastic waste; food; nature depletion; and pollution), on which there are consolidated discourses with a clear focus on the causes of such issues, while the relevant effects are perceived to be located in the future. The effects of the present are, for both countries, changes in seasons and weather, that have already been reported as the most frequent perception of climate risk. In parallel, the same activity (factories or transport) might appear dissociated or associated to climate change across the groups in both countries. Therefore, complete pictures of the phenomenon are scarce as it rarely covers for threats to human society and to the natural ecosystem resulting from climate change, as the established indicators of climate change awareness (Lee, Markowitz, Howe, Ko, & Leiserowitz, 2015; Kim & Hall, 2020). There is still room for environmental literacy efforts concerning climate change in both countries, while in Uruguay it also needs much attention in the first place as it competes with a larger number of specific immediate concerns reported.

The significant agricultural profile of Ireland and Uruguay is manifested in the centrality of environmental risks associated with food production, although the discussion is articulated in a very different way from this first exploration of critical issues. While in Ireland beef and dairy are currently under intense scrutiny, vegetables and grains are more contentious in Uruguay, with meat production and consumption hardly problematised. The discourses of young Farmers are a particularly interesting point of contrast among countries, not only for these distinctive emphasis between agricultural activity, but also for the extensive analysis of emissions developed in Ireland while absent in Uruguay, presumably due to the different penetration of the issue of climate change as an environmental challenge just reported.

The localisation of the diverse problems mentioned by participants, offered a first approach to their glocal engagement with environmental risks, as it indicates the distance perceived with each of them as particular stakeholders. While half of the groups conducted in Uruguay offered vivid testimonies of local environmental risks (young Farmers, Technical Training Students, Social Inclusion Programme, First Year University Students), they did not substitute concerns of a global scope, which even included any distant ecosystems or creatures. In the other half of the groups, the risks were not localised but described and discussed in very general terms, although some regional events or industries were named. In Ireland, localised discussions only appeared at country level, with only a couple of personal testimonies, notwithstanding the exception of foreigners living in Ireland, who would refer to their home country as a benchmark for discussion. Besides farming as a whole industry, no single carbon-using company or any other local environmental conflict was mentioned in Irish discussion within the focus groups. References to the global scope of the environmental crisis were predominantly vague in this preliminary discussion, referring mainly to shared global spaces or

resources like oceans or soil which were hardly located in specific places. Within this trend, the cases of Social Inclusion Programme participants in both countries deserve a special mention, since previous studies on vulnerable populations, such as the one by Clarke & Agyeman (2011), found that they tend to localise their perceptions of environmental issues and responsibilities, rather than engage in talk about wider environmental issues and responsibilities.

Regarding distance in a temporal and not a geographical dimension, another interesting finding is that, for young people living in Uruguay, environmental risk is generally not a major potential or future damage, but mainly an everyday reality that is occurring today, as they experience pollution directly from harmful effects on the natural and built environment that surrounds them. Thus, the international division between polluting regions and polluted regions discussed in the previous chapters, seems to be mainly reflected in the perceptions of the research participants and in the experiences that they report. According to this study, Ireland performs as a "risk donor country", while Uruguay plays the role of "risk recipient country" as signalled by Beck (2009, p. 30). Furthermore, the groups in Ireland where climate change did not emerge in the initial discussion were those whose participants came from other global regions, such as from Brazil, Mexico, Turkey, Ethiopia. Nonetheless, in this first assessment of the environmental crisis, it is very exceptionally analysed from a perspective of environmental injustice, even among the participants who placed the debate more globally.

The early identification of the environmental crisis within structural or systemic issues, which was stronger in Ireland but recurrent across the whole sample, offers evidence of a perspective of sustainability being closer to that of sustainable development, in that it involves economic and social aspects which cannot be easily separated from the environmental problem. However, they were critical to the current system. It also reveals, in many participants, a greater awareness of the interdependence between different dimensions, including nature, politics and culture and denounces disconnection at all levels, being therefore more ecosystemic.

In Ireland for instance, half of the groups skipped the listing of specific environmental risks and spontaneously turned to structural factors that could be considered primary roots of the environmental crisis, and explicitly calling for a systemic vision. As the conversation advanced, further examples of issue awareness provided, suggested that the initial skip of them was due to the assumption of a shared diagnosis on the visible challenges, while the real questions had to do with underlying dynamics. There seem to be no novelty in identifying environmental risks for those young adults, who alternatively signalled “the capitalist system” simply as at fault, through either elite sustaining its

hegemonic structures or the whole of humanity embracing more individualistic anthropocentric culture.

In Uruguay, the structural analysis also appeared across most of the groups, although not substituting the discussion of specific risks in detail. The conversation did not seem to suffer from the same fatigue in the Southern country, where testimonies and explanations were more frequent than embracing judgements and ethical reflections in the initial diagnosis of the environmental crisis. This provide a first-level approach to the perception of the individual and collective agency of ordinary people in withstanding the environmental crisis, which is further deepened in the next section.

Last, but not least, some participants across focus groups, especially in Uruguay, referred to challenges around how the environmental risk is socially constructed and perceived. Information mismanagement, manipulation, mis-framing of problems and solutions, psychosis and various types of denial, were all identified as key markers towards understanding the environmental crisis or, more precisely, why humans are so ineffective when responding to it. Therefore, definition power (Beck, 2009) and valuation languages in conflict (Martínez Alier, 2008) were indirectly acknowledged as part of the problem. In Ireland, young Farmers were the only group clearly focusing on this perspective of analysis probably feeling most challenged by climate change as farming is regarded as causing over 30% of Co2 emissions, while Folk Musicians marginally referred to it as well, advancing the discussion of various forms of personal agency within socio cultural structures.

Overall, the extended environmental awareness across studied groups of young adults, where only one of the groups of every country (eco-villagers) could be clearly designed and considered environmentalist, suggesting very low incidence of the types of denial identified as denialism or negation (Weintrobe, 2013; Stoknes, 2014)). Since ages range from 18 to early thirties, Centennials and Millenial green profiles could be signalled as the reason, supported by previous studies emphasising their electronic connections fostering a global green culture, as argued in Chapter Three (Eckersley, 1999; Díaz Estévez, García de Frutos, & Pena Moya, 2014). However, it should be noted that representative public opinion studies reported in Chapter 2 show extended awareness of environmental risks in both Ireland and Uruguay, with younger cohorts found to be slightly more "environmentalists" in Ireland compared to other age cohorts.

The extended environmental concern not only happened across world regions, but also groups where socio economic vulnerability was clearly identified on discussed heartfelt environmental concerns, thus contributing to the findings that appear to contradict Ronald Inglehart´s influential explanation of environmental concern as primarily dependent on affluence (Inglehart, 1981; 1995). As concern

has been found to be predictive of actual pro-environmental behaviours, at both the public and the private level (Bamberg & Moser, 2007; Oreg & Katz-Gerro, 2006), the extensive mapping of environmental issues could be analysed in a positive light. However, complex psychological and micro-social dynamics identified as barriers for effective environmental communication start to appear in subtles and still marginal forms of denial.

In the first instance, it could be concluded that the young people investigated in Uruguay have a greater potential for engagement with the environmental risks, if we consider their proximity to ongoing acute environmental problems that many of them report. However, the early and highly critical discussion of responses of young people living in Ireland and the level of concern expressed, despite the spatio-temporal remoteness of the environmental damage perceived, makes it impossible to affirm that they are less engaged overall. In this sense, the discussion on responsibility and agency will shed more light on the process from evaluating awareness to actual engagement with environmental risk through potential disavowal dynamics at the individual and collective level (Weintrobe, 2013).

Responsibility and Agency Facing Environmental Risks: Who and How?

Personal and collective engagement with the environmental risks mapped out in the previous section, were further explored through several questions designed to find out how young adults in Ireland and Uruguay talk about and negotiate their environmental responsibilities and what is projected or expected from other stakeholders. Alongside personal responsibility, their assessment of individual agency was also expressed and confronted with structural barriers when addressing core questions such as: "How do you feel that you are related to these environmental problems, especially if you do feel related in the first place? Who are or who will we be affected by these problems? What do we need to do in order to solve it? Can we solve climate change or simply just adapt? Who are specifically responsible for this crisis?" They attempted to encourage all kinds of responses from participants across the 16 focus groups discussions, beyond their initial spontaneous references, and they were proved provocative as they helped drawing a map of young adults representations of responsibility and agency that will be presented afterwards, starting by findings of the focus group conducted in Ireland.

Respondents´ Representations of Responsibility in Ireland

Who is responsible for the environmental problems – especially through the perspective of young adults? Humans in general remain the most recurrent answer across the 8 focus groups conducted in Ireland, followed by governments and the industrial sector in a second level. Emphasis was tabulated considering the number of groups which attributed responsibilities to these stakeholders, plus the intragroup level of agreement on pointing to each sector. The details of these responsibility attributions are presented below, illustrated by quotes from participants of the focus groups conducted in Ireland.

The attribution of responsibilities to the people in general, whether themselves or others, remains the dominant perspective, considered as most relevant by most participants. The *mea culpa* response and attitude was quite general and related to consumption habits and lifestyles for most of the cases, with some further reflections on their inconsistent behaviour and some references to how intrinsically unreliable humans –including themselves- might be regarding environmental protection.

In one of the most personal versions of self-responsibilisation and acceptance of psychological dissonance across the whole sample, Eco-villagers express:

> **Subject A:** We might not consciously be doing it, but it's our lack of consciousness when acting that has brought us all here. Not us individually, but all of us as individuals.
> **Subject B:** It is all our faults and I know I'm completely guilty of that. I'm very much like: On the one hand I hate how can you buy an iPhone and, you know, I fly to Canada and I do all these things. So, you know, even people who try the hardest are still … We're not perfect. And we still have a destructive way of life.

Alternatively, "people", although not specified who they were and clearly excluding the speaker, were held responsible for killing animals, being wasteful, not recycling and not addressing fossil fuels overuse. Opposing the policy perspectives of other groups on green transport, for instance, one of the participants of the Social Inclusion Programme argued that the problem was the citizen/consumer: "Think of the diesel car. Petrol cars are still there, although there are smart cars and they are trying to use electric cars for taxis ...". Urban consumers, unaware of food production processes, were the clear target of responsibility attribution in another group, conformed by members of the rural sector.

People in their role of citizens, claiming for environmental rights or deploying any form of civic engagement, were not part of this strong trend of not pointing to elites but to crowds when discussing responsibilities for the ecological crisis. Political activity through direct or representational democratic dynamics was not mentioned neither for their own cases nor for other citizens: electing, being elected, putting pressure in elected politicians, being a member or supporting civil society organisations, taking part in protests or citizen initiatives, etc.

The responsibility attributed to politicians or to the State in general, is half as recurrent as the attribution to the common people, and slightly superior to the burden put on companies. Politicians, and governmental forces in general, were usually signalled as failing to their responsibilities to a point where expectations about them are low or inexistent. Without distinctions between local or global level ruling, they were blamed for talking but not acting through laws and bans, for corruption, for not helping sustainable transitions to electric cars, for not leading the citizens in the right direction. As some participants summarise it, for "not paying attention to the crisis and failing to lead citizens to change" or, in a minimum performance perspective, in spite of being part of the job they are paid for. Governmental actions were considered in both, the national and the international level within some groups, as the one of Advanced University Students:

> I think that's everyone's responsibility. However, when you live in a democratic society, when you pay taxes, when you pay for governance, the government should be the people who lead collectively in the best interests of their people (…) And when you look at things like the Paris Agreement, when the majority of the

> world's governments came together and all agreed this was a major issue, that they were going to do something about it, that was one of those moments where globally, every single person felt: Oh ok, we're actually going to do something about this and we're actually going to make a difference.

Exceptionally, harmful practices were directly attributed to the government, besides the omissions of letting the environmental crisis advance. These detrimental actions reported were providing a misleading environmental education and engaging in stigmatising communication of rural stakeholders. The only positive reference to governmental actions was the plastic bag ban, although used to interrogate why don´t they continue with interventions that help citizens to sustain environmental behaviours.

Companies´ responsibility in the environmental crisis is a primary focus in only one focus group discussion, where they were accused of corrupting politics, of choosing the cheapest means of production without caring for the consequences, and of not wanting to invest in green businesses (much less embracing the circular economy), while not apparently caring about being labelled as polluting industries. The lack of corporate environmental responsibility appeared in other groups also as a matter of a profit-oriented culture or alternatively as a pragmatic cost-benefit analysis of green specific changes in their operation. Only one participant, across the entire sample, mentions companies not criticising the sector but as potential contributors, equally responsible as individuals.

Within the group of Young Farmers, the "we" refers to the agricultural industry in particular and it is an isolated recognition of their ability to combat climate change. Among this only group where any industry was represented, the consensual perspective derived responsibilities through a broad set of arguments, mostly focused on supposedly wrong perceptions about farming:

> I think that what´s unique in Ireland is that we are a food producing nation, a food exporting nation, and the more away you travel in Ireland there is farmers and food producing lands, animal, crops around you, and people see this. I´ve talked to people from US, UK, from Spain, from Italy, from some parts of Africa, and they don´t see the same level of farmers and farming industry surrounding them. So, In Ireland, people see and hear that farming is contributing so much to climate change, that "oh, yes, farmers are bad" or "let´s reduce the farming", "reduce the intensity, reduce the emissions" but it´s because it´s so central to here in Ireland, where if you go to another places like I mentioned, farming is seen as more of a vocation, it´s also seen that when people go to the countryside they are going for holidays, but people are living in the countryside here and farming is all around them so they don´t see us as food producers.

Along with the attribution of responsibilities to governments and companies, two groups signalled the responsibility of online influencers, exerting their impact especially on young audiences. Mis-framing emission responsibilities, proposing wrong paths to sustainability or ignoring environmental issues, were discussed as generally irresponsible actions, while they were alternatively considered capable of positive leadership as well. Media in general was also held responsible for following a similar trajectory, although this happened only in one of these groups, during this initial conversation preceding exposure to environmentally-focused YouTube videos.

In the following chart, it is possible to observe an overview of the attributions of responsibilities across the focus groups conducted in Ireland (bold text signals extensive intragroup agreement), alongside statements of the relationship between diverse stakeholders and the environmental problems.

Table 12. Perceived Responsibility across Groups in Ireland

	Who is responsible?	How?
Group 1: Folk Musicians	❖ **Companies**	• Making profit out of the environment, the cheapest way • Not finding alternative ways of making profit while taking care of the environment • Buying politicians to keep their business
	❖ Us/Citizens	• Taking part in the system, as for instance buying plastic, or buying cheap
	❖ State ❖ Politicians	• Doing stuff, respecting the law instead of just talking • Banning what needs to be banned instead of being bought by companies
Group 2: Inclusion Programme	❖ **People/They**	• Killing animals • Being wasteful, not recycling • Not addressing fossil fuels overuse
	❖ **We/Human beings**	• Being greedy (land, money, resources) and corrupted by power • Doing our part
	❖ Government/All governments	• Not doing what they should do
Group 3: University Students (First Year)	❖ **We/People**	• By doing each one´s bit, living healthier •
	❖ **Governments**	• Not paying attention to the crisis and failing to lead citizens to change • Due to counting with more power than individuals, but they are not doing what they are supposed to do
	❖ People above us/Influencers	• Leading people, as people follow their lead
Group 4: English Students	❖ **The leader of the city, or the place**	• Encouraging people who wouldn´t act only because of having the knowledge or people interested in changing
	❖ **Parents, adults, in charge of education**	• Any problem is about education: If you teach the children the right things, it´s likely that they grow up not doing stupid things
	❖ Everybody: Big companies, small companies,	• Everybody has to contribute to create a culture that orientates on how to do it right and how good it is

	ourselves individually	
Group 5: Third Level Students (Advanced)	❖ Everyone, but mostly the government	• In a democratic society, you pay taxes, you pay for governance; the government should be the people who lead collectively in the best interests of their people. i.e. Plastic bags ban, plan for transition to electric cars
	❖ Everyone, individuals and companies	• Recycling and consumer activism, but not enough if companies don´t reduce packaging, for instance, and not easy for not wealthy consumers
Group 6: Young Farmers	❖ **People, mostly urban consumers**	• By not being aware of dynamics of food production in Ireland and abroad (food miles, use of water, carbon footprint, etc.)
	❖ Media/Influencer	• Mis-framing emissions´ responsibilities
	❖ We/Agricultural industry	• Must do something about climate change
	❖ Government	• Using farming images to represent pollution • Pushing environmental schools that miseducate kids about milk and meat free diets
Group 7: Refugees/Immigrants	❖ Us	(Indirectly referred to when reflecting on individual agency)
Group 8: Eco-villagers	❖ Companies	• They don´t want to sacrifice their business
	❖ We/Everyone	• Not consciously acting as individuals • Even the ones who try the hardest, have a destructive way of life
	Language reflects that of participants	
Source: Personal collection		

As evidenced by the previous chart, young adults of each group employ diverse discourses of environmental responsibility, while their interaction produced different balances of responsibilities that characterise each group, and enable some intergroup comparisons.

Respondents´ Representations of Agency in Ireland

In order to go deeper into the nature of the environmental crisis and also the global reach of human responses, the provocative question of whether there is any solutions to the current situation was raised with the young adults in Ireland. Will there will be a collapse or could the trend be reversed, or what could technically be done versus what humans might more easily accept and embrace? Finally, what are the barriers and what is the reach of diverse agents in the face of environmental threats? If the discussion on responsibilities uncovered earlier perspectives of individual and collective agency of laypeople in the face of environmental risks, the latter conversation about the end of the story enabled new reflections about it.

Table 13. Representations of Future Scenarios and Agency across Groups in Ireland

	How will this end?	What should/could be done?	Barriers for action
Group 1: Folk Musicians	We can´t solve it. Not clear We have the power to change the course	○ Kill all humans (joke) ○ Street activism ○ Voting and grassroot movements to exert influence on politicians	○ Not being powerful elites causing the most damage (companies, politicians) ○ Not being in my own country ○ It all depends on political decisions
Group 2: Inclusion Programme	Only a big slap to the face can make people cop on Having personal responsibility is not enough … I don´t know You can´t stop it. And we are already put down now We can try and slow it It´s gonna cause a war		○ The majority seems to be pushing down the few ones trying ○ I can´t ensure that the majority will take responsibility although they have it ○ Everybody is a fool
Group 3: University Students (1st year)	Things would only change if society has certain mindset, but it depends on elite´s influence Solving it would be a very slow process There are ongoing alternatives	○ Elites acknowledging the crisis, so that society believes it ○ Stopping massive pumping of carbon, besides not having a car or a baby ○ Become vegetarian or vegan, not using a car, and little steps ○ Industries caring besides profit for their land	○ There is not much you can do since it´s in such a large scale ○ It´s a really slow process and demands to abandon the more traditional way, so it´s difficult to do it and sustain it on time
Group 4: English Students	People have the solution People can solve it We can´t solve it	○ Stopping to consume things of specific brands, as big companies just exist because of consumers	○ People thinking, because of lack of education, that we are in this situation because of companies and the system ○ People might not want to solve it ○ People want to see the effect of their action straightaway, and talking about the environment, it takes time ○ There is a lot of money and, when it´s about money, the big companies won´t allow to find solutions
Group 5: Third Level Students (advanced)	There are alternatives to consider If we don't act now, or yesterday, there'll be nowhere to grow vegetables and plants	○ Potentially effective programmes applied by governments ○ Assuming that the onus is on all of us ○ Maybe vegetarianism or veganism is the answer	○ Always assuming the person above you has the answer, which is not true ○ People perceiving climate change events as individual anomalies, as a fraud ○ Weak arguments, as ignoring that cows must be milked or they die ○ Donating to save animals instead of acting
Group 6: Young Farmers	It´s gonna take a food shortage a change in the mindset There won´t be enough water in 50 years	○ Targeting more impactful and less essential activities, as flying ○ Educating new generations, as they influence adults ○ Calculating emissions with a global perspective ○ Showing people that the most grass farmers grow the more carbon that absorbs ○ Using technology to help farmers track their carbon footprint and to show it	○ People not willing to decrease or eliminate flying on holidays, therefore accepting misleading evaluations ○ Vegan diets based on wrong information, social media causing trouble for young people ○ People would keep on cutting trees, they are not good at managing it ○ Consumers unaware of the impacts of vegetable production in other countries, and not asking themselves the question of how are we going to feed the world ○ Farmers are an easy target in Ireland, because they are everywhere ○ The whole argument about who´s actually going to produce what we want to eat is not there

Group 7: Refugees /Immigrants	I don´t think we can, like, do anything for this, to change the climate Everything is gonna change, in all countries	○ Weather is not in our hands so we can´t do anything ○ Businesspeople could exert influence to protect the environment ○ Being aware of what´s going on to others ○ Ask others not to cut trees or throwing garbage in the sea	○ People would keep on cutting trees, they are not good at managing it
Group 8: Eco-villagers	The solution will come from the people, if it arrives on time Not sure if the community project will work, as we are probably too late There are big problems, we are a bit late, but there is hope It´s a wheel that we cannot stop Very pessimistic about our chances, being so far from needed, with so little time We can't avoid the change that will happen, the catastrophe to happen and everything to collapse	○ The solution will come from the common people ○ Thinking global and acting local: Learning organic agriculture, developing a community that can grow bigger and integrated to the ecosystem ○ Young generations asking questions to the ones in charge of these problems ○ Europeans can learn in the Eco-village and educate others for free ○ Everyone taking power and taking action, but not sure it could happen in time ○ The best chances are in little, local, sustainable initiatives spread all over the world, who might survive	○ Community processes are slow and there is no time ○ Even the ones trying the hardest are not perfect, as they fly or use an iPhone ○ Not everybody has the privilege of volunteering to learn alternatives
Source: Personal collection			

Citizen Agency

The possibility of promoting the power of agency through eco-consumerism and the reduction of consumption of products considered harmful to the environment, remains one of the main trends posited among young participants of the research in Ireland. An English student from Brazil argued:

> I think we have the solution because when it comes to big companies, big companies just exist because of us. These big companies have these products but who buy these products? If we really want to change something, just let´s stop consuming things of this specific brand, to try to do something. I think we think that the big companies and the system can dictate what we need to do but it´s the opposite, they just [exist] because of us. I think [that] if we change minds, this can change too. Stop thinking "Well, we have this because of companies and the system." For me, the problem is education: When you educate people, everything can change.

Becoming a vegetarian or a vegan, plus other ways of being aware of the origin of the food, together with not using a car, belonged to this perspective as well, and it was discussed in at least half of the groups. An Irish University Student in her first year reflected:

> It´s a really slow process so we have to be really committed to try our best and not everybody is willing to do that. There are people who become [a] vegetarian or [a] vegan or do not use a car, however, not doing the traditional thing could be more difficult, so maybe do your best, try, small steps that could help.

However, another student, an Advanced Student, openly criticised this approach to the problem and the solutions. While doing so, she introduced the possibility of demanding an ethical corporate performance as well, connecting back with her initial diagnosis pointing to a lack of compassion as the mother of all social problems:

> We're kind of fed up with this thing, you know, like consumer activism. And "it's in your power". "If you don't eat meat than they won't breed cows and then all will be fine". But then when you're appealing to the people with power, is it that you are just appealing to their sense of greed again, because it's pointless to appeal to their sense of compassion?

Civic engagement and social connections were at the centre of a different trend across the focus groups, after not having emerged in the initial discussion about the environmental crisis or when discussing responsibilities. On the one hand, the proposal is to target decision-makers through protest, voting and/or taking part in grassroot movements. On the other hand, the proposal is to use the massive access to information in order to be aware of others´ needs and also to exert personal influence on others by demanding that they do not inflict any given damage. If they previously pointed to their responsibilities as consumers, now they turned to the political system for actual solutions. If they previously highlighted individual decisions associated to their lifestyles, now they appear to rely on social bonds. This mechanism of diverting the attention to other stakeholders when being further pressed to answer about what is needed to successfully respond to the challenges might uncover how the barrier of doom, cost and sacrifice operates in this cohort of young adults, along with distance in its dimension of perceived influence.

Acting as a good citizen regarding the environment would mean, in a Refugee's voice, the possibility of addressing others:

> I think that I can tell people, if I see them throwing stuff on the sea or anywhere, if I saw them cutting trees, I can tell them "no, this is not right because it will affect our climate, our environment." I can tell say that to people who don´t care about the environment [sic].

While activism in the form of street manifestation or joining political organisations is a response that most Folk Musicians find logical, only one of the participants is embracing it and vindicates voting as well.

> So, for me, one of the most important parts of my life is also enter into politics, so I'm an activist and I think this is very important as well. So, it's important to have grassroots movements but also try to influence, try to do political campaigning for people that represent, if you believe in the democratic system of course. It's also important having grassroots movements but it's also important to have echo, represent yourself in a government, I think.

Focusing on their possible role in this matter, leads Folk Musicians to the identification of their privilege as people who might have a job with a pro-environmental impact, contrasting with Third World deprived populations who supposedly do not count with that possibility.

> **Subject B:** To find the way to have your, [sic] to work in a field that is like good for people. It's ok if you are still making money for yourself but that is good for people and the environment. So, if you can have a job that improves the situation ...
> **Subject C:** But this is also very limiting. Not everybody can afford a job, or an education to have a job that can make an impact (…) Lots of people in the world! Lots of countries, very poor countries that cannot know more than slavery or surviving.

However, it is exactly among a Third World group, where this approach to responsibility and agency appears as well. In the words of a Turkish Refugee living in Ireland: “The first [thing] that came to [my] mind is: Through the things I´m doing, for example, I´m studying business, I´m planning to be a businesswoman, so through this stuff I could be influencing other people.”

Eco-villagers and members of the Farmers´ Association presented the most detailed and articulated proposals for solving the environmental crisis, which reflected the close relationship with nature of their daily rural activities. With different perspectives and tones, they were both indirectly expressing that the solution was what they were devoted to at the moment –farming, living and learning in an ecological village-, which gave them significant agency, although structural issues beyond them were stopping the necessary massive change.

Regarding their individual and collective agency, young Farmers clearly identified contributions and challenges:

> **Subject A:** Livestock production, let´s say dairy, beef, sheep, whatever it is, but they are converting something that´s inedible to humans – here in Ireland, grass –

into meet, into dairy, into sheep meet, so it´s converting something that as humans we can´t digest and turn it into food products. And that´s not a message that we had really pushed and show people, like, the most grass we grow the more carbon that [it] absorbs, and we can turn that carbon into food, and something that we need to show that story about as well [sic] ... How we are producing our meat, how we are producing our dairy. I think that´s something that people would understand, where do we come from, so ...
Subject B: I think educating children and schools, like what Agri Aware does I guess, as several different studies show the influence of children over purchases and habits of their parents it´s actually really high. And I think that´s [a] huge area that we need to educate that group [of] people ...
Subject D: Right.

The perspective of Eco-villagers, the other group clearly embodying what individuals can do besides eco-consumerism and civic engagement, also focuses on their individual and collective agency, while acknowledging external forces at play and uncovering many uncertainties. In their words:

Subject A: Well I don't think that the solution will come from above, from the high class and from who is governing. I think if they have a solution, it is not a solution, unfortunately. It will come from the common people. And I think, because I'm here in this eco-village learning things about agriculture, that it should come from organic agriculture, because it allows [sic] ... I mean, it puts you in a situation where you are the main individual of your own little space. At the same time, you are doing something local, thinking about something global. So, you are creating … you are trying to create a kind of community that can be a community of people, that can be a community of vegetables, that can be a community of animals and insects that creates a bio-diversity that can maybe become a bigger scheme. That, with a kind of rotation, can maybe involve more people and more places. But I'm not sure that it will work honestly because we are probably too late already. You were asking before when. I think that the scientists said something, like, eleven or twelve years that there are left for us, so ... But anyway, we are here so we will do something, probably! Also, just to keep us busy you know, to do something! (laughter)
Subject B: I can say something, if you don't mind ... there are a lot of problems from one person to society, from insects to other big animals, from plants to people, OK? There are a lot of problems. And actually, there are big problems but you know, like, but it's not a bit late [sic], there is a hope. You know, like, for example now, in Europe and other parts of the world, young generations are bringing work, like, they are asking questions to people who are creating those kinds of problems for society, for nature, for their future, OK. This is a good thing actually and this movement of young generations, like us, it's going to create positive things to have a solution for those problems. If those solutions will be enough or not, I don't really know but at least, will be something positive, you know, for nature, for the future. And, like ... future yeah, that's it!

Finding a way out of the environmental crisis finds a diverse set of barriers as identified by the focus groups` participants in Ireland. Lack of commitment on the side of people is the category with more

references, with structural and contextual deficits ranking second. Psychological and micro-social barriers of diverse nature were also mapped out in four of the eight groups. Misperceptions, derived from lack of information or education, were identified as difficulties to assume citizens` responsibilities or as drives to invest in "wrong solutions" like veganism, along with denial in the form of perceiving isolated anomalies instead of an interconnected phenomenon of human-made environmental crisis. The incapability to invest in long-term rewards, which are provided by environmental benefits, was another barrier identified.

Alongside individual mechanisms to deal with the problem, micro-social dynamics affecting agency were identified. "Sheeple" behaviour was mentioned in a couple of groups, as a somewhat unconscious form of avoiding personal commitment that they acknowledge in others, and also low self-esteem leading to feel like "the answer is always in someone above you", confessed in first person as a constraint for engagement with environmental risks. Moreover, Advanced University Students signalled what could sound as a so-many-impediments fabricated constraint (Stoll-Kleemann, et al., 2001, p. 11), while offering a valuable cultural insight for situated knowledge of psychological barriers for effective environmental communication:

> **Subject A:** It's funny when you said shame culture. I think that is so inherently Irish and it not only applies to things like sex, it's so across the board that if you are, like, in any way different than the norm, then you are kind of ostracised. Yeah, and again it does come back to things like the environment. It's kind of, like, you know, if you do try to make a difference, you're seen as lesser, like people who drive electric cars are seen as either [sic], they're not the middle of the road, they're seen as either they think they're better than everyone else, or they are below you. And it's one or the other. It's never: Oh, that person's trying to save some money, actually a prime example of that would be people who drive hybrids who don't get any slack. Because it's: Oh yeah, you've still got petrol in that car, that's still a car, you're not trying to rub it everyone's faces, or something!

End of the Story

The constant in the discussions in Ireland is the uncertainty about how everything ends. This is present in 8 out of 8 groups´ visions of the future. Most of the groups reject conventional wisdom to guess how this crisis will end, keeping the discussion on the realm of possibility in trying to stop the catastrophe instead of evaluating if human agency in itself will be strong enough to "save the planet".

This conversation among First Year Students offers an example of not simply forecasting guesses, but rather foreseeing a clear solution that they do not certainly trust, thus suggesting the barrier of doom for engagement with environmental risk:

> **Subject A:** Well, governments have a lot more power than individuals, whatever they would decide to do would has much more effect. But they are thought not to be doing what they should do.
> **Subject B:** I think it would only change if society has [a]
> certain mindset but we are influenced by the people who we believe have power over us, so if they say something like 'this is gonna happen' then gradually the society will follow and believe that it is true. And this is how [I] think things will change. The government, and the people that individuals listen to and, like, I feel people that we believe in have more power over us and who have more influence than us, like, people in social media and just those are [positioned in a] higher [level] than we believe we are.

Similarly, the vast majority of the intermediate positions – neither apocalyptic nor affirmative regarding the solvability of the problem– have a predominantly pessimistic hue regarding the future. Alternatives and solutions already in place, mainly from grassroots movements, might take longer than the time we have left, in the perspective of many of the participants located in this middle terrain. Others found it possible, but doubt of the will of the people or the elites to lead the change of mindset needed. For others, a happy ending might only come after a collapse that shakes the structures: "It´s gonna take a food shortage to change the mindsets" –sounding like an almost desirable drive for the shift the participant demands from society-; or "Only a big slap to the face can make people cop on", expressed in a judgemental tone inspired by irresponsible others.

The pessimistic trend is reinforced by explicitly apocalyptic visions of the future, which emerged in 6 out of the 8 discussions held in Ireland. For participants of the Social Inclusion Programme, one of the few consensuses about environmental risks is that 'this will end up badly':

> **Subject A:** I think this is gonna cause a war.
> **Subject B:** Oh, we are already in our way to [a] war. As long I´m dead, I don´t care. It´s gonna be [a] war, it´s gonna be World War III.

Eco-villagers spoke in terms of human extinction, a collapse, a reset of the planet. The human response is framed as "changing what we are doing" as a matter of surviving, and "preparing ourselves to have better chances to survive" through adaptation and resilience strategies. Among Refugees, these questions reveal a knowledge deficit regarding the anthropogenic forces concerning environmental change: "I don´t think we can, like, do anything for this, to change the climate." For others asserting the limited agency of human beings, the existence of more powerful structures is key: "We can´t solve it, companies won´t allow it", "Having personal responsibility is not enough …", "It´s a wheel that we cannot stop", "You can´t stop it. And we are already put down now".

Finally, it is possible to find optimistic statements about the future in 5 out of the 8 groups, although it does never represent a strong trend within the discussion. English Students, all of them from Latin

America although living in Ireland, were the most confident about the power of the people through both private sphere habits, and pressure on companies that need them as consumers. In other conversations, isolated voices of confessed activists pointed to either civic engagement as the key to significant changes – "We have the power to change the course of events", or to a wishful hope in spite of the circumstances – "There are big problems, we are a bit late, but there is still hope". The remaining perspectives belong to those who affirmed that it is technically possible to solve the crisis and reverse the problems, but they doubt about the chances of a prompt reaction, the existence of political will or the will to carry out uncomfortable changes at individual level.

Therefore, Irish respondents appear predominantly pessimistic about the future, clearly impersonating the doom factor of Stoknes set of barriers impeding effective climate communications. Dissonance is acknowledged and mostly accepted with guilt, instead of altering beliefs, questioning knowledge or stepping into denialism to solve the dissonance.

Respondents´ Representations of Responsibility in Uruguay

Who is responsible for the environmental problems according to the perspective of young adults living in Uruguay? Citizens, government and the industrial sector is the resulting list when considering perspectives across the 8 focus groups conducted. Emphasis on diverse stakeholders were classified within the Uruguayan sample, considering the number of groups which attributed responsibilities to the abovementioned stakeholders and the intragroup level of agreement in pointing to each one of them.

The predominant discourse is that responsibility lies on "us", "all of us", "each one of us", "human beings", "groups of people", while further explanations suggest that the category could be that of citizens or laypeople. These responsibilities covered all of the domains of environmental behaviours, from the private to the public sphere, involving eco-consumerism, domestic conservation behaviours, civic engagement, and lifestyle changes of diverse scope. Individuals as (i) responsible citizens is the emphasis in most groups – with domestic and public space actions - while others focused on humans as a species sharing the planet with other living entities, in a more eco-centric perspective, or as consumers feeding a clearly unsustainable production system. It is reported through confessed personal failure to specific or general responsibilities, but also through personal distancing to the collective "we"/"humans." In just a few cases, other citizens are blamed explicitly, excluding the speaker.

The most affirmative version of the focus on personal civic engagement is provided by the group of Eco-villagers, in which government action is explicitly undermined:

> For me, that responsibility belongs to each individual and to each group, that is, it really starts with ourselves. Moreover, lately I constantly see that the government is asked to do something, and I say but how are you going to hope that, to expect someone so far away whom you don't even know, to do something? I mean, really, let's start with us.

However, the government is the second great depository of responsibilities, when looking at the total of groups conducted in Uruguay, these attributions being half as frequent as those aimed at the common citizen. It usually refers to country-level authorities, in charge of identifying how every specific country may contribute, enacting laws, using a heavy-hand so that they are complied with, monitoring the state of the natural and built environment, applying fines, or increasing the price of polluting goods, such as plastic bags. Politicians, in particular, are hardly pointed at, with the exception of the recent access to the Parliament of a senator of the Green Party who practices agro-ecology. At a local level, states and cities are expected to take care of waste management, and indirectly blamed for not providing zero emission public transports or public bikes, as seen in other countries. Other countries were also signalled in order to criticise their irresponsibility, as is the case of Brazil with regards to stewardship of the Amazonia – not stopping or regulating industries like those of gold mining and clandestine tree felling, or generally industrialised countries "which have more power." The right to a clean or healthy environment is never referred to in these terms, while the role of the public sector is not directly associated to warrantying environmental justice.

Even though Eco-villagers, Folk Musicians and Advanced Third Level Students did not assign responsibilities to the government, governmental responsibilities were a matter of intense discussion in other groups. Among young Farmers, some participants argued that regulations and sanctions were crucial, while others would instead emphasize citizens´ compliance with the rules. The group of young participants of the Social Inclusion Programme had a highly engaged argument around the issue of waste in public places, where half of the group would put the burden in individuals, while the other half would blame the failure of the public collection system.

Industries took the last place in the ranking of responsibilities, as it was mentioned four times less than citizens, and two times less than the government. Across groups, only half of them attribute any responsibility to companies in the environmental crisis, and usually without strong consensus or without putting it in the first line of responsibility. When companies are signalled, the reason is mainly the production of toxic waste. Accordingly, there were positive reviews of their role when they applied a plan for waste management –something extended in Uruguay, according to Refugees/

Immigrants, who also referred to the positive role of raising awareness and "fixing destruction." Destroying nature to plant soy and polluting natural resources through agrochemicals, were also associated with industrial activity. Lastly, industrialisation in general and its unsustainable logic was another way of blaming companies for the ongoing environmental crisis. Only Folk Musicians put in bold terms the radical responsibility of this sector, by stating that there are "100 or 120 owners of the means for production" and production of goods creates "80% of the global pollution."

In the following chart, it is possible to obtain an overview of the attributions of responsibilities across the focus groups conducted in Uruguay (bold text signals extensive agreement), alongside specifications of the relationship between diverse stakeholders and the environmental problems.

Table 14. Perceived Responsibility across Groups in Uruguay

	Who is responsible?	*How?*
Group 1: Folk Musicians	❖ 100/120 owners of the means for production ❖ All of us/Consumers	• Pollution of production of goods, which is 80% of the global pollution • Consumption of the products
Group 2: Inclusion Programme	❖ Us ❖ Other individuals ❖ Local Government	• Throwing envelopes in the street • Mistreating animals/eating them • Throwing garbage in the street • Garbage collection • Law for cleaning • Fines
Group 3: University Students (First Year)	❖ **Governments** ❖ Some countries (large scale polluters, developed, owners of special natural resources as Amazonia) ❖ All of us	• Regulating industries • Identifying what each country can do better, regardless of their size/power • Increasing the price of polluting goods, such as plastic bags • Eating meat • Using single-use plastics
Group 4: Technical Training (First Year)	❖ **People/Humans** ❖ **Context/Culture** ❖ Companies ❖ Government	• Not taking responsibility for changing habits (i.e. recycling, reusable bags) • Technology that disconnects children from the environment • Produce toxic waste • They use pesticides, dump waste without a correct process and end up in the oceans • Country policies and taxes
Group 5: Third Level Students (Advanced)	❖ Industry ❖ Elites with power ❖ Us	• Industrialisation • Destroying nature to plant soy and polluting with it • Overconsumption of meat/Stop eating meat • Over exploitation of natural resources
Group 6: Young Farmers	❖ Government agencies ❖ The human being	• Laws, heavy hand • Only changing habits if sanctions are in place (plastic bags example) • Throwing garbage anywhere
Group 7: Refugees /Immigrants	❖ **Us** ❖ Industry/Factories	• Not separating the garbage • Noise/Hearing damage • Not reusing bottles, car wheels, plastics, nylon (domestic, enterprises) • Allowing Amazonia to burn

	❖ Public Policies	• Waste management plan • Call for reflection • Fix things so that there is not so much destruction on the planet • Zero emission public transport, public bikes • Not stopping Amazonia depletion (gold mining, clandestine tree felling)
Group 8: Eco-villagers	❖ Each one of us ❖ Collectives/Groups ❖ The people	• Look for a personal balance, from inside • Leaving the city, searching for life alternatives which are integrated into nature, into the land • Organising to create a local economy • Taking care of the seeds • Raising their voice, demanding, demonstrating, stopping the mining, direct action
	Language reflects that of participants	
Source: Personal collection		

As evidenced by the previous chart, there were diverse perspectives inside each group. However, it is possible to identify a certain balance of responsibilities that characterises each group and enable some intergroup comparisons.

Respondents´ Representations of Agency in Uruguay

As reported, discourses of environmental risks´ responsibilities included some perceptions of individual and collective agency that emerged before being punctually addressed in the discussion schedule. Is there any solution to the current environmental crisis? Will there be a collapse or could the trend be reversed? What could technically be done versus what humans might accept and embrace? What are the barriers for (effective) action? If the discussion on responsibilities early on uncovered perspectives of individual and collective agency in the face of environmental risks, the latter conversation about the end of the story enabled new reflections to shine through.

Table 15. Representations of Future Scenarios and Agency across Groups in Uruguay

	How will this end?	What should/could be done?	Barriers for action
Group 1: Folk Musicians	○ We are on time to solve it. It depends on each one of us ○ Not if the current economic system does not fall ○ The underlying problem will remain: Exploitation. It keeps changing its forms.	(Not mentioned)	○ A system where capital is at the centre, not the environment, not humans ○ A system based in exploitation of humans and nature
Group 2: Inclusion Programme	○ There are solutions, certainly, as laws, fines, better services for collecting waste	○ Pass a cleaning law ○ Applying fines ○ More frequent municipal collection of waste	○ Nobody wants to pay the fines ○ Fines can be paid but garbage bins will still be overloaded
Group 3: University Students (1st year)	○ Many people, especially in Africa, will die more ○ Societies will adapt to horrible things	○ Adapt, reduce and postpone the damage ○ Developed and highly polluting countries must act and can make a difference	○ Having not that much power as a country ○ Solutions like going vegan will not be massive until we are about to collapse ○ Producing meet is Uruguay´s main economic activity

		○ Other countries like Uruguay might follow within their possibilities	○ Companies focus on their gains, not interested in world´s welfare ○ A psychosis about climate change, then people don´t believe anything
Group 4: Technical Training (1st year)	○ It can be solved, but by postponing it is getting extremely difficult ○ It cannot be solved what´s going on with the environment. We might make it better or less ○ Some issues can be solved, some damage could stop or diminish, but we will have to adapt.	○ Taxations as the one of charging plastic bags ○ Education of children	○ Many things out of our reach as individuals, managed by big companies ○ Entering people's minds to change their day-to-day life is complicated and in some places, they don't care directly ○ Also make companies have their rules and analyse alternatives ○ Species extinct cannot be created again and, if created through cloning, it won´t be natural, plus the adaptation process to the new planet will be expensive
Group 5: Third Level Students (advanced)	○ There is a solution but in the really long term, because we have become consumer generations globally ○ I doubt it, as it is in the human nature to use natural resources to survive	○ Global politics must change ○ Raising awareness ○ Reusing and updating the same Cell/iPhone, instead of disposing them ○ *Mea culpa* and find something to do to contribute (like stop eating meat)	○ Many people with hunger issues ○ We are, globally, consumer generations, and it´s almost impossible to avoid the consumption system. It is installed generation to generation ○ Human development entails using natural resources, from the origins and it will be always like this, even unconsciously ○ Technology had developed things to make us live more and with more comfort
Group 6: Young Farmers	○ It cannot be solved ○ With policies, the problem can be reduced	○ With politicians who are aware ○ With a heavy hand	
Group 7: Refugees /Immigrants	○ So far it can be reversed if we stop the time, but not in a century	○ An early starting lifelong environmental education	○ Comfort ○ Lack of individual initiative to collect and sell packaging ○ Misinformation about waste-management systems ○ Companies only care about their pocket ○ The need to generate income through a job to feed your children ○ The priority of poor people to survive day by day ○ Organic and ecological products are too expensive ○ Short term orientation of humans, short life
Group 8: Eco-villagers	○ We are adaptative beings, we can adapt to anything ○ For some people, it will be harder to adapt than others ○ The scenarios are infinite ○ The solution exists and starts with each one ○ It´s so imminent that its days are counted; furthermore, it all will explode in 50 years if we don´t act ○ The model destroying us cannot change, it will collapse ○ It will not be a sudden collapse. It is an ongoing process	○ Deep revision of educational systems ○ Looking for alternatives, as escaping from the city and integrating in nature ○ People organised, creating a new model for when the old model falls, looking at ancient civilisations	○ Lack of economic power of certain population ○ Lack of information of certain population, especially the poor ○ Education now lacks of a different conception of humans and their surroundings ○ A strongly set and defended *status quo* of the system, backed by a power difficult to overcome. If it doesn´t fall, then nothing will emerge ○ The trend to ask the government to act, instead of acting ourselves
Source: Personal collection			

Citizen Agency

Eco-villagers are the group who hold the most elaborated and strategic perspective of a fully-fledged citizen agency, which came as no surprise, since they were the only group in the sample examined whose collective purpose could be considered "environmentalist":

> **Subject A:** With the previous question, when you ask if there was a solution or we just adapt. Yes, we are adaptive beings, we adapt to whatever there is, to

> whatever comes, but I also feel that we, here, for example, are looking for a solution, right? As we choose to leave the city and find a way around what television brings, each one of us is looking for a solution to our way of life, by integrating ourselves into nature, which in the city is very difficult. That helps so much to environmental pollution. So, well, we are adaptable, but we also have to find a solution and, I don't know, that answer just came to me: That here we are, in the solution.

Besides referring to their own semi-rural initiative of building a community around permacultural practices, they include others who live in cities in their proposal of citizen action for facing the environmental crisis. This constitutes one of the few references to differential roles for people according to their location and, ultimately, their place identity.

> **Subject B:** The solution exists, I think it begins with ourselves and if we people organise ourselves and create a model. Let's talk about a new model so that when the old one disappears, there is already a living flag and there are no leaks. So, I think people, I see that, for example, in the cities … Political action, let's say, activism … The space that is given in the city is much more for asking, for protest ... I'm not denying that there is space for propositions, obviously not, because there are a lot of things. But the city gives you that space, you know? It is to go there to the places of power, where decisions are made, and ask for it. To successfully protest, to chain yourself, to complain. Those who leave the city I think they also do so because they recognised that, no, in the city there is no way out, there is no space for the construction of the new. And both are important, it is necessary that people go and ask for changes, right? To raise their voices, to demonstrate as well, to face repression. People who chain themselves to the trees, people who aim at stopping the mega mining, are as important as those who organise and try to create a local economy. The two I think go hand in hand, and need each other.

Young Farmers, the other group having a close relationship with nature, are globally under scrutiny because of the ever-increasing carbon footprint of animal products. However, neither they offered an articulated response about their agency in the environmental crisis, nor they detailed barriers for individual or collective agency with regards to the risks they identified. Surprisingly, the Uruguayan farmers did not answer as "a body", as if they were answering on behalf of a sector, although being part of a rural association same as the participants surveyed in Ireland – probably reflecting the wide range of farming perceptions and attitudes from within the sector.

In those two groups – young Farmers and Eco-villagers – the only references to civic engagement emerged, as a way of exerting human agency. The presence of a green politician in the new parliament is the reference to representative politics as agency, while Eco-villagers referred to political activism when highlighting the pressure at the gates of decision-makers that people in the city might exert.

In contrast, the most extended discourse across the Uruguayan sample refers to personal agency through a conscious consumption and through recycling habits, which appeared again in this second moment of discussion about the role of laypeople in the environmental crisis. If consumption was extensively discussed across focus groups, the most engaged with this sustainable alternative to business as usual were the Advanced Third Level Students and the Refugees/Immigrants. The latter group devoted most of the conversation to reusing and recycling habits, which they consensually considered as part of their cultures of origin besides being a cost-effective activity:

> **Subject A:** I am also an ecologist. I have a creative recycling company, it's called X, and I work creating things, shapes, from the heart, everything recycled. I say that, if we start little by little, it's okay to [sic] … There is a large share of debt from large companies, where they produce things, they could call for people reflecting upon it or fix things themselves so that there is not so much destruction of the planet, but what we are doing [sic] … I think that we can do little things to reverse the damage a little. We cannot leave everything to the companies, because we know that most of these companies do not care, they only care about their pocket.
> **Subject B:** Supporting and defending that idea, there is a phrase that is used a lot in our country which says that Cubans are the best recyclers in the world. Because there is a way, see, the logistics … It´s complicated, but it is about reversed logistics, which deals a lot with these recycling issues. Cubans are expert on that level, you know? Because we are the people who, for example, buy a bottle of soda, and we do not discard it; we use it for water, we give it another use. And when it is no longer useful for water, we chop it and plant a little plant in the park. Or we buy a sweater and that sweater goes through different processes, you know? You come here and it has happened to me … For example, the workers use cans a lot: You finish the soda, you remove the acid and you already have a glass.
> **Subject C:** And you can also make gaskets for carburettors, for cars. Or making ashtrays.

In Uruguay, the main barriers for humanity thriving, in this world at risk, are specific structural forces (6 groups) and ethical failures of citizens, followed by other stakeholders (5 groups). Regarding psychological and micro-social barriers for engagement with environmental risks, a small but interesting set of constraints identified across the discussion (3 groups) confirmed the value-action gap occurring, despite high levels of awareness and understanding. “Perfect” information is not enough to spark any jump into action, while doom and lack of self-efficacy appear strongly in one of the most knowledgeable groups, that of First Year University Students:

> **Subject A:** I feel bad about myself, for not being vegan (laughs), because the livestock industry is what pollutes the most and I continue to consume it, and it's like, I don't know … And many people are aware of –not all of them, but many people are aware – that the livestock industry is the one that pollutes the most, and

we continue to consume the same meat, products derived from animal origin. So, it's like … I feel very responsible, even if I´m not directly responsible, but, yep.
Subject B: I do feel responsible, I feel guilty when, for instance, when I buy something stupid with a plastic thing like this, that later I have to throw away. I feel bad, but, for example, in my house, I have a bag in which [sic] … In Canelones there are large recyclers, it is not classified as here [city], and so who knows how much of that they recycle. I mean, it is a lie but my family always insisted [on us] throwing all the plastic and glass there. I try not to use single-use plastics; they give me, like, a bad impression. I'm a vegetarian, not because of the environment, at first, but now I also join those reasons. And I try to buy few products of animal origin. For all of that, I feel responsible, but what happens is that [sic] … I think that, as individual, we have to take responsibility but we also have to be responsible for the government, because what we can do is never so much.
Subject A: Sure, like a small contribution, to add something …
Subject C: The same thing happens to me, with the plastics, but it doesn't hit me as much. I have it more internalised, [I have] assumed that the industries, the industrialised society, is everything about plastic, nylon bags and everything like that. So, that´s how it is.

Besides these kinds of (cognitive) dissonances or justified doubts of laypeople's efficiency, complementary psychological barriers to pro-environmental action are highlighted and sourced within various forms of social dynamics. For example, as previously mentioned, Technical Training Students agreed on the identification of some socially cultivated individualistic inertia:

Subject A: I think it´s also the disunity of the people because these problems also occur due to indifference. Because there are people who want to change things, but out there they are disunited. And there is like another system that is controlling us so that each one continues with their life, and put those problems aside … And they continue to grow. That´s the thing.
Subject B: Also, another thing would be that, many times, someone thinks that he wants to do something well, but he kind of joins the crowd that does not think the same and ends up like everyone else ...
Subject C: I would support what they just said. Like, the lack of empathy, as each one only cares about their lives. One has to be fine, so no one look to the side to see what is what is missing for others, or if I can help.

End of the Story

Diverse positions emerged within and across groups, while offering a majority of optimistic perspectives in spite of sharing a concerned diagnosis regarding the present moment. The type of "what if" factors provided assistance towards understanding how close they feel to the solution they believe in. In half of the groups (Inclusion Programme, Technical Training, Refugees/Immigrants, Eco-villagers) the views were either that there is a solution or at least the possibility of decreasing the harm carried out, which, along with adaptation of human beings, portrays a liveable future on Earth

- no alternative voices stated the opposite. The solutions identified highly depended on the possibility of acting now and the burden is mostly placed on an undefined and consensual "we". Some explicit references were made to policy and politicians (Social Inclusion Group, Young Farmers, Technical Training Students), to organised people developing alternatives (Eco-villagers) and to individual guilt and *mea culpa* leading to lifestyle changes (Advanced Third Level Students.) No companies are relied on when it comes to solving the crisis, in spite of some responsibilities previously attributed to them. Generational changes are presented as an alternative, but a slow path is identified – being hopeful if there are early life educational efforts to build a pro-environmental culture (Technical Students, Refugees/Immigrants), and techno fix solutions are not taken into consideration.

Among the rather optimistic perspectives which represent a middle terrain, Eco-villagers and Technical Students were the groups articulating the most nuanced analysis of scenarios, with a place for assumed unrecoverable losses, (differential) human resilience, and the potential restoration of nature through increasing bio-diversity. This passage cited in the discussion among Eco-villagers reflects this more balanced perspective of the future, while insisted on a previously reported analysis of who is in a better position to adapt:

> **Subject A:** It seems to me that it will always be an adaptation to what the experience brings. I mean, there are things that are irreversible in the model that is destroying us. It will not change, because it cannot change. The collapse, to use that word, will not be from one day to the next, and today some have advantages …
> **Subject B:** There are so many factors, it is very complex to be able to say if one is doing well or worse [sic] … [It] depends on where you are geographically. And, something else: Someone who eats differently is capable of being healthier. And living on top of the mountain, in these geographical conditions, provides best chances of survi ving. I don't know, temperature will increase by 2050 more than 1 degree Celsius the surface of the planet earth, that is, in the midday we won´t be able to go outside anymore (laughs.) And who is going to win there? Who can enjoy under a shadow or who can stay …? Maybe there is someone in the middle of nowhere who has much more chances than millions in cities, no matter if they have more money. So, the landscape, the ecosystem, will be transformed, and, well, the scenarios are infinite. And especially when having more and more people, more people wanting to consume resources; undoubtedly, no matter if you have plants or knowledge, if you are in a gigantic city, you are messed up (laughs.)
> **Subject C:** Maybe it´s healthier to be poor all your life and having to bike everywhere, because you will have developed an impressive lung capacity or you can run better to reach a cave to get shelter in Pan de Azúcar … (laughs.)

The First Year Students of Technical Training also discussed restoration paths among all the possible futures pictured by them:

> **Subject A:** I believe that some problems can be solved, and others can be stopped so that the damage is less acute. And, at the same time, we will have to adapt to this new planet, because we cannot create again what was destroyed.

The other half of focus group discussions (Folk Musicians, University Students, Advanced Third Level Students, Young Farmers) presented more pessimistic visions of the future -close to Stoknes´ concept of doom, considering no solutions to the environmental crisis. Although these opinions coexisted also with more optimistic projections within the groups where they emerged. The idea of collapse is present, but not necessarily as the end of the story for humans, but rather for "the system"; the unsustainable production and consumption arrangement of dominant business norms remains highly criticised. First Year University Students and Advanced Third Level Students hold the most apocalyptic perspectives of the future, with a clear lack of faith in society as a whole. Global political elites must act instead, along with a distinction being articulated between the most and the least vulnerable populations. Contrasting with the optimistic perspective, generational changes are hopelessly given the difficulty of reversing a globalised consumer trend, as argued by Advanced Third Level Students, in spite of showing very specific knowledge of alternatives.

Summary and Discussion of Findings on Responsibility and Agency Facing Environmental Risks

We begin to approach responsibility and agency from the first responses to what the main environmental problems are, particularly when the participants prioritise a more structural analysis that goes to the roots of the problem(s) instead of focusing on specific risks. There, the role of human being is problematised, although still without specifying which sectors or stakeholders are complicit. Assumptions about agency and civic engagement are further negotiated and contested when asked to assign particular responsibilities. The findings of the section dedicated to responsibility and agency, allow us to delve into that first approach taking up questions that directly point to who and how they are impacting the environment, as well as what outcome do these young adults foresee.

Regarding the attribution of responsibilities, it is noteworthy that, both in Ireland and Uruguay, the layperson is the first one accused by focus groups respondents. A more or less critical *mea culpa* mixture of guilt and shame predominates from a close examination of all these focus groups in this study, taking the place that could be more appropriately shared with decision-makers, large polluters or even the whole macro-system. However, the particular differences between countries appear when the following ranking positions are reached: Governments and companies are responsible in joint

second place in Ireland, while in Uruguay the government is the second major responsible agent for not dealing with environmental risks, while companies are placed in a distant third place, for their overall responsibility for the environmental crisis. Therefore, socio-environmental conflicts largely spread in Latin America and identified also in Uruguay (Environmental Justice Atlas, 2021) do not seem reflected in these evaluations of the role of companies in the environmental crisis, even when pulp mills issues and other specific environmental impacts were reported initially.

Table 16. Responsibility Attribution across Countries

Ireland	**Uruguay**
#1 People / We	#1 People / We
#2 Governments and Companies	#2 Governments
	#3 Companies
Source: Personal collection	

Participants´ ´vocabularies of responsibility´ in this study were coincidental with a previous study on laypeople perceptions of environmental risks (Clarke & Agyeman, 2011), while the recurrence was contrasting with those findings as these young adults did not tend to off-load or shift away responsibility onto institutional others. In this study, there were also cases of personal distancing using the consensual and collective "we"; a shift to the government to guiding and regulating behaviour; redistribution to (ir)responsible others; and the active rebuttal of individualisation - but not only redirecting it to the government, in this case. However, these alone were not the predominant discourses employed, but rather deploying clear assumptions of personal responsibility, including confessional reflections about their impossibility to act upon their knowledge of the current environmental crisis. There is a recurrent assumption of individual responsibility, with few (indirect) references to environmental rights. Additionally, there were further new discourses of attribution, like the one of responsibility diluted in a system to which participants belong to, without the possibility to escape, in which there are powerful others, but that holds itself in everyone, including themselves.

Regarding how the story will end, what can be done and what barriers exist that may tamper with future success, the main difference between the young people of the two countries is the apparent certitude with which they respond to such complex dilemmas. While in Ireland they do not dare to foresee an outcome and expressions are filled with uncertainty, in Uruguay there is speculation about the future without reservation and with apparent total conviction concerning many of their positions. The projections, in addition to being bold, are mostly optimistic in Uruguay, although adaptation and regeneration strategies are discussed more openly in the face of the exclusively preventive focus gleaned from the Irish groups. In contrast, the young people consulted in Ireland offer a pessimistic panorama that reaches not only the possible future but also the necessary success of the actions that

they consider reasonable to carry out, or that they are already taking on board. Lack of commitment – due to ethical, psychological or cultural failures, especially across individual citizens, is the most recurrent barrier identified in the Irish focus groups, while in Uruguay structural conditions predominate in pointing out obstacles to successfully combat the environmental crisis, particularly taking into account various forms of injustice and inequality. A neo-liberal approach stressing individual agency, usually associated to core countries, versus the focus on structural forces that progressive socialism ruling Uruguay for the last 15 years emphasises might explain this divide, although political affiliations and political ideology were not discussed in the focus groups or measured in any form.

In Uruguay, the combination of optimism and low perception of self-efficacy suggest a considerable challenge to move from awareness to engagement with environmental risks, thus still far from effectively bridging the value-action gap. A shadow of North-South ecological debt and global asymmetries help the subtle emergence of a social representation of national low responsibility in the environmental crisis. Irish participants might be allocated in a more promising stage as they seem to be already facing self-destruction, with many expressed feelings and uncertainties that, although still looks like doom, might lead to a balanced assessment of responsibility and agency. However, the quantitative assessment of emissions and the stereotyped issue of plastic in the ocean, both closely associated to their unsustainable and dissonant consumer choices, seem to be blocking a more nuanced discussion of the problem and the human responses beyond prevention. Therefore, acceptance of their fair share and of the nature of the crisis is challenged, within the process of engagement with environmental risks. Fear is high according to their reports; social norms indicating environmentally friendly behaviours are strongly perceived; although self-efficacy does not look better than in Uruguay.

Personal agency in Uruguay for instance, mostly takes the form of conscious consumption, with some marginal references to civic participation and its impact. In both countries however, the groups that can be considered *a priori* environmentalists (Eco-villagers) are those that offer a more articulated agency-driven proposal, aligned with a green identity that as expected brings them together. Rural youth similarly offered this approach in Ireland, however in Uruguay they discuss very briefly various forms of responsibilities and agency, which basically points to the State as being most essentially culpable, despite the criticism they make of their own farming sector when initially depicting environmental threats. Surprisingly, environmental organisations are rarely mentioned (just one Eco-villager in Ireland, who takes part in Extinction Rebellion, and a Folk Musician in Uruguay who criticises the whole sector of environmentalist non-profits), while not being assigned any

responsibility or agency in the face of the ecological crisis. These findings confirmed the decline of civic engagement, even bleaker in young people (Dahlgren, 2007; Dahlgren, 2012), which contrast with the emergence of transnational environmental movements that also targeted young citizens and entered the public sphere in protest scenarios.

Therefore, the responses to the environmental crisis of the majority of young adults surveyed in both countries, but more explicitly in Ireland, appear to end up engaging with the interpretation of sustainability that Clarke & Agyeman (2011) labelled as ´environmental sustainability´ and with less explicit discourses reflecting a ´just sustainability´ perspective. As in Agyeman's scholarship referred to in Chapter 2, the analysis of power, identity and agency helps identifying these two big strands also evident within these research findings. Environmental sustainability, associated to the New Environmental Paradigm (Dunlap and Van Liere 1978), is seen from the universal perspective of Ulrick Beck that states as already noted how "poverty is hierarchic, smog is democratic" (1992, p. 36). Consequently, all of humanity finds itself in the same boat: Potentially affected and certainly responsible for the environmental degradation. Therefore, everybody must make fundamental changes from essentially unsustainable to sustainable lifestyles. The new global citizenship that Beck invokes, with a democratically shared sense of responsibility, seems to be the predominant trend among young adults of the Global South and the Global North, with greater support afforded by the Northern region – at least as uncovered by this study.

Environmental justice associated with sustainability however does appear to be foregrounded or evident across the groups of Ireland and Uruguay, but often marginally. Discourses of inequality, when experiencing the environmental crisis breaks with the universal perspective of humans at risk. Comparing the two countries, this focus and approach is stronger in Uruguay, where global inequality among countries is most clearly signalled, especially regarding the economic power to put environmental protection over profit as centrally important – echoing the need to reduce the size of their footprint on the planet. Overall, citizens (equal) rights to a healthy environment were mentioned less than their individual duties, but indirect references were found when discussing government responsibilities. In Ireland, the wide emphasis around laypeople responsibilities for the environmental crisis did not include civic engagement, while focusing on their unsustainable lifestyles. When looking at the political establishment, they demand leadership more than ensuring the provision of a healthy environment, responding to a right to nature.

Together with the mapping of issue awareness, these findings on responsibility and agency provide an assessment of the representations of the environmental crisis that these young adults have developed and are potentially intertwined with their media consumption. Furthermore, they provide

evidence to analyse their engagement with environmental risks, as a central factor in effective environmental communication. According to the theoretical approach to reception that foregrounds this study, this is not a pre-exposure picture of young audiences since media and culture have mutual influences. In the following chapter these multiple mediations will be further reported and also tested through a pre-experimental exercise that provide concrete formats to discuss pro-environmental short-form video.

CHAPTER 6. AUDIENCES IN IRELAND AND URUGUAY: REPRESENTATIONS, EXPOSURE AND INTERPRETATION OF ECO-MEDIA

Introduction

An essential object of this research project was set up to understand young adults' exposure and interpretations of online eco-videos. In this regard, the specific objectives to accomplish this included: level and type of exposure to media and eventually eco-media; ranking and interpretation of specific eco-videos; and perception of eco-videos' influence on themselves and others. For this purpose, half of the discussion was devoted to appreciating their media repertoires and their perceptions of media influence on environmental risks, followed by a pre-experimental activity of media viewing. This chapter presents the findings of that section of the focus group discussions carried out in Ireland and Uruguay.

General trends of media use by young adults, which tend to be highly selective - mostly digital and dispersed - are better portrayed through national surveys. However, to better situate each group discussion and understand the viewing strategies and engagement protocols at play regarding their online video mode of interpretation, focus group participants were asked about their 'media repertoires'. This notion considers the use of media as interconnected and combined, and refers to the typical media use of individuals in consuming media texts. Previous findings about young audiences are often focused on second or third level students, as they might be representative of the population for the case of countries with high university enrollment rates. Therefore, they cannot be easily generalised to the diverse sample of young adults who took part in this research, including vulnerable youth in terms of socio-economic inclusion and education level, who deserved further analysis.

Within the focus group discussions guided in this research, the participants were confronted with specific examples of eco-videos (18 in total for each country) retrieved from YouTube. This sample of diverse media texts is the result of a selection process using various theoretical and empirical considerations (see Chapter 5, Methodology, for more details). These short online videos are available on YouTube and potentially distributed by complementary social networks (Instagram, Twitter, Facebook, etc.), and include not only journalistic productions, but also various modes of advertising, marketing content, and entertainment media. The sample of videos used to test participants preferences in a pre-experimental situation include a wide variety of environmental risks: climate change, along with air/soil/water pollution as well as biodiversity loss. Descriptive, critical and propositional perspectives of these issues are included, calling out both national and global views.

The sample also incorporates diversity in terms of genres, aesthetic approaches, authors, leading voices acting as hosts or narrators, and, most importantly, a variety of environmental discourses.

Following open questions exploring participants' uses of media and their representations of media influence, they were asked to "have a look" at the list of the videos (each ranging from 5 to 10 minutes) provided on the research project website. After viewing, the participants had to select one or two videos that they considered effective, with regard to environmental awareness. After this individual exercise-- designed for use with their mobile phones and headphones-- was completed, they were asked to share with the group their favourites, and discuss their rationale for such choices.

The findings presented in this chapter mirror the subsections of the focus group discussions conducted in both countries. After an account of the general media use reported by the participants, social representations regarding how influential media could be for engaging with environmental risks were summarised in order to further understand the mindset of this particular audience. Then, a frequency analysis was conducted to offer a general view of which videos received more recommendations in the pre-experimental exercise. A brief analysis was then conducted to discern which environmental discourses were prioritised through video recommendations across individuals and groups. This drew on the theoretical classifications that distinguish three current trends of environmentalism (Cult to Wilderness/ Eco-efficiency Gospel/ Mantra of Environmental Justice) together with two geopolitical levels (local/global). Finally, the features highlighted by the participants when explaining their top video recommendations were analysed, in order to better understand their interpretations and the potential influence of the videos in this audience.

Young Audiences in Ireland

Report of Media Use by Young Adults Surveyed (Ireland)

In Ireland, media repertoires reported in the focus group discussions presented the following particularities.

While actively conforming to the digital trend and gatekeeping role of social media, University students are still exposed to traditional television and TV news specifically, including national and US-focused coverage, and report little use of alternative media outlets.

Twitter, Instagram and WhatsApp are consensually central modes of new media engagement for English students from Latin America. Facebook is also a popular platform among them, while others dismiss it and protect themselves from what they perceive as 'fake news' by turning to legacy media

outlets and trusted websites instead. Most of the students primarily relate their use of media to gaining information about current events. Although some admit to feeling overwhelmed by 'bad news', leading them to limit their exposure to this through their media choices. In parallel, Instagram is clearly recognised as simply for entertainment and aesthetic pleasure, the same as in other groups, while Podcasts are referred to here as sources of information and education, along with the recurring reference to YouTube (tutorials, talks).

YouTube and Instagram, followed by Facebook, along with TV and Radio, summarize the media repertoire of a group of refugees who were interviewed in this study. YouTube remains the most important media for them, and it is used as a search engine providing "news and everything". Instagram is the central media for another participant, who uses it "to know what's going on around the world", and ends up reading "everything on Instagram: news, entertainment, all kind of information". Facebook or Snapchat appear in second place, and are mostly related to entertainment; legacy media remains as a reference but is mainly consumed on mobile phones.

The social inclusion group of young adults provides diverse media repertoires with Facebook as the only unanimous answer. However, different uses of the platform were reported as exclusive by the participants: for news and messenger only; for data of local cultural events to attend exclusively; or for inspirational quotes and games only. The majority of participants rank entertainment as the top media use, with YouTube, Instagram and Nintendo being the leading platforms. Yet there are participants who have a strong focus on the news, in order to "know what's going on in the world". This is the group with the most potent internal variation in their media repertoires, starting from minimal access and type of use of digital media to a multiplatform highly segmented use of multimedia attached to personal interests and hobbies.

Despite the reported difficulty of Internet access in rural areas, the young farmers group also prioritised Twitter, Facebook and Instagram, along with several Irish farming websites and publications (*Agriland*, *Farmers Journal*). Instagram has a more practical use for them: it is the place for "agricultural-based surveys, and a lot of business promoting their stuff." Meanwhile some farmers dismiss it, as being "mostly rubbish" and not offering "factual information". One of the most engaged participants rapidly pointed to the generational divide by separating legacy media readers/listeners (print newspapers, local radio, national television) from social media users. In response, one of the youngest participants declared that he stills listen to local radio; others report listening to national radio along with reading print newspapers, and a third one confirmed applying all of these uses, as well as agriculture news outlets and national radio. The distinction between local and national media seems particularly relevant for this group. However, streaming is not frequently used with regards to

online entertainment, even among the youngest participants, who asserted -"Netflix, I haven't used it in years, I guess."

For many of the eco-villagers, media use equals social media use, and it is a site of contradiction: "It's always like this Brexit thing and that environmental thing and human rights thing. So, I'm struggling to find a balance, I guess, between not using social media because it's so overwhelming, but also using social media to find out how I can fight the overwhelming". Facebook and YouTube, followed by Instagram and Twitter, remain the dominant platforms. These young adults' networks seem to provide their main public affairs content instead of private sphere events or thoughts. Knowing "what´s going on", for them, is not facilitated by the mainstream news consumption, but by a critical activist coverage with global scope, leading to empathy and action, to which they might contribute towards "raise awareness" around their political interests. A second robust trend within this group focuses on the educational role of media. The social network platforms offer the opportunity to exchange knowledge and best practices with other permaculture practitioners (via chat and images through Facebook and video through YouTube). At the same time, documentaries on YouTube are a complementary source of information. Memes received a solitary mention as a thread of a more entertainment-based kind of usage. Similar to other groups, WhatsApp is the preferred platform for coordination among members. The use of Telegram, an instant messaging app similar to WhatsApp, reported by an eco-villager was surprising for the others and led to the following media-savvy joke: "I have Whatsapp, I have Telegram because I like the Russians-- it's a joke! I say and yeah, (laughter) it's a bit unfair to share only with the Americans, my information, so …" Television - excluding Netflix and streamed shows - is not within their current choices of media. Furthermore, they criticize legacy TV for "hyping" important issues, like protests, and negatively serve the system through this incomplete or biased coverage of events.[42]

For folk musicians, the informational use of media is central and Internet-centred: news, events and opinion of leading voices are obtained primarily through Facebook, Twitter and YouTube; no use of TV, radio or paper was mentioned. Showing a highly selective and reflective use of media, they are very aware of filter bubbles and the gatekeeping role of news outlets or news editors. They also notice the right or left-wing political axis of the coverage, alongside the profile of the public individuals they follow online. An example of such sophisticated strategies is explained by the following:

> In that way, I think that Twitter is good because at least we break the filter bubble with Twitter. And I use Twitter as a moral compass. (…) For me, the people that I follow on Twitter are my moral compass, kind of. I follow people that I believe so (sic). When they share something or say something, I know that I agree or don't

> agree with them, so I know where I'm standing. I can make my own opinion with their opinion, and I kind of know if I'm in the right half or not.

As Ex-Pats, they engage with different media for keeping track of their 'place of origin´ affairs, both at a local and a national level. Entertainment is the second most frequent media use and includes photo viewing, games, series' premieres and documentaries. The participants tended to dismiss private sphere publications and interpersonal interactions through social media. WhatsApp is the most popular platform for interpersonal communication for this cohort, especially when it comes to coordination inside groups of any kind.

The general patterns associated with young adults media consumption mainly were confirmed across the groups, with Instagram, Facebook, Twitter, and YouTube mediating informational, entertainment and socialising uses. Therefore, participants were digital literate, although rural participants and social inclusion program participants reported some constraints for Internet access and exposed difficulties in using specific platforms. How each social network platform ranks and what particular uses are dominant varies across groups and participants. YouTube, for instance, is usually one of the leading platforms chosen mainly for entertainment and education purposes. However, legacy media were not entirely abandoned by these young adults, as reported in 5 out of 8 groups, including participants with diverse education and Internet access, but mostly when searching for information and related to local/national issues. Media literacy presented various levels, including groups where it was assumed that "everything" was in the media and groups that were highly aware of production and online distribution dynamics, along with a medium arena where disinformation was feared but not necessarily counteracted. When it comes to information, strategic use of media appeared less associated with education than to older age groups and to political activism in a broad sense. As folk musicians, young farmers and eco-villagers uncovered the most intentional media repertoires, contrasting even with Media students as active audiences. Meanwhile, it is precisely among the less formally educated group where someone reported the most specialised use of media adopted for entertainment, including videogames. Numerous new questions about media "audiencing" arise and remain uncovered because they exceed the purpose of a brief map of this research project to situate eco-video interpretations by this specific group of young adults.

Representations of Media Influence on Engagement with Environmental Risks (Ireland)

The discussion of whether eco-videos, in general, are deemed effective and, broadly speaking, what role media plays in the environmental crisis generated diverse responses, which could be summarised as follows. Three trends were identified among the young adult participants in Ireland regarding

environmental messaging and what can media do for us: 1) media is an impactful tool (for better or worse), 2) media might get you thinking of the issue, and 3) media is not a significant influence in social change towards sustainability at all, being merely entertaining at best. Listed from the most to the least salient, they were only consensual social representations in three groups, which agreed on the first representation of media influence.

Among the young farmers, the centrality of media was widely stressed, clearly situating them within the first trend. It was expressed as a critique of how the media tends to negatively shapes public opinion around the causes and also the solutions to the environmental crisis. Examples included the misleading portrayal of rural activities (see Chapter Five for details) and the social media channelled celebrity claims promoting veganism. For all group participants who embraced this social representation of media as a powerful platform, information and issue framing seemed to be the key to developing lay-people attitudes and subsequent behaviours regarding engaging with environmental risks. Another group reaching a consensus about the decisive role of media were the refugees taking part in the study, agreeing with the proposition that media remains central towards providing people with access to information about environmental problems and solutions. They appear to consider that media also allows one to see what happens in other countries and their messages could probably function as a convincing precautionary tale around the dangers of abusing nature. The English Students group also appear to agree with the first assertion, considering media as an impactful tool that can also be misleading, especially when it presents fake news.

The first trend also included an extended agreement about media´s powerful influence over audiences within the Eco-villagers, who emphasised the possibility of sharing information and knowledge (for action) through social media. Early in the focus group discussion, these young adults reported using alternative media connected to environmental activism and/or nurturing an ecological lifestyle to articulate their particular group identity. This group also acknowledged however some dangers in what they understood as social media dependence. Suffering from too many worries about "everything that is going on in the world" was one of the adverse effects of social media, while others pointed to how some environmentalists´ prioritize showing their participation despite not being truly committed or knowledgeable about what they are doing.

Both groups of university students acknowledge the difference between awareness, attitude and behaviour, which puts them in the second level of media attributed impacts. Among First Years, some expressed that eco-videos provide mainly entertainment that "gets you thinking" about green issues but is useless in behaviour change. The latter depends on one's personal drive, their values, interests and their cultural customs – "who you are in the first place", was mentioned in their focus group

dialogue. This expression corresponded with others who testified that watching specific videos did lead them to implement heartfelt voluntary changes in their behaviour. Meanwhile the real obstacle to maintaining a radical green lifestyle were structural conditions and difficulties (such as availability of green products). This perspective was echoed by the participants who stated that eco-videos are not really effective because they don´t facilitate or guide small individual change or stressing more extensive political action - "as if young people were useless besides lazy video watching", in the words of a First Year´ University Student. The supposedly low-level effectiveness of the media was also explained by a statement that "one size does not fit all", recalled by an Advanced University Student. However, they engaged in a discussion about whether a local small changes approach should be prioritised within environmental messaging or if, instead, a global perspective showing real people who are already affected by the ecological crisis, would work better with Irish audiences as a whole. Leaving aside personal preferences and audience segmentation, the power of using celebrities as leading voices of media texts was widely accepted by these students, especially when looking for message salience or dealing with "alienated followers".

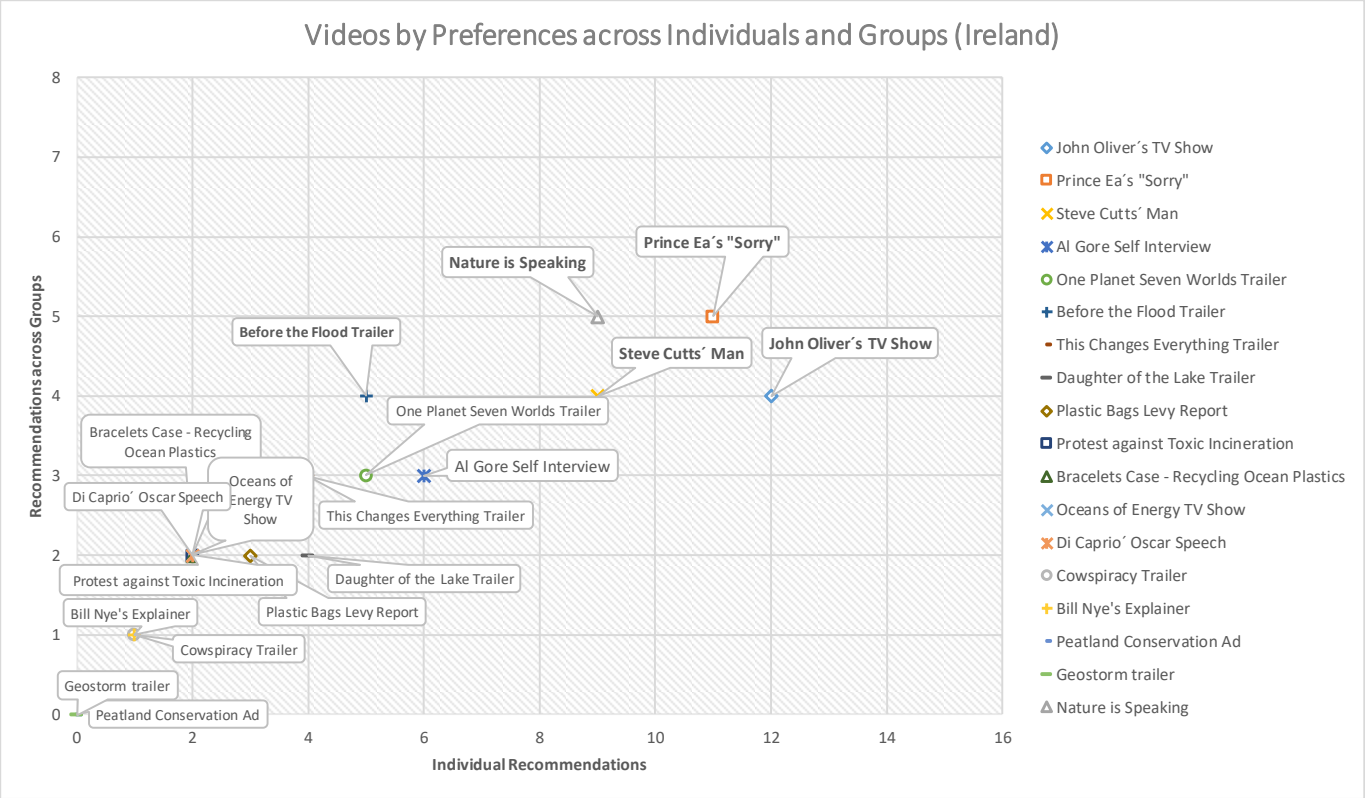
In contrast, celebrity advocacy was consensually dismissed by advanced university students and social inclusion programme participants when referring to themselves as audiences, who undoubtedly gave priority to real people and real problems, including those focused on social and economic conditions. A call for messages that are not preachy, that consider how the image can have real power and stress the creation of climate jobs, was also raised intermittently across the groups contributions. The Folk Musicians group could also be seen as part of this trend, in assigning relative influence to media. Their assertions remain however less explicit, recalling an underlying scepticism about other factors which are distinct from structural conditions of the system, along with a very conscious biased selection reported in their overall media use.

In a minority view among young adults consulted in Ireland, the third trend serves to highlight engagement with environmental risks and "is not about [specific] videos but other influences", as expressed by a social inclusion group participant. Among Young Farmers - the only other group that included this perspective in the discussion - it took the form of choosing direct encounters with the public, as the only way to show them how environmental concerns are being tackled, by for example innovative food-producing activities.

Salience of Videos in Performed Viewing (Ireland)

Which online videos are more effective in promoting environmental awareness from the perspective of the young adults taking part in the study, the following chart shows how video preferences were distributed across individuals and groups in Ireland. The most recurrent examples of what could be characterised as compelling videos are located in the upper right quadrant - as they attracted numerous participants across diverse groups.

Figure 2. Distribution of Video Preferences in Ireland



Source: Personal collection

Although there is a dispersion of interests across the eight groups that brought together 51 young adults living in Ireland, five videos (bold text in the chart) rank high according to individual recommendations, while being positively recommended in at least four of the eight focus groups. These five videos are Prince Ea' spoken word video clip "Dear Future Generations, Sorry" (2015, 6:02); the short film "Nature is Speaking - Julia Roberts is Mother Nature | Conservation International (CI)" (2014, 1:58); John Oliver's Paris Agreement episode (2017, 20:57) from *Last Week Tonight;* the short animated film *Man* (2012, 3:36), created by the British illustrator Steve Cutts; and the trailer of Leonardo Di Caprio's documentary *Before the Flood* (National Geographic, 2016, 2:18). The episode of John Oliver's TV show leads the ranking of personal choices, drawing on a strong

consensus across some groups, while other videos attract recommendations across a more significant number of diverse groups of young adults

Al Gore in Wire, *This Changes Everything'* trailer, and *One Planet, Seven Worlds* trailer share the next tier of cross-sectional preferences, being recommended in three of the eight groups. By individual mentions, Al Gore answering 'The Wire' questionnaire and the trailer for the BBC series on nature get 10% of the preferences, while the other recommendations do not reach this percentage level.

As previously explained, the sample included videos presenting diverse environmental discourses, featuring global and local examples of each current of environmentalism considered by Guha & Martínez Alier (1997): the Cult to Wilderness, the Gospel of Eco-Efficiency, and the Mantra of Environmental Justice. The following chart situates the most salient videos (bold text) concerning their environmental discourse.

Table 17. Salient Videos and Environmental Discourses (Ireland)

	Cult to Wilderness	*Eco-efficiency Gospel*	*Mantra of Environmental Justice*	*Undefined Current of Environmentalism*
Global Approaches	**"Nature is Speaking - Julia Roberts is Mother Nature | Conservation International (CI)", CI Channel** "*One Planet, Seven Worlds* Series Trailer", BBC Earth	"4Ocean Bracelets Help With Ocean Cleanup", Insider' infotainment video "Al Gore Answers the Web's Most Searched Questions on Climate Change", Wire "*Geostorm* Movie Trailer", Warner Bros	**"Paris Agreement: Last Week Tonight with John Oliver (HBO)", Last Week Tonight Channel** **"*Before the Flood* Trailer – National Geographic", NatGeo Channel.** "Oscars 2016 Leo Di Caprio wins best actor", LDC France "*This Changes Everything* Trailer", Toronto International Film Festival Trailers "*Daughter of the Lake* Official Trailer", Guarango Films Channel.	**"Dear Future Generations, Sorry", Prince Ea Channel** ***Man,* Short Animated Film, Steve Cutts´ Channel** *"Cowspiracy* Official Trailer", First Spark Media "Climate Change 101 with Bill Nye", National Geographic
Local Approaches (Ireland)	"IPCC- Protecting Ireland's Peatlands", citizen channel	"Plastic bags – breaking the habit: Ireland's levy deemed a success", EU Environment "Oceans of Energy. Eco Eye 15", RTE	"Oppose Irish Cement Plans to Burn Industrial Waste in Limerick – Protest", citizen´ channel	
Source: Personal Collection				

Environmental justice prevails within the choices of videos by these young adults (*Before the Flood* Trailer, *Last Week Tonight* episode on Paris Agreement). The second position belongs to the Cult to

Wilderness reframed in "Nature Is Speaking – Julia Roberts is Mother Nature" (1:58). At the same time, Eco-Efficiency is the less prevalent current of environmentalism within the sample. Regarding the geopolitical approach prioritised by the participants of this research, the global focus attracted more attention than the local examples provided for each current of environmentalism.

In *Before the Flood,* Leonardo Di Caprio shows how environmental problems do not threaten all humanity to the same extent by visiting some of the most affected communities in the world. This point is explicitly stressed in his Oscar speech. In his documentary and its trailer, the Ecology of the Poor is showcased in diverse Third World scenarios where environmental risks currently exist, demanding resilience and creativity from the affected communities. The politicisation of climate change discussions, which might be related to this focus across the various levels of power and agency has been associated with this trailer in previous studies of YouTube comments (Meza, Shapiro, & Park, 2018) and also with the *Last Week Tonight* episode in the sample (Galliah, 2020). The analysis of John Oliver in the selected episode ("Paris Agreement", 2017, 20:58) has a global approach as well, as it focuses on the importance of the Paris Agreement and explains the injustice involved due to the lack of support from the US, the biggest polluter worldwide. Although the show airs on cable television, YouTube is also a strategic viewing platform, especially related to its aim of reaching young audiences detached from mainstream media (López, 2018).

"Nature Is Speaking" is one of the short films from Conservation International´s campaign launched in 2014. In this video, available on YouTube and the organisation's website, nature speaks directly to its perpetrators with a script narrated by Julia Roberts, which argues that "Nature doesn't need people, but people need nature". The magnificence and power of wilderness are shown through images of Earth´s diverse ecosystems –"My oceans, my soil, my flowing streams, my forests" - without any human presence or reference that distract from the eternal character, stressed by the not so gentle reminder that "I've been here for over four and a half billion years. Twenty-two thousand, five hundred times longer than you". As stated by a previous study on the celebration of nature, this video represents nature "as (1) eternal and magnificent, (2) caring and providing, and (3) mighty, but delicate" (Olausson & Uggla, 2019).

Some of the salient videos highlighted do not provide 'pure' examples of these three discourses but tend to fuse arguments and perspectives from two or three currents, probably as an attempt to enlarge the chances of connecting with the audience. If the previous empirical evidence led to the inclusion of these cases, where strands of environmentalism appeared in combination or were arguable explicit, the high salience of one of these undefined videos –"Dear Future Generations, Sorry" - confirmed the preference for Environmental Justice and Cult to Wilderness discourses. In addition to the

intergenerational justice approach (Brereton & Gómez, 2020; Andina, 2018), Prince Ea acknowledges the unfair global distribution of environmental damage, including the call for wildlife conservation, especially trees.

Cartoonist Steve Cutts´ short animated film *Man* is another salient video "text" mentioned in the exercise. It presents a critical interpretation of capitalism through the story of a 'typical human', whose journey, starting 500,000 years ago, is one of unreflexive environmental depletion, leading to human extinction. Therefore, there is no proposed environmentalist response in this portrait of man´s relationship with the natural world, labelled as dystopian (Athes, 2019) and posthumanist (Dönmez Ağın, 2015). The report and characterisation of the problem point to the depletion of wilderness as well as to the failure of technical developments, which would stress the alignment with the Cult to Wilderness while taking distance from celebrating technology as in the current of Eco-Efficiency. Through this one man destroying everything and suffering the fatal consequences, humanity is represented without their diverse roles and levels of involvement in the causes or the consequences, which clearly dismiss the perspective of environmental justice to analise the ecological collapse. While other media cases of an undefined current of environmentalism exist, they are less salient among the focus group participants in Ireland. The trailer of *Cowspiracy*, which creates suspense about "the world's most polluting industry" and lists its impacts concerning all kinds of environmental problems is a good example. Another one is Bill Nye's video explainer of climate change, because it includes a huge array of arguments and potential actions regarding climate change without emphasising features of any of the three strands of environmentalism taken into consideration in this study: the Cult to the Wilderness, the Eco- Efficiency Gospel and the Mantra of Environmental Justice, also called the Ecology of the Poor.

Features Highlighted along with Video Choices (Ireland)

The participants highlighted diverse content aspects when evaluating and selecting particular video "texts" instead of others, helping to understand their interpretation process while expanding the analysis beyond environmental discourses.

Some of these comments, especially those alluding to the description of the problem and the environmentalist response, give additional clues in analysing how pervasive the different environmental discourses might be with these young adults and how central they are for the spectator experience. However, other video features or visualisation experiences might be reported as equally or more relevant for this audience´ preferences. For instance, the theoretically grounded global-local axis criteria for selecting the video sample might explain the choices less than the production values

of the videos when listening to the audiences, given that some of the local contents can be recognised as grassroots "citizen" videos or more traditional journalistic coverages of events. The type of environmental risk and the approach to it, including the specific genre or format, as well as the authorship or the leading voices being privileged are all important and can be married with the aesthetics deployed in terms of both sound and imagery, which could be the unique aspects emphasised by participants when explaining their specific choices.

The next sub-sections are devoted to presenting audience´ interpretations of the five most recommended videos across the focus groups conducted in Ireland. As previously stated, they were: #1 "Dear Future Generations, Sorry" (Prince Ea, 2015, 6:02); #2 "Nature is Speaking - Julia Roberts is Mother Nature" (Conservation International, 2014, 1:58); #3 *Man* (Steve Cutts, 2012, 3:36); #4 "Paris Agreement: Last Week Tonight with John Oliver (HBO)" (2017, 20:57); and #5 *Before the Flood* Trailer (National Geographic, 2016, 2:18).

- Features highlighted in Ireland about "Dear Future Generations, Sorry" (Prince Ea, 2015, 6:02) - #1

The futuristic imagination approach, the direct-address style and the musical genre could summarize what participants signalled as effective in this piece while also stressing how "different" it is from other videos on the topic.

Expressions like "I chose it because of the title", along with reports of having been attracted to it despite not having the time to watch it, all points to the strategy of talking to future generations using an innovative preliminary appeal. And it is noted that the strategy used was enticing: "I think it was a good idea just to try to imagine what the world would be if we don't take action now, that's it, like the emotional aspects, I think". This observation expressed a participant's view that gained support within her group when discussing this piece. In another group discussion, a participant followed this lead, explaining how "the colours and all were all dull, like it's gonna be in the future unless we do something about it". Her fellow students explained how this is a helpful strategy, as "we don't realize the wrong we are doing and we don't - like I don´t, you wouldn´t - realize the stuff you are doing and that you are affecting the future so much". A third group where "Dear Future Generations, Sorry" was also recommended, discussed its powerful message about the future: "It´s kind of tough that you can see that he is just saying sorry because of all damage we all caused, and we don´t do anything. He´s just telling us that we can do something, but you are not doing anything, and it will be the end".

The direct call to action was appreciated by most of the participants who selected this video. Besides the previous mentions, others add that "Dear Future Generations makes me think what am I doing for this environment, what do we [do], so it´s a very good information". The clarity in the message is essential as well as the direct address to the public, despite the *mea culpa*: "Just the way that man stands in the desert at the start to it ...", "The words were not too complicated, how they speak about the issue, and it was really really clear", "I figured it was like some empowering speech". Unlike other videos, this one seemed easy to thoroughly engage with and understand: "It´s a guy apologising, but apologising for his generation and the things they were busy doing, but they knew about the problems, they could solve it, but they didn´t because they were busy thinking only of their things."

Another salient aspect brought up to explain the choice was that it is made up of rap or spoken word format. The genre chosen was present in many interventions across the group discussions: "There was a guy that made it into a song, and I thought this was very effective"; "It was good that he could connect with people, younger people, cause it's like modern, it's a rap, so it's kind of catchy or whatever, so it´s so good"; "I like the spoken word one (…) I registered that because I could see it as just a spoken word"; "How music was incorporated, cause I think music is massive in our days. Something being said with, like, a rhythm people would be being thrown into."

While many participants mentioned how they had already seen this video, it was specifically pointed to as the determinant factor for recommending it now in only one case, along with the trajectory of the YouTube celebrity Prince Ea. A participant explains: "The first one I choose [it] because I saw it before and this guy is always talking about these kinds of things. It´s very very… Like what he says, you wouldn´t realize until he brings for..." (…) "I have seen it before and it was like "wow, nobody is talking like that", how he´s making you feel, so this guy is the best". Another participant in the same group echoed her viewpoint by stressing how she "liked the guy."

Criticism appeared however, along with compliments, for this piece in several groups discussions - but remained without counter-arguments in only one of the groups (4th years´ university students). They all accepted the following statement: it "just felt like a video from Secondary School biology where they're like rapping about cells, it didn't hit home at all". Other participants who were also criticising the video clip revealed rejection of the genre that stopped them from clicking play or watching it further –"the poetry" was described as a somewhat "cheesy" approach.

This spoken word video clip of Prince Ea is mentioned in all the discussions, not only when recommended, but sometimes also when criticising it and otherwise referring to its appeal for future viewing. Therefore, "Dear Future Generations, Sorry" in this study captured more attention than any

other video and, when recommended, was signalled as a strategic choice for other people besides simply calling on personal taste.

- Features highlighted in Ireland about "Nature is Speaking - Julia Roberts is Mother Nature" (Conservation International, 2014, 1:58) - #2

Powerful, strong, interesting, attractive are the adjectives used by the participants to describe this piece. "Nature is Speaking" is a Conservation International's short film, where Julia Roberts performs the voice of nature; reminding spectators how "nature is ready to evolve, and it does not need people", while alternatively people need nature to survive. The high impact attributed to this piece relies on both the images of powerful nature and the shift in the usual narrative where humans have the voice and the power to drive changes.

The title first reveals the narrative shift in who speaks, and according to the participants this was an element that they found intriguing. "Nature speaking… I was curious what they meant", says one. "The titles kind of calls to me, the words, and then I wanted to know what they were gonna say about it". After watching, the message is relatively straightforward and truthful for all who chose this video; in one participant's words, the video is about "how little you are in the nature and how much respect you must give to nature". Even someone who mentioned that Julia Roberts was a factor in being attracted to the video in the first place, emphasised that the profound reason for choosing this as one of the most effective videos was most definitely the message. In particular, the idea that nature deserves respect, aligned with an ongoing personal search for a connection with nature, all of which were the motives for participants who were somewhat predisposed to agree with the less anthropocentric perspective of this campaign.

The imagery used was another pillar of success for the short film from Conservation International, as noted by the participants with examples such as: "It´s all about nature´s beauties", "The images of nature caught my attention", "A lot of different environments, all the green imagery and water ... " However, one of the few young adults who expressed dislike for the video, blamed the images of "bits falling off an iceberg" as an example of how it did not "speak to him".

Another critical voice heard regarding this video, which the other participants did not echo, pointed to how he found the spoken narration "a bit funny" as if the idea of humans speaking as nature was contradictory. He added that the tone of the voice used was too theatrical.

- Features highlighted in Ireland about *Man* (Steve Cutts, 2012, 3:36) - #3

The video ranking third as the most recommended across all the groups is the animated short film *Man*. It garnered as many individual recommendations as "Nature is Speaking" and no criticism at all. The interweaving of message and genre seems to be the key to its highly consensual effectiveness.

The advantages of using animation instead of another format and the satirical approach to a humans relationship with his environment are clearly understood and consistently highlighted across the groups. In the participants words:

- ✓ A cartoon, a guy, doing bad things all the time, killing animals... but is not a man, it is the society, where we are going ...
- ✓ This is kind of a good choice for the people that is sensitive to some kind of bad images... Like if you see someone shooting an animal, maybe you close your eyes, but with the cartoon… It is exaggerating things but, in the end, is not exaggerating but really a way for people to be able to realize the bad things.
- ✓ I just thought it was kind of cool and the animation, the little man stood out. Some people would think he's very heartless, but you knew it wasn't, it was a representation.
- ✓ Mostly because there isn't a certain person speaking, so if it´s Leonardo Di Caprio, there would be people that don´t even listen to what he says because they won't like him. But this was just an animation and showed what he´s doing. It´s not only killing the animals… It´s so simple; it makes you think. How he´s doing and wouldn´t bother him that much, I really really like that.

For a few other participants who recommended *Man*, the reason was primarily because of its unique form of animation: "I like when there is drawing and because I can understand. And it's like a universal thing", "I chose the 'Man' video because it was short and animated."

- ❖ Features highlighted in Ireland about "Paris Agreement: Last Week Tonight with John Oliver (HBO)" (2017, 20:57) - #4

The comedy genre is the key here, as an entertainment factor, as a valuable way of delivering information, and even as the best strategy for promoting individual action.

"I just find him hilarious", expresses a participant, while many others confess how they are fans of John Oliver´s show because of his style. The genre also works for those who aren't followers of the show: "I think I would choose as well the comedian guy because I think it's always the best way, especially if you want to make the politicians ridiculous". For one participant, though, the only one to explicitly criticize the video, comedy seems to be what discourages her from attributing any

seriousness to the content: “Yeah, first of all, I went to Paris Agreement, but then I was like oh, no, no, it´s not my cup of tea, so I would just go to something more useful” (…) “Maybe at the moment, I´m not in this mood. Maybe I wanted to listen to something that would make work my brain more, you know? Just for that. Maybe later on, yeah, I would go there”.

In addition to the entertainment factor, comedy is also highlighted as an effective strategy for explaining the environmental crisis or any other current affairs issue. “I like how he (John Oliver) gets his information across. He makes a story that most people would be bored by on a news show comedic”, in one participant´s words. Or, as another one explains:

> My personal choice was the John Oliver one, just because the way that he does his shows is like a way for you to get news, but it’s like a more exciting way, cause you are like, you know there’s always gonna be like, he’s gonna put fun at something, but it´s like such good fun, in a more serious way, like he would say why what they said was wrong and ridiculous and let the actual facts do it” (…) “I really like that one because he was just explaining why Trump backed out of the Paris Agreement and why that´s really dangerous, and kind of says, “ well, here is what he said, and this is why this is wrong”, and he`s kind of misguiding a bunch of people, who if you are not really fond of climate change, you might really go 'oh, it is an economic issue, that they are going to destroy all our jobs'. So he says this is not what’s is going on. You just do your own work and research.

Turning entertainment into individual action was a strategy that was further elaborated upon about the effectiveness of John Oliver´s late-night show on the Paris Agreement. It was presented and consensually agreed upon by the participants of the group where this video was the top choice for raising awareness. These two complementary expressions summarize how a TWT episode could lead to citizen action, and from their perspective: “It's actually very entertaining, so you feel like watching it, and then you learn something, and then you feel like doing stuff”, “And doing stuff cause I'm the poor fool people, so that's like the best for me, just the best”. According to this participant, lay-people self-esteem is awaken when the show uncovers how citizens are being deceived (fooled) by authorities like Trump who creates alternative facts.

This late-night show episode (Last Week Tonight, 2017) leads the ranking of individual recommendations while sharing the third spot with *Man* and the *Before the Flood* trailer when considering in how many distinct groups it was signalled as highly effective.

- Features highlighted in Ireland about *Before the Flood* Trailer (National Geographic, 2016, 2:18) - #5

The fifth spot in the ranking of the most recommended videos in Ireland, when giving priority to choices across groups, is the trailer for this film hosted by Leonardo Di Caprio. The presence and the role of the Hollywood celebrity were highlighted as an asset of this piece, where the well-produced documentary genre was another reported key for its effectiveness.

The presence of Leo Di Caprio was spontaneously reported by many participants who recommended this video. At the same time, this feature was further acknowledged in less celebratory discussions, mainly to give credit to the strategy as a useful one when thinking of the general public and without explicit criticism of the legitimacy of his environmental advocacy. Phrases like the following show how a third-person effect was prioritised when discussing this case: "Well, he´s a massive celebrity, so he obviously attracts more people than the others involved, like geologists, etc.", "Also, some people are very alienated, and because Leonardo Di Caprio is doing that stuff, people pay attention", or "if you are trying to sell something, celebrities is/are probably something that will attract some people to watch videos". However, this does not mean that the participants expressing these ideas exclude themselves from this group. Even when they do not trust him, his presence, by default, -- and the featuring of celebrities in general-- still operates as a surprising attraction for some:

> We are talking about climate change, about the environment, so I think: what these celebrities are saying about climate change? Is it a movie? So it caught my attention because he is a celebrity, and what can their contribution be? Doing the movie what kind of things they are doing, if they are transmitting the information to the people… Like the greenhouse effect, about that. And he travelled to other countries.

While the global documentary approach of this piece seemed to have blocked further criticism when discussing it, Leonardo Di Caprio was instantly dismissed by the few who do not like to listen to celebrities despite acknowledging their cultural effect. At the same time, he was positively referred to because of the Oscar Speech included in the sample.

Not only the presence of Di Caprio was highlighted, some of the respondent's also recalled the presence of Barack Obama, affirming that he chose this video *"*because I like National Geographic videos and I like Leonardo Di Caprio". The combination of a screen celebrity with a leading media brand such as NatGeo could be the clue for the many arguments favouring the superior quality of this video. For instance: *"*I think *Before the Flood* was more professionally done. (…) The really wide shots of oil fields and stuff it did was really like powerful". After describing why other documentaries might be less effective because of not seeming as reliable or nuanced enough to consider small changes that might mitigate the environmental crisis (like *Cowspiracy*), Leo Di Caprio´s piece was

recommended*: "*I would choose maybe *Before the Flood*, even though it didn't touch on vegetarianism as much, which I was kind of annoyed about."

The specific genre deployed is another central factor in recommending this video. "Cause he was put into a movie format, it didn´t look boring like those articles that look like really really long, in this he was going and we were actually seeing from his point of view, what he was seeing" - "because it´s very didactic, the documentary. It shows properly what he´s watching cause sometimes what we can´t watch is not there". Someone in a group compared it to the Al Gore video, which is included in the sample to express why the *Before the Flood* trailer works better, besides the leading celebrity voice:

> The Al Gore one is very factual, very educational. You are bored after two minutes and cause he´s sitting there in a chair with no movement, whereas the other one is full of action, it´s very colourful, he´s very passionate about it, he´s selling to you, you will remember, you feel that passion, it could encourage you to really follow on, look for the deep thing because it highlights all the different... it´s not only about having the celebrity but about how you use them. While Al Gore has been out talking about change for a while, I think that people are looking for something different now, and it all comes back to the whole idea that is not taken for it, but by how it´s delivered. And people, unless is brought in the colourful lens and jumped it all on them, then these people aren´t gonna listen.

Finally, this brief account of audience valuation of pro-environmental videos in the quasi-experimental situation reveals how the textual content which articulates the pieces, usually narrated by one or more voices, is not the main argument for considering them effective. Consequently, environmental discourses corresponding to various rationalities are not as central as for instance media formats, styles and tone for these young adults, when evaluating the examples provided. The one exception in the top 5 rankings might be "Nature is Speaking"*;* the cult to the wonderful nature is extensively acknowledged in this short film, to the extent that stewardship of the wilderness is privileged over the eco-centric threat to vulnerable humanity. Moreover, the contrast between narratives focusing on universal responsibilities as a human species and the ones reflecting differentiated responsibilities is only acknowledged as a remarkable asset for the case of intergenerational injustice in Prince Ea´s pledge, which nonetheless excludes the geographical dimension of environmental injustice. The emotional responses they prioritize seems to depend on specific audiovisual languages or genres (animation, direct address, nature documentary, global documentary, etc.) and persuasion modalities and strategies (humour, poetry, situated testimonies, transportation to futuristic scenarios, powerful imagery, activist celebrities). The provision of information or analysis of the problem and the solutions and implicit responsibility and agency attributions are apparently overlooked. Above all, the innovative storytelling approaches and the

visual power remain the most critical features of the videos, which in turn are perceived as effective for promoting environmental awareness.

Performed Video Preferences across Groups (Ireland)

In order to shed some light on the video choices made that were less recurrent than the five media examples previously analysed, the following chart shows where precisely and how intensely all of the videos were recommended across the groups of the Irish set.

Table 18. Recommended Videos across the Set of Focus Groups conducted in Ireland.

	University Students (1st year)	**University Students (4th year)**	**English Students**	**Folk Musicians**	**Social Inclusion Programme**	**Refugees**	**Young Farmers**	**Eco-villagers**
High Salience		*Before the Flood* Trailer	Al Gore Self Interview	John Oliver´s TV Show			*One Planet Seven Worlds* Trailer	*Daughter of the Lake* Trailer
		Steve Cutts´ *Man*	Nature is Speaking	Steve Cutts´ *Man*				Nature is Speaking
				Prince Ea´s "Sorry"				
Low Salience	*This Changes Everything* Trailer	Al Gore Self Interview	Plastic Bags Levy Report	Nature is Speaking	Steve Cutts´ *Man*	Bill Nye's Explainer	*Daughter of the Lake* Trailer	Prince Ea´s "Sorry"
	John Oliver´s TV Show	*This Changes Everything* Trailer	Prince Ea´s "Sorry"	Eco Bracelets Case - Recycling Ocean Plastics	Eco Bracelets Case - Recycling Ocean Plastics	Prince Ea´s "Sorry"	Protest against Toxic Incineration	*This Changes Everything* Trailer
	Prince Ea´s "Sorry"	John Oliver´s TV Show	*One Planet Seven Worlds* Trailer	Di Caprio		*Before the Flood* Trailer	Oceans of Energy TV Show	*One Planet Seven Worlds* Trailer
	Al Gore Self Interview	Nature is Speaking	*Before the Flood* Trailer	Al Gore		Oceans of Energy TV Show	Nature is Speaking	John Oliver´s TV Show
	Before the Flood Trailer	Attenborough's speech (UN)					Di Caprio	Di Caprio Oscars' Speech
	Di Caprio Oscars' Speech							Protest against Toxic Incineration
								Plastic Bags Levy Report
								Steve Cutts´ *Man*
								Cowspiracy Trailer

Source: Personal collection.

Especially the rows of High Salience make clear that group belonging does not necessarily predict choices, with a high dispersion of interests inside even small groups of discussants. No matter the constituency, diversity in video selection is evident inside groups. When fewer video choices are noticed (Social Inclusion Programme, Refugees), it was observed that it corresponded to low involvement in the exercise instead of an extended agreement between participants. In addition, the combination of choices varies significantly from group to group. Nevertheless, local narratives (RTE´s 'Oceans of Energy, Plastic Bags Levy Report'), especially those with low production (Protest Against Toxic Incineration, Bog´s Protection Citizen Advertisement), are the lowest positioned in the ranking emerging in half of the groups' discussions.

The two groups of university students performed similarly regarding their choices. The trailers for *This Changes Everything* and for *Before the Flood*, the "Climate Agreement" episode of *Last Week Tonight*, and Al Gore in *Wire* were recommended by both groups, along with the spontaneous reference to speeches as examples of compelling pieces (Leo Di Caprio and Attenborough, respectively). These young adults were mainly in agreement with several notable exceptions. For instance, *Man* was a consensual preference among fourth years'; however, it was not mentioned in the other third-level students. "Dear Future Generations, Sorry" was recommended by first years, yet criticised by the advanced students. Furthermore, a dispute over "Nature is Speaking - Julia Roberts is Mother Nature" was provided by fourth years', while the short film was not mentioned among 1st-year students. Therefore, it could be concluded that factual narratives were less contested than fictional or creative formats, while the global environmental injustice approach occupied a prominent place in their preferences.

Al Gore in Wire was also recommended by another group of advanced students, the Latin American English Students. Although they do not mention climate change among the main environmental problems, or perhaps because of that, many participants selected Al Gore's answers on this topic. They also recommended the trailer of *Before the Flood* and agreed with the preference of the First Year´s for "Dear Future Generations, Sorry", but preferred "Nature is Speaking". Besides these global preferences, some showed interest in the mini-doc on the ban on plastic bags in Ireland, which had been one of the central environmental concerns reported in the previous discussion.

The group of folklore musicians spontaneously distinguish, with a significant level of agreement, what attracts them personally from what can be compelling for others. A clear example is Di Caprio and Al Gore as massive attractors that they would not listen to. Both selections were aligned with the initial focus group discussion on the problem and the solutions: the problem is stressed as a systemic one and reflected in the high salience of *Man* and "Dear Future Generations, Sorry". The discussion on activism was reflected through the interpretation of John Oliver's analysis as an effective way to mobilize. At the same time, those who defended that money could and should be made sustainably recommended "Ocean Bracelets", and finally, "Nature is Speaking" was the choice of those who worried about nature's depletion.

The initial recommendations within the refugee group, described during the discussion of environmental risks, signalled their preferences, which were expressed strictly in the first person, without speculating upon the potential choices of other viewers, or assuming a generalised experience of media. Instead of consensus or even coincidences, Bill Nye's explainer was the choice of those who had reported a lack of knowledge about climate change (basically, discarding Oliver for not

being informative or severe enough). Refugees who had reflected in terms of environmental justice and mentioned deforestation as a specific challenge opted for Prince Ea's video clip and recommended the trailer for *Before the Flood.* The choice for RTE' *Eco Eye* episode "Oceans of Energy" was, for another participant, the result of having experienced the force of the sea while living in Ireland.

Within participants from the social inclusion program, who devoted very little time and attention to the videos, the critical narrative of *Man* gained preference, in line with their prior expression of anti-systemic attitudes. The option for "Ocean Bracelets" also accompanied a concern for plastics and for sea wildlife which was previously affirmed.

The trailer for *One Planet, Seven Worlds* was the predominant choice among rural youth, who are the only group who appear to have a generic rejection of pro-environmental videos, especially those that focus specifically on climate change. Together with the Cult to Wilderness, also supported by the recommendation of "Nature is Speaking – Julia Roberts is Mother Nature", their choices include the two remaining global strands of environmentalism. The environmental justice focus on direct contamination by extractive companies appeared in the trailer for the Peruvian film *Daughter of the Lake* available through Netflix or in the protests against an Irish cement plant that they selected. At the same time, they also valued the eco-efficient call of "Oceans of Energy".

The other rural group, the neo-rural eco-villagers, adopted quite the opposite response and had a positive predisposition to the environmental videos on climate change and direct pollution. Their more salient choices coincided with the young farmers, as the group prioritised "Nature is Speaking" and the *Daughter of the Lake* trailer. Their reflections on environmental justice and cultural differences, introduced in earlier discussions, persisted in focus, along with their eco-centric admiration for nature. In the remaining choices, dispersed interests were displayed despite their consistent community of thought around sustainability.

Therefore, without clear trends besides probably university students, this analysis can only confirm the fragmentation of audiences even among the same cohort and the artificial situation of having the same universe of possible media choices. Additionally, it helps visualize how video choices accompany previous reflections on environmental problems and human responses.

Young Audiences in Uruguay

Report of Media Use by Young Adults Surveyed (Uruguay)

In Uruguay, third level students also conform to the patterns associated with young audiences. Their media use is mainly digital, with a solid gatekeeping role performed by social media and turning especially to Instagram and YouTube while leaving (or leaving unattended) Facebook. As reported in Ireland, they still consume mainstream media, including daily news TV shows, radio programmes and digital websites of national legacy media, in some cases through Twitter. However, like Media and Journalism students, they also search for alternative media and make sure they have a diverse "diet" of distinct perspectives on current affairs, although sometimes depending on paywalls. They express that Instagram offers mostly entertainment and connection with others, and YouTube is a

database of "everything you can think of" (documentaries about other cultures, music, history, international politics, spirituality, curiosities, films, tutorials). However, they prefer Netflix for full-length movies. Furthermore, one of the 1st year students heads an initiative to “translate” and promote less prominent news stories for young audiences on Instagram (18-25), arguing that they rarely consume news.

Young students from a Graphic Design technical training course report the use of television and news specifically, despite their age (18-20). Online, Google seems as crucial as social media – Instagram, Facebook, Twitter, YouTube - to discover media content, and suggestions in the form of ads on all these platforms attract them to some further content that they value. Instagram is the most used platform, displacing other social network sites that focus on photos, videos, music; it is also a channel “to get hired” as a designer. There are cases where the Google search engine or YouTube are the only Internet ports of access used to get links that eventually lead to social media platforms for both news and entertainment. As commented upon by other students in the first year of a post-secondary education program, YouTube is helpful for information, education and entertainment, “as a big encyclopedia, a box with lots of information”. Another advantage reported is that “despite the high amount of toxic comments”, they do not feel affected or exposed using YouTube unless they upload a video.

The need for comprehensive and realistic information leads to website and social media searches, primarily housed on Facebook, for Folk Musicians interviewed in Uruguay. These online options offer more coverage of current affairs than the mainstream media, with no filter from the actual violence of social and political issues; they are alternative media outlets with differing ideological frameworks which align with their views. The socialising role of these platforms is acknowledged and stressed as a complementary reason for trusting the information they receive on social media, which was filtered or created by people they trust. Instagram and WhatsApp are the most prevalent tools, along with Facebook, and these platforms are most devoted to entertainment, especially for those sceptical about the mediation of social reality. Priority is given to face to face and word of mouth communication, while the possibility of audiences´ critical or resistant exposure to media content finds no agreement in this group; some would point to avoiding exposure as the best strategy to deal with media that they do not trust and, alternatively, others emphasise their own critical exposure to certain media.

The media repertoire of immigrants – many of them refugees or asylum seekers - from Cuba or Venezuela and other foreigners who participated in this study, involves media content from their country of origin as well as their current host country. The participants' prioritisation of digital media

is justified by the search for "real" information, without restrictions or governmental interference, as often occurs in their homelands. The only other media mentioned is TV, although the examples point to new ways of consuming it: for instance, by using an app where all the Uruguayan channels can be viewed. The mobile phone and the Internet are at the centre of their media use in Uruguay, as distinguished from media use in their home country. In terms of finding reliable information from home: "Most Cubans identify with Cuba, for example, we visit Cibercuba, they publish all the news there, about how Cuba is, the world and those things". Social media (primarily Facebook and YouTube; Instagram was discovered upon arriving in Uruguay and is used infrequently) is not used to follow journalistic outlets that provide news. Still, digital media use is more focused on interpersonal relationships and personal interests, such as the use of Computrabajo to find out about the availability of new jobs.

For young adults participating in the social inclusion programme, the cellphone is also at the centre of their media use. Google is the main portal or "door" to practically everything they are interested in: they receive current affairs news from Google home page and their networks (Instagram and WhatsApp mainly), they look for and watch soap operas and movies (Netflix, YouTube and other services), and sometimes soccer matches. They also listen to music (YouTube and, when no Internet is available, on FM radio) and download it (Google), they buy and sell online (Instagram, Facebook) and they learn how to do things (YouTube tutorials). Instagram and WhatsApp are the essential apps for them: "you can live without them, but you live bored", summarised a participant obtaining consensus in the group about the essentially entertaining role of these platforms. Their main activity revolves around knowing what others are doing through images and videos (Instagram, Whatsapp status, with Facebook in second place). These so-called others are people they know personally as well as national and international celebrities. At least half of the group creates and uploads content to social network platforms like YouTube or WhatsApp, mainly telling the world what they "are up to". Twitter is a social media platform for "chetos" (a slang term for rich urban people), from the perspective of some of these focus group participants, while others use Twitter. Newspaper or traditional media outlets' content might be consumed online (the "informativo", the TV nightly news report). At the same time, they are still exposed to analogue TV at home; they do not necessarily choose to watch it, but it is part of the background, used at times as a companion (soap operas, cartoons). Another interesting gap in the codes is that they tend to interpret "media for communication" as, literally, ways of communicating with others, such as speaking or using signs. For these young adults, the primary role of media platforms, organisations or contents is to provide all forms of entertainment.

When talking with the group of young farmers, radio is a dominant medium, with TV also being central. However, they report frequently on being heavy users of social media, especially Instagram, and WhatsApp, which is used primarily for business activities (Facebook, Twitter and Tinder were mentioned as well). A type of social use attached to predefined interests and self-development activities appears here, in contrast to the social inclusion programme. It includes receiving information about farming machinery, nutrition or cycling (by following brands, sportspeople, companies), spreading the word of events through posters in their stories, and promotional activities of artisan entrepreneurship. Social interaction also appears when reporting searching for people, through indirect messages publicly posted or sharing party pictures through Instagram, as well as through the use of Tinder and gossiping via WhatsApp. “Entertainment and connection” are basically how they summarize their prevalent use of Instagram. Still, some refer to it also as a channel to find out about international events, like the fires in the Amazon broadcast by individual users. Facebook and Twitter are alternatively preferred for consuming news from traditional national outlets, but always filtered by their social network circles. At the same time, the former is subsequently used to buy and sell, or exchange items related to cars and horses.

For eco-villagers, Facebook is the predominant platform. They use it as a global or regional news wall, selecting who to follow and monitor if their built social network is reliable. They also use it to access news posted by their networks of friends and acquaintances. However, some are leaving Facebook to migrate to Instagram, which is a space to promote personal entrepreneurship (art crafts, recycling) and offers information closer to sources (videos, live, Instagram TV). Thus there is less incidence of fake news. Most of them have not explored Instagram; a similar trend appeared with listening to podcasts/radio via Spotify; they appear to be a minority in this group. The trend is associated with searching for independent media that is firmly based on eyewitness testimony. YouTube is a platform that participants do not actively choose, although it is mentioned more than other specific media sites or channels. The eco-villagers recognize the use of algorithms in YouTube (as in other social networks), suggesting similar media/ content to hold the viewer’s interest (*RT - Russia Today*, for example, or *Playground*). There is no agreement on WhatsApp, which for some is a valuable source of alternative media content (links, videos, news), shared within groups of people and related organisations. In contrast, others limit it to an operational use that prevents the bombardment of misinformation: "a more direct communication, I would say, I use it to solve issues with people", notes one participant. Strategic consumption of information - thought, sought, designed, even avoided - is a feature of this group, bringing together diverse sources, generally with an anti-capitalist stance. Blogs written by intellectuals and email distribution lists of environmental networks are part of their media repertoire. Furthermore, it could also include publications or television

broadcasts that they disagree with but serve as the mainstream speech thermometer. In one participant´s words: "I always read the headlines because I want to see what they are telling us, what the official version is or what thousands of people will read".

Generally, social network sites are prominent also within the Uruguayan sample of young adults, with Instagram as the leading platform. However, legacy media still have a place in six of the eight groups of young adults surveyed, mainly TV news and radio in various contexts. The most typical media repertoire mixes news consumption on TV, radio, alongside both legacy and alternative websites; social media for entertainment, socialising and awareness of international events; and YouTube as the platform for fiction, music and tutorials. If Instagram is primarily associated with entertainment, other affordances emerged as providing business opportunities of a diverse kind and enabling access to situated testimonies of current affairs, without mediations that put credibility at risk. Depending on the groups, Facebook ranks high or Google as "main entrance" to any content on Internet, for either specific searches or just letting the algorithm provide an agenda. YouTube specifically was considered as both the most extensive database of any content and the typical streaming platform for audiovisual entertainment; it was also identified as a safe place where you are not exposed, unless by uploading your own content. Most participants reported an active consumption of media, especially for entertainment and socialising purposes. At the same time, information is sometimes searched for in specific outlets, sometimes delegated to the trusted others who gatekeep their social media feeds and occasionally dependent on platforms automatic suggestions. No Internet access difficulties were reported, although fewer digital skills in other platforms were evident in the social inclusion group when developing the activity with videos and very poor media literacy.

Representations of Media Influence on Engagement with Environmental Risks (Uruguay)

The discussion as to whether eco-videos are effective in speaking to their audiences produced as expected mixed responses. Broadly speaking, the role of media generally in the environmental crisis also provides diverse responses across the groups in Uruguay. As for the Irish set of focus groups, it is possible to identify the following trends: social representations pointing to a significant media impact; social representations that interpose diverse conditions (in the audience or the message) for media effectiveness; and a third perspective in which media is not at all considered central, when it comes to engagement with environmental risks.

In the set of focus groups reported in the Southern hemisphere, however, the most consistant trend is one of relative influence, depending on the audience and the specific content deployed. The most salient viewpoint was that the effectiveness of the media "texts" depended specifically on the prior

interest of the spectator, leading to expose him/herself to these types of media or alternatively to totally dismissing them in the first place. Without judgement in most cases, young adults argue that it is crucial to distinguish people who care, from people who don´t care about the planet. People are categorised in clear binary terms, between those who share the pro-environmental perspective of the videos versus deniers of environmental risks. People who usually take the initiative with their behaviours versus people who would not. People who show a long term interest in nature, versus people who will watch any video simply as entertainment. And, finally, people who grew up listening about environmental challenges, versus people who grew up in a precedent time when "there were no environmental problems", at least in the public conversation and in other spaces of socialisation. A participant provided an extreme example that illustrates the case for predispositions as the most potent mediator of effectiveness:

> I think a video could be effective if Trump sits down to look at it and watches everything. If Trump sees it all, even if he ends up thinking what he wants to think, he opens a door for me if he watches it all. If, after 2 seconds, he knows what's coming, his prejudice takes over, and he throws it away. The video will not be effective, because it will reach thousands of people and the thousands of people will be people who already have formed an opinion. Therefore I won't be able to achieve the effect that I wanted to achieve.

For some participants, the aforementioned enterprise of convincing deniers is hopeless; for others, the paradigmatic example of the failure of the media to promote environmental awareness lies squarely with the older generations. They see their grandparents as too close-minded to receiving any environmental message because of "the lack of a culture" of sustainability, probably due to not having received an environmental education while, by contrast, probably also being a generation less prone to overconsumption.

Instead of focusing on the audience, the other broad ranging investigation of the social representation of the comparative power and influence of media, focuses explicitly on the message. For the participants exposing this perspective, the problem might be that messaging fails because of their approach to the issues. Some of these failures identified are: dramatically overemphasising the problem, while showing few solutions; choosing leading voices which belong to a polluting sector such as the film industry, or those who are not deemed to be close to the audiences. Consequently, this tends to infer that such stakeholders are not or cannot be personally close to the audience, or at least close in branded and consumer terms, such as recalling well-known brands that make concrete contributions to the environment. Videos, from their viewpoint, must be as hard-hitting as possible to move and therefore trigger reflection, although they are not necessarily going to change behaviour. For a few participants, only videos that stand out from the crowd could be considered significant, as

long as they are informative, inspiring, educational and practical.

As reflected in the previous comments, variations in this middle level of influence are also determined by whether participants are considering the goals of providing information, whether it be to change attitudes or to provoke behaviours. The discussions opened other distinctions, such as assessing the many encounters with media: the short and the long term, the individual and the social impact, the active and the passive exposure. For instance, this perspective of cultivation appeared in some of the discussions:

> I think a video by itself doesn't do (sic) anything. It doesn't affect anything because you watch a video and then forget it in 10 minutes. But, if there are many videos and many diffusions, over time, you are sown in the unconscious, and you get into the unconscious collectives of people until it becomes an important topic. Because nobody cared about the environment before and now even in schools are teaching it, so I believe that the media that publishes the videos will change something, the media put it today -as the agenda-setting (laughs)- saying this is important and, every now and then, not a bombardment of information but saying it every now and then, reminding you. Then each one is going to give more importance to the cause. Then I think that the more you do the broadcast, the better, and it's not going to be instantaneous, but I think in the long run it gets into your mind.

This unconscious effect, or not audience-led effect, also appears as the basis for attributing a high impact to media. The most vigorous agreement appears in the Immigrants and Refugees group, along with the commonsensical affirmation that “we have been manipulated to vote for teams or citizens, to search for new products”, thus including media functions as public service and commercial intermediation. Therefore, media should devote itself now to the noble mission of environmental awareness and change. In another group, the reason for considering media as a powerful tool relies less on “what I consciously look for, but in what comes to me”, as “Internet platforms provide as more information that we seek for, so you unconsciously get to things that call you attention”. Other groups also trust the media to “collaborate” given its massive influence but point to the fact that “big companies, not benefiting from this coverage”, might not allow them to do so. Regarding the short online videos, in particular, perceptions of high impact are attributed to the expressive and political value of the format, along with its power of synthesis as “consumable”, and very adequate to new modes of media consumption (fast, online, through social media, accessible). Interventions, such as speeches, found unique potential reach through this online video format, as was the case of Di Caprio´s virally disseminated Oscar speech on climate change.

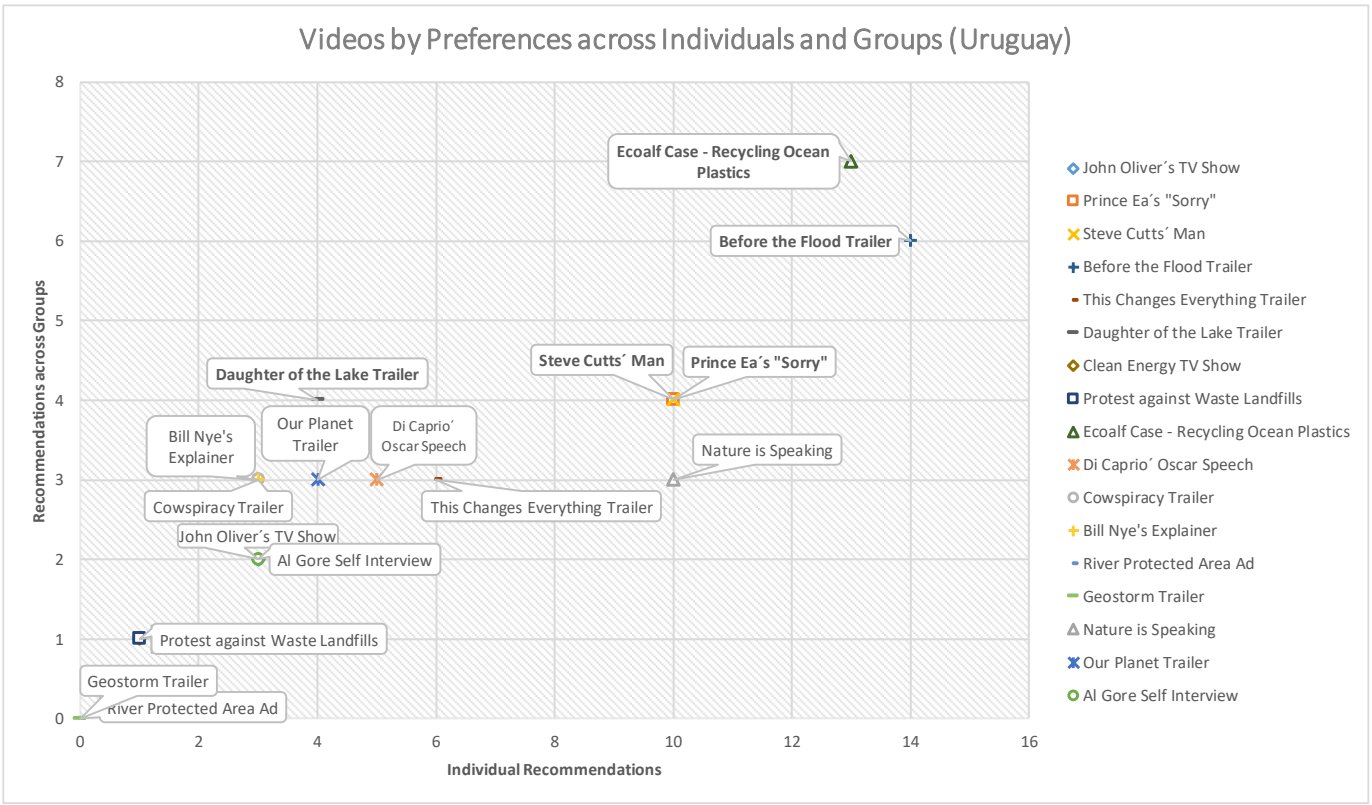
On the other extreme, the most sceptical views regarding the role of media in promoting engagement

with environmental risks point to, on the one hand, the inadequate coverage, and, on the other, to the weakness of any media when compared to other direct influencers. Incomplete coverage of mainstream media versus the fragmented, and at times fake, media coverage via social media is identified across some groups, inducing a tension which is not resolved at least in one of the discussions. Yet in the same group, unfair media pressure on younger generations also emerged a theme. In another group, highly filtered, even manipulated and censored information in mainstream and social media leads them only to trust what they can directly witness.

Salience of Videos in Performed Viewing (Uruguay)

Which were the most recommended videos in the discussions conducted in Uruguay? The combination of two measures were used in building the ranking of videos: how many participants of the focus groups chose each video and in how many diverse groups these videos were selected. Therefore, for a video to locate in the upper right quadrant of maximum relative salience, it needs both a high level of agreement in specific groups about its value (horizontal axis signalling individual recommendations), and popularity across diverse groups (vertical axis signalling number of groups where it was recommended).

Figure 3. Distribution of Video Preferences in Uruguay



Source: Personal collection

Although there is a dispersion of interests across the eight groups in Uruguay as there was in Ireland, there is a significant coincidence in some titles among the 58 participants. On the upper right quadrant, there are four examples of pro-environmental videos that were recommended by numerous individuals across a diverse set of groups: an infotainment story about the ecological brand of clothes Ecoalf; the trailer of Leonardo Di Caprio´ documentary *Before the Flood;* Prince Ea's spoken word video clip "Dear Future Generations, Sorry"; and illustrator Steve Cutt´s short animated film *Man*. Another documentary trailer for *Daughter of the Lake* also reaches four of the eight groups conducted in Uruguay, thus joining the Top 5 ranking.

The next tier of cross-sectional preferences (recommended in 3 of the eight groups) include various options. Ranked according to individual mentions, they are: "Nature is Speaking – Julia Roberts is Mother Nature" (short film, Conservation International, 2014), the trailer of *This Changes Everything* (documentary, 2014), Di Caprio´ Oscar speech (2016), and the teaser for *Our Planet* (documentary series, Netflix, 2019), along with the trailer for *Cowspiracy* (documentary, 2014) and Bill Nye´s explainer on climate change on National Geographic (2017). By individual mentions, only the first three videos reached at least 10% of the preferences.

As previously explained, the sample included videos that present diverse environmental issues and discourses. They feature global and local level examples of each current of environmentalism considered in this study: the Cult to Wilderness, the Gospel of Eco-Efficiency, and the Mantra of Environmental Justice. In the following chart, it is possible to situate the most recommended videos regarding their environmental discourse.

Table 19. Salient Videos and Environmental Discourses (Uruguay)

	Cult to Wilderness	*Eco-efficiency Gospel*	*Mantra of Environmental Justice*	*Undefined Current of Environmentalism*
Global Approaches	**"**Nature Is Speaking – Julia Roberts is Mother Nature", Conservation International Channel "Our Planet | Official Extended Trailer | Netflix", Netflix Latin America Channel	**"Ecoalf - Garbage made clothes to clean the oceans of plastics", Future is Exciting´ Vodafone Channel.** "Al Gore Asks Us To Be Uncomfortable For *The Uncomfortable Truth 2*", Film Fans Channel "*Geostorm* Movie Trailer", Warner Bros	***"Before the Flood* Trailer – National Geographic", NatGeo Channel.** **"*Daughter of the Lake* Official Trailer", Guarango Films Channel.** "Paris Agreement: Last Week Tonight with John Oliver (HBO)", Last Week Tonight Channel. "Oscars 2016 Leo Di Caprio wins best actor", LDC France "*This Changes Everything* Trailer", Toronto International Film Festival Trailers	**"Dear Future Generations, Sorry", Prince Ea Channel.** ***Man,* Steve Cutts Channel** *"Cowspiracy* Official Trailer", First Spark Media "Climate Change 101 with Bill Nye", National Geographic
Local Approac (Uruguay)	"Protected Area National Park Esteros de Farrapos and Islands of Uruguay River Tour", citizen channel	"Uruguay, the most eolic country", Obras Web Channel. "Less is More / Channel 20 / 15.10.15 / Climate Change 2 / Part 1" (Clean Energy), Canal 20 Channel	"Protest against Waste Landfills in Little Solís Creek - Teledia", TV report through citizen channel.	
Source: Personal collection				

The leading current of environmentalism for young adults in Uruguay include the Eco-Efficiency Gospel, as illustrated by the extensive preference for the video of the Spanish sustainable fashion brand Ecoalf. A solution to the widely discussed problem of plastic in the oceans appears in this branded content produced by Vodafone, featured in its series "Future is exciting", focusing on a massive collection and recycling process that turns plastic waste into marketable clothes.

The second most popular environmentalist strand would be that of environmental justice or the Ecology of the Poor. It was revealed by the choice of the trailers of *Before the Flood* and *Daughter of the Lake*. In the documentary *Before the Flood*, Leonardo Di Caprio visits some of the most affected communities globally, showing how environmental problems do not threaten all humanity to the same extent. The trailer for the film *Daughter of the Lake* focuses on an ecological conflict reflecting the imbalanced exposure of Third World people to the negative environmental impacts of

extractive industries. Regarding the geopolitical approach prioritised by the discussants, the global focus clearly attracted more attention than the local examples provided for each current of environmentalism in the groups.

Among young adults in Uruguay, videos presenting more than one environmental discourse were also highly recommended. “Dear Future Generations, Sorry”, for instance, merges two environmental discourses by acknowledging the unfair global distribution of damage –the environmental justice approach of the Ecology of the Poor - and by including the call for conservation of wildlife and trees. Another coincidental choice between countries that evades classification is the short animated film *Man,* which depicts the destructive journey of humans who ultimately reach a hopeless end and does not offer any environmentalist response to classify, while excluding environmental justice and criticising eco-efficiency.

Features Highlighted along with Video Choices (Uruguay)

As previously reported for Ireland, diverse content aspects were highlighted by the participants in Uruguay when explaining their selection of particular video “texts” as more effective for promoting environmental awareness. Allusions to the description of the problem and the environmentalist response help assessing how pervasive the different environmental discourses might be for these groups of young adults. Additionally, references to the genre or format, the authorship or the leading voices, the aesthetics in terms of sound and imagery provide evidence of the complete experience of viewing eco-videos perceived as influential by these young adults.

The following sub-sections are devoted to presenting audience´ interpretations of the five most recommended videos across the focus groups conducted in Uruguay. As previously stated, they were: #1 “Ecoalf - Garbage made clothes to clean the oceans of plastics” (Vodafone, 2018, 5:36); #2 *Before the Flood* Trailer (National Geographic, 2016, 2:18); #3 “Dear Future Generations, Sorry” (Prince Ea, 2015, 6:02); #4 *Man* (Steve Cutts, 2012, 3:36); and #5 *Daughter of the Lake´* Trailer (Guarango Films, 2015, 2:27).

- Features highlighted in Uruguay about “Ecoalf - Garbage made clothes to clean the oceans of plastics” (Vodafone, 2018, 5:36) - #1

The presentation of the ecological brand Ecoalf, which involves recycling ocean plastic in partnership with the fishery industry to create and sell clothes, was selected as the most effective video in 7 out of 8 focus groups in Uruguay, ranking #2 in individual recommendations. It was the parallel example

of Ocean Bracelets' infotainment piece in the list for Irish groups, which was not available for Spanish speakers, and provides an international model of the environmentalist current of Eco-Efficiency.

Four attributes frequently appear in this choice: the innovative response, the cooperation of diverse agents, the focus on solutions and the relevance of clothes consumption.

The novelty of the content was often emphasised by participants who chose this video as one of the best from the list provided. The innovative process of creating fancy clothes out of garbage, providing a second life for plastic and nylon, was qualified as a practical, effective response to pollution in the oceans. The visualisation of the before and after transformation - from bottles to a sweater, from plastic into something that looks like cotton - was highlighted, along with the volume and the detail of the procedure. Most of them did not know about the existence of the organisation. Many had not thought of this possibility before: “I press the play button in the one about clothes made of plastic, start watching, and it blew my mind (…) It blew my mind the fact that it was possible to take all that plastic out of the sea and recycle it”.

Cooperation was another focus of attention and could be considered part of the innovation factor embedded in the storyline. The alliance with anglers was emphasised, as they turned out to be collecting garbage from the sea in addition to just fishing as usual. Still, they also acknowledge the complementary action of “not only one organisation but a great collective, from fishermen to the people who buy the products”.

In contrast to the many videos that focus primarily on the environmental problem, this one stands out because it presents a practical solution to pollution as the central issue. “The only one that really caught my attention was this video because the others are telling me what I already know, what´s going on, what´s going wrong, and what´s the point? I´d rather watch a way to change things”. It was also argued that it “shows that it is possible to mitigate the damage we have done” and that it shows “a kind of salvation that could work, reusing things and making new products”, yet never introduces the possibility of relieving the viewer of the responsibility to reduce waste.

These attributes often appear intertwined:

> It is one possible solution for pollution, showing that there are organisations already working on this –in Spain mainly- and it is inspiring. Not only one organisation, but a great collective action including from people who fish to people buying the products. It´s good to say that´s ok; there is kind of salvation that might work, reusing things, making products, products that you might think that is made of cotton, but it´s really garbage that has been transformed.

Other explanations highlighted the importance of pointing to issues over fashion consumption. Some participants identified it as an arena where more effective alternatives are welcome by the people since it is a daily necessity. The example of the H&M programme of discounts in exchange for used cotton clothing is referred to as a similar solution that tackles aesthetic, ecological and economic drives for recycling. At the same time, ecological clothes consumption becomes a relevant opportunity because of the negative impacts of producing new clothes; a respondent said it is useful "to help to avoid animal death for wool and also the abuse of the ecosystem", revealing a surprising lack of knowledge about processes like the one of extracting animal wool despite living in Uruguay.

- Features highlighted in Uruguay about *Before the Flood* Trailer (National Geographic, 2016, 2:18) - #2

The second spot in the ranking of the most recommended videos across groups belongs to the trailer for *Before the Flood* (National Geographic, 2016), the documentary on climate change produced by Nat Geo and by the globally famous actor Leonardo Di Caprio, who is also the 'host' or leading voice. The piece, one of the examples of global discourses representing the current of environmental justice, ranks #1 in individual recommendations in Uruguay.

The readings of this video stressed both how it presents the environmental problem – comprehensively, emotionally appealing, attentive to differential responsibilities - and the presence of Leonardo Di Caprio. His presence is seen as an attractive feature of the film and justified by his lasting role as a UN environmental ambassador.

"*Before the Flood* is showing the reality, not only [the] water", says a participant, distinguishing this approach from the others, while some describe it as a very complete piece which "shows the factories, the ice melting, the agrochemicals, the floods, the tsunami, the earthquakes…". Others argue that it is the one that includes more information. At the same time, the visuals are the key factor for other participants, who even identify the trailer by one of its most striking scenes: "the one about the poles, of ice melting". Most of them mention how simple and effectively all is explained in this piece. Going a step further, a participant also asserts that it is possible to fully understand the narrative because it includes factual information about the impacts of climate change but within a history that produces emotions, which is the key for "reaching/touching" individuals despite being hard-hitting:

> This is the most effective for people to understand. Me, for instance, I have seen this teaser before and when I watched it again, my skin hair bristle. I start

> watching it, and it is bristling; it provokes emotions" (…). "And, along the way, it tells me about kilometres of ice melting, which produces three times the volume in liquid, countries are covered, entire countries sink.

A complementary analysis of the discourse is provided by the ones who value how the trailer depicts differential responsibilities and agency in the environmental crisis globally. Positioning the United States of America as the primary target is seen as justifiable because of being one of the leading polluters and also a global leader that influences other countries, as stated in the documentary. Small countries, like Uruguay, might not have much agency in the matter. In the words of a participant, "It´s clear that rich countries must be the first to do something in favour of nature, right? The ones leading this, because a poor country would never have the resources to build wind farms, solar panels" (…). "Nowadays, there are summits, but they don´t reach agreements, and the rich countries are the first doing it wrong". Actually, the trailer is referred to many times not only as the video featuring "Di Caprio"/"The blond actor"/"the famous actor" but also as the video where Obama appears.

Among the many virtues of the video, the role of Leonardo Di Caprio is highly valued. The reasons include the attention that a celebrity attracts to any message, the global reach of his fame, his clear explanations, the apparent authenticity of his commitment, the record of actions carried out through his foundation, and his summoning of others to the climate cause (not only discourse). The importance of how the story of the environmental crisis is told, or the discussion of genre, reappears when comparing *Before the Flood* with other audiovisual content featuring Di Caprio, such as the Oscar Speech: "It actually shows what´s going on, the changes, while at the Oscar´s he was not showing anything and the other celebrities would notice more how he was dressed than what he was actually saying". The exceptional quality of the narrative, starting from an attractive title, is also stressed by one who admitted that he was consciously skipping all the trailers in the list of videos provided.

On a few occasions, the video was mentioned as a way of introducing reasons to dismiss it. The lack of information and understanding about the topic was reported as a barrier to giving it more attention. Others speculated that the piece would not surpass a lack of previous interest in the environmental crisis.

- Features highlighted in Uruguay about "Dear Future Generations, Sorry" (Prince Ea, 2015, 6:02) - #3

This video clip by the spoken word American artist Prince Ea ranks third with both salience measures: it is recommended in 4 out of eight focus groups. It captures as many individual recommendations as

“Nature is Speaking”. This YouTube celebrity was not previously known to any of the Uruguayan focus groups, although several participants had heard about or had seen the video.

“Future” is a crucial word to understand the success of this piece. The complementary features highlighted relate to the music video genre, with its typical social media rhetoric of direct appellation and the poetic-musical approach. A different story told using various stylistic strategies makes it attractive, although some criticism arose around the focus on current US affairs.

The apparent recipients of an audiovisual letter –“Dear Future Generations”- is the first factor that attracted the young adults consulted. Once watching the video clip, the call to travel across time remains of great value according to the diverse explanations from the audiences: from seeing it as a valuable tool for promoting awareness, to agreeing with the idea that they will be the most affected, to confirming it as a rightful course of action in response to the environmental crisis. Expressions like “It is good because it transmits messages to us about everything that we do not realize, of what is coming”, or “It is made for reminding us that it is not something that will affect us, but those who come and perhaps worse”, represent the first level of analysis. At the second level of analysis, someone offers this explanation and introduces the political dimensions of the environmental problem, in addition to the personalised call to action that others have expressed:

> Addressing future generations caught my attention. Having that advanced perspective of looking at a later moment, instead of the problems of the present or dictating current solutions to existing problems, but beyond that. I feel this is the point of what we were talking about before at the political and decision-making level. It seems to me that this perspective is missing: the deep and empathic and sincere look to the next generations of the world that we are going to leave, right? I think that the slogan of ´we must stop thinking about the next elections and start thinking about the next generations´ is very precise and very forceful for the moment we are today, isn't it? Whatever the country, whatever the government or the elections running.

At the same time, the actual recipients of this “very strong message” are clearly acknowledged by the audience, who agree with the need to address the responsibilities of the present generations in damaging the planet, as “we” are failing both past and future generations of humans. As someone admits, “We only think about now, as we are not interested in what may have happened before or what may happen later”. However, the specific examples used to deliver this message were a barrier for some participants, who criticised the lack of universality of the call when referring to political affairs: “maybe someone from the United States can understand, but others would be like what do you mean?´”

Another factor of success for the participants who choose “Dear Future Generations, Sorry” as one of the most influential media texts on the list is its genre. Generally identified as a music video clip, the “rap” codes of delivering the message in an explicit and direct mode appear as strong as the musical features. In a participant’s words: “He begins to speak to you, to the viewer, at whom he is looking. The first time I saw him, I liked it because he speaks directly to you. It seems so direct that it makes you like, jump in and watch the whole video”, “I found it (direct address) more relevant to give the message that only showing images”. In contrast to this, someone states that just a person talking to you might be generally boring: “These videos bore me a bit, but I liked the imprint it had, that's why I kept watching it”. That was precisely the reason why one participant dismissed it: “the rap one, I thought it was going to be only a person speaking, and it didn´t catch my attention, it´s like the most viewed Instagram videos, all about people talking to you, trying to convince you, and I said no, I´ve seen that before.”

Art, music, poetry are frequent reasons for choosing this video, and it was argued that it is “more than rap”, that music is key “to make you get into it” as well as “when he stops the music”, and that “it starts as just a speech, but it has everything”. Expressions like “To me personally, I do not know, maybe because of my sensitivity, it´s like an arrow, [sound of an arrow hitting] I want to see it again” or “What most caught my attention was the other video that was really exciting, the talk and music that became a poem. And, well, the message that it had, I loved it. I found it very powerful to unite the art of the music, of the lyrics, of the poem, with a very strong message” provide evidence for this perspective.

The genre is also discussed as something relevant to connect with specific audiences. Someone argues that “[T]o talk about the environment, you have to targ*et al*l the public, but mainly those of us who today have the power of change, who are the youth, let's say. So I think maybe rap works, as it helps you to generate more empathy between the public and what you want to say”. While agreeing with the association of rap with specific audiences, another participant argues that this video can actually target any group as “he starts speaking normally and the rap starts after, so it´s someone just speaking to you and I feel it strikes you lots”. For others, choosing rap is helpful as a different way to reach people, instead of “statistics showing how we are, we are this, we are that.”

- ❖ Features highlighted in Uruguay about *Man* (Steve Cutts, 2012, 3:36) - #4

The third spot in terms of salience across groups is shared by “Dear Future Generations, Sorry”, the trailer of the documentary *Daughter of the Lake*, and the animated short film by Steve Cutts called

Man (2012). They were all recommended in 4 different focus group discussions in Uruguay, but his one gathered more individual recommendations across the sample.

The features highlighted about *Man* point to how it awakens the audience by perfectly recreating what humans do, along with the choice of animation as the audiovisual genre for the story.

This is how a participant explains the broad agreement as to why *Man* is a handy tool for raising awareness of environmental issues: “What we see in the video is what we have all been discussing here today”. He refers to the inclusion of the footprint of big companies, the extinction of animals, the extraction of minerals, the limitless urbanisation, even the destruction of what they have created before, and finally, how humans will be sitting on a throne “with many things and having nothing” if they don´t become aware. The fictional recreation of human time on Earth seems insightful. It seems to awaken the audience, as other participants express: “What I liked the most was that it is something you see and you say, this is what we are doing every day”, “And we make it unconscious, which is sad; we make it totally unconscious”. Furthermore, it was qualified as “cruel, hard to watch” despite being a cartoon because “it presents a very crude image of what is really going on.”

The synthesis of past and ongoing actions includes an impactful futuristic closure for the story of the man on Earth: “It is like very strong. It reflects everything that the human was doing all the time, that is, over time, and leading to an end, like the end of the video, which is like super apocalyptic.”

How a cartoon can have such a potent effect is at the centre of other salient conversations about this piece. The educational impact, as someone noted, and the entertaining nature of the viewing are the features that were highlighted when choosing this audiovisual genre. However, this kind of animated fiction might also be a barrier when considering the decision to watch it: “I was amused because that is, I was amused because it is kind of funny, but it leaves you thinking afterwards. But I don't know if many people would start to see it, because it is a cartoon”; “Yes, I pre-judged the cartoon and didn´t watch it.”

The topic of human responsibility does not seem overused, as the title was the first attractive factor for some participants, who sometimes guessed that humans’ detrimental choices concerning the environment would be the focus of the narrative.

- Features highlighted in Uruguay about *Daughter of the Lake´* Trailer (Guarango Films, 2015, 2:27) - #5

The trailer of this 2015 Peruvian movie available on Netflix was as popular across groups as Steve Cutt´s short film and Prince Ea´s video clip. Still, it received considerably fewer individual

recommendations and mentions (less than “Nature is Speaking”, Di Caprio´s Oscar Speech or the trailer for the documentary *This Changes Everything*, for instance).

Among the participants who chose this video as one of the most effective ones, the power came from “being a real experience, heartfelt”. While some point to the main character's life story, others stress the representation of something that is currently happening in a specific place. Sometimes both features were mentioned: “I liked it because I think it´s true, what happened or is happening in Peru, and it is told to you from the perspective of the girl who lives there, that I liked too”.

Regarding the personal story of environmental injustice, participants stressed: “all her suffering, of the change, of leaving their land, the place, supposedly to go to the city to study and well, also the depression, when the police wanted to remove her”. At the same time, someone else argues, “That experience is very important for the role it plays in, let´s say, environmental education”. In terms of representation, it was argued that the trailer portrayed typical and recurring subject matters: eviction, transnational corporate practices, and the policies of extracting natural resources from developing countries.

The last analysis of audience explanations of performed video choices in the quasi-experimental exercise reveals how certain environmental discourses previously identified in specific “texts” find their way into audience interpretations. That is the case of environmental justice approaches to the environmental problem and its solutions, which not only appears in 3 of their top 5 choices (*Before the Flood*; “Dear Future Generations, Sorry”; *Daughter of the Lake*) but is also commented afterwards as one reason for recommending these videos. If participants in Uruguay also highlight format aspects, they give more attention to textual content than participants in Ireland; the paradigmatic example of this trend is the different analysis provided of Prince Ea´s video clip, which belongs to the shortlist of videos in both countries. Besides identifying an Eco-Efficiency discourse, the focus on the argument is evident when the video story “Ecoalf” high popularity is foregrounded with references to the actual project of recycling oceans plastic to create clothes, instead of how it is presented through the info-tainment audiovisual story. Regarding aesthetics and emotions, the reported experiences with the eco-videos in Uruguay mirror the findings for Ireland, but a more rational ´audiencing´ process that searches for information and analysis seems stronger here.

Performed Video Preferences across Groups (Uruguay)

In the following chart, it is possible to track the five most popular videos previously analysed and less recurrent choices in the Uruguayan sample across groups. Columns indicate the specific group

where the diverse media examples were selected as the most effective for promoting environmental awareness. According to how many participants agreed, two vertical sections signal how salient the recommendation was within the group.

Table 20. Recommended Videos across the Set of Focus Groups conducted in Uruguay

	Social Inclusion Programme	**Folk Musicians**	**Refugees / Immigrants**	**Technical training (1st year)**	**Young Farmers**	**Third Level Students (1st year)**	**Third Level Students (final year)**	**Eco-villagers**
High Salience	Al Gore Self Interview		*Before the Flood* Trailer	Prince Ea´s "Sorry"	*Before the Flood* Trailer	Prince Ea´s "Sorry"	*Before the Flood* Trailer	Ecoalf from Ocean Plastics
			Ecoalf from Ocean Plastics	Nature is Speaking		Steve Cutts´ *Man*	Nature is Speaking	*This Changes Everything* Trailer
			Nature is Speaking	Steve Cutts´ *Man*				
Low Salience	*Before the Flood* Trailer	Ecoalf from Ocean Plastics	Steve Cutts´ *Man*	Ecoalf from Ocean Plastics	Ecoalf from Ocean Plastics	Ecoalf from Ocean Plastics	*Our Planet* Trailer	Prince Ea´s "Sorry"
		Our Planet Trailer	*Daughter of the Lake* Trailer	*This Changes Everything* Trailer	Prince Ea´s "Sorry"	*This Changes Everything* Trailer	John Oliver´s TV Show	Steve Cutts´ *Man*
		Bill Nye´s Explainer		Di Caprio Oscars'Speech	Di Caprio Oscars'Speech	*Daughter of the Lake* Trailer	Ecoalf from Ocean Plastics	*Daughter of the Lake* Trailer
		Clean Energy TV Show		*Before the Flood* Trailer	Bill Nye´s Explainer	*Cowspiracy* Trailer	Di Caprio Oscars'Speech	*Cowspiracy* Trailer
				Daughter of the Lake Trailer		John Oliver´s TV Show	*Cowspiracy* Trailer	Protest against Waste Landfills
		Greta´s Speech		*Our Planet* Trailer				
				Al Gore Self Interview				
				Bill Nye´s Explainer				

Source: Personal collection.

As in Ireland, group belonging does not necessarily predict video choices, as even small groups provided a wide variety of recommendations, except when navigating the list of online media examples presented technical challenges or did not attract their interest (Social Inclusion Programme, Refugees/Immigrants). The combination of choices varies from group to group, but less than in the Irish set of focus groups, especially when it comes to high salience video recommendations. Local narratives are marginal in Uruguay, with only two recommendations: one among eco villagers and another by a folk musician.

The three groups featuring Third Level students were the most interested in considering diverse kinds of videos, but they did not include any local narratives on environmental issues. Students in the first year of Third Level education shared a marked preference for Prince Ea´s video clip "Dear Future Generations, Sorry" and Steve Cutts´ animation *Man*, welcoming these creative imaginaries with a higher level of agreement than Irish university students. Both groups were also coincidental in their attention to the eco-consumerism case of "Ecoalf – Garbage Made Clothes to Clean the Oceans of Plastics", relatable to the Gospel of Eco-Efficiency, and on two environmental justice narratives. The latter two examples were the trailer of the documentary *This Changes Everything*. *Capitalism versus Climate*, and the trailer of *Daughter of the Lake*, a story of "the poor" confronting mining companies to protect their water livelihoods. They also agree on the one of *Cowspiracy*, which focused on the meat industry and not classified in any specific ecological current. Cult to Wilderness discourses like "Nature is Speaking" and *Our Planet* Trailer appeared together in two of the three groups of students. In contrast, they were hardly mentioned across the remaining sample of groups.

The comedic genre video Paris Agreement on *Last Week Tonight* was only recommended by third-level students and was not discussed within any other groups. In contrast, along with "Ecoalf", the environmental justice discourse of the *Before the Flood* trailer was a recurring recommendation across the groups and especially salient among non-students.

Folk musicians presented a diverse set of video recommendations that incorporate the three currents of environmentalism and a local focus by including the TV show on renewable energy "Uruguay, the most eolic country". Between folk musicians, *Before the Flood* created an active dissent between the ones who thought it was an excellent narrative, disclosing facts and producing emotions, and those who discard any highly produced video, especially if includes celebrities.

Within the group of immigrants and refugees living in Uruguay, a balance between the different currents of environmentalism emerges as their most salient recommendations were *Before the Flood* (Environmental Justice), "Ecoalf" (Eco-Efficiency) and "Nature is Speaking" (Cult to Wilderness). Their passionate descriptions of the content revealed that the video choices echoed their previous thoughts on environmental issues, with no room for surprises. Di Caprio's accusation of the US as the biggest polluter was a compelling component of the BTF trailer, while recycling had been a recurring topic in the previous conversation and throughout the focus group discussions. They connected the videos with their experiences back in Cuba and Venezuela.

Concerning the rural groups, both the young farmers and the eco-villagers share a preference for "Ecoalf" and "Dear Future Generations, Sorry". Besides these cases, they do not agree on any other

choices. In Uruguay, the performance of the young farmers is not markedly different from other groups and is highly globalised. They show no negative predisposition to the pro-environmental videos. They actually prefer contents on climate change, especially BTF but also Bill Nye´s explainer, Prince Ea´s "Dear Future Generations, Sorry", and Di Caprio´s Oscar Speech. Given this, environmental justice ranks slightly higher than other approaches for them, and they dismiss the Cult to Wilderness in their choices. The eco-village choices of videos emphasize criticism of the capitalist system: from *This Changes Everything*, to the meat industry (*Cowspiracy*), to extractive industries (*Daughter of the Lake*), to Waste Landfills (a broadcast of a local protest) and humankind in general (*Man*), while being saliently compelled by the eco-efficient case of clothes made of recycled plastic. Environmental justice seems to be the current of environmentalism that best suits their media preferences when considering the local and the global arenas. Surprisingly, the Cult to Wilderness does not excite them too much, although they choose to live and produce in a permaculture community directly utilising the patterns and resilient features observed in natural ecosystems.

The social inclusion programme group performed similarly to the cohort in Ireland, showing little interest or capacity to deal with the list of videos, exacerbated here because many of the examples were in English. Interpreting audiovisual discourses in the pre-experimental exercise was a challenge for them, to the point that the group (re) created a supposedly existing story that began with an image that many of them reported seeing: how some felled trees had blocked a current of water, killing the fish. A very brief scene from the trailer for the documentary *This Changes Everything* is the closest example to the scene described, although the peasants featured were explaining river pollution. Overall, the group paid attention almost exclusively to the images, dismissing voiced or written text, thus normalising the fact of not understanding English instead of activating subtitles as indicated. Judging by the fragmented conversation about the videos, which clearly referred to documentaries showing natural phenomena such as floods, explosions and mudslides, these participants seem to have watched only two or three examples from the list of videos: the trailer of An Inconvenient Truth 2 presented by Al Gore, the trailer of *Before the Flood* or that of *This Changes Everything*. Furthermore, they seem to associate somewhat "environmental problem" with "natural disaster". Another example that revealed their lack of interpretation codes and set this group apart from the other young adults surveyed was how they could not identify that Leonardo Di Caprio was at the Oscar Gala in his speech. They just perceived that he must have "won something", although the video's title included the word "Oscar."

Therefore, without clear trends besides probably Third Level Students as in Ireland, the fragmentation of audiences is confirmed even among young adults with shared identities and in the artificial situation of having the same universe of possible media choices. By including low salience video

choices, this analysis helps revealing how the Uruguayan sample performed a more globalised media consumption and valuation than the participants surveyed in Ireland, where at least half of the groups highlighted local narratives. What remains constant is the consistency between the focus of the previous discussion of environmental risks and the subsequent choice of eco-videos.

Discussion of Findings on Eco-Videos Audiences in Ireland and Uruguay

The patterns usually associated with young adults´ media consumption were primarily confirmed in the sample in Ireland and Uruguay, with Instagram, Facebook, Twitter, and YouTube, generally mediating informational, entertainment, and socialising functions. Digital literacy was lower in specific groups such as social inclusion program participants in both countries, along with some farmers in Ireland and some Central American refugees in Uruguay, mainly due to their difficulties with Internet access. How each platform ranks and what specific uses are dominant varies across groups and participants. Instagram provides more than visual entertainment (jobs, business, situated testimonies of current affairs), and YouTube is usually one of the leading platforms chosen mainly for entertainment and education purposes. Google emerged strongly in Uruguay as the main port of access to almost any content that might interest these audiences, including news suggestions. However, legacy media were still part of their media repertoire, especially to cover local and national events, as reported in the majority of groups across regions.

Selective exposure is a key factor confirmed by this research, which reinforces the notion that previous evidence coming from studies that only consider Internet access in insufficient to draw significant conclusions for environmental communication. These audiences are primarily active, ranging from just choosing the homepage that will filter content for them to the extent of making sure that they follow intellectuals, journalists, and media outlets to build their daily diet of perspectives on current affairs. They are even more active in entertainment, which they can easily reconstruct when reporting how they use media, without any criticism or distrust as it does appear regarding information. Being involved in multiple platforms is not the typical case since they tend to focus on one or two unless searching for particular affordances, which could be explained by several reports of the overwhelming effect of “knowing all that happens everywhere all the time”. As previously stated, numerous new questions about media “audiencing” arise and remain uncovered as they exceed the purpose of a concise map where to situate eco-video interpretations by these specific groups of young adults. Or, according to the multiple mediations model, to better understand technological sources of mediation in audience reception.

Regarding environmental messaging and the influence of media, the most robust trend found out in Ireland points to media as a generally impactful tool that could assist or prevent pro-environmental

attitudes, which is coincidental with findings from the literature revision reported in Chapter Three. In contrast, in Uruguay, the most recurrent social representation is relative media influence, which would depend on audience predispositions and the content itself. These social representations about the power of media become essential for assessing the cultural mediations taking part in the process of media reception, while also previous studies found that perceived media influence on others accounted for direct and indirect media effects on attitudes, social norms, and pro-environmental behavioural intentions (Liao, Ho, & Yang, 2016). Both scepticism and faith in the media might serve as an indicator of the personal pro-environmental predisposition, which therefore should be higher in Ireland. Environmental communication could be more effective in Ireland, in these terms.

Regarding the quasi-experimental exercise of choosing from a list of more than 15 eco-videos the ones that are considered more effective for promoting environmental awareness, two of the first four places coincide in both countries: the video clip "Dear Future Generations, Sorry" and the animated short film *Man*. None of them are associated with a specific current of environmentalism, while Prince Ea´s spoken word piece does include environmental justice claims and *Man* excluded it. In the other two places of the ranking, the groups surveyed in Ireland include "Nature is Speaking", the short film which belongs to a Conservation International campaign representing the Cult to Wilderness, along with *Last Week Tonight*' episode about Trump and the Paris Agreement, from a climate justice perspective. Uruguay completed the top 4 list with the eco-efficient speech of "Ecoalf", which is an infotainment piece about clothes made with plastics rescued from the oceans; and for the trailer for Leo Di Caprio´s documentary *Before the Flood*, a global overview of climate change with an environmental justice perspective. The fifth position, distant in terms of tabulated recommendations but still present in half of the groups, belongs to more examples of environmental justice discourses: *Before the Flood* in Ireland and the water defenders Peruvian documentary *Daughter of the Lake* in Uruguay.

Table 21. Ranking of Eco-Videos across Countries

Ireland	*Uruguay*
#1 **"Dear Future Generations, Sorry" (Prince Ea, 2015, 6:02)**	#1"Ecoalf - Garbage made clothes to clean the oceans of plastics" (Vodafone, 2018, 5:36);
#2 "Nature is Speaking - Julia Roberts is Mother Nature" (Conservation International, 2014, 1:58)	#2 ***Before the Flood*** **Trailer (National Geographic, 2016, 2:18)**
#3 ***Man*** **(Steve Cutts, 2012, 3:36)**	#3 **"Dear Future Generations, Sorry" (Prince Ea, 2015, 6:02)**
#4 "Paris Agreement: Last Week Tonight with John Oliver (HBO)" (2017, 20:57)	#4 ***Man*** **(Steve Cutts, 2012, 3:36)**
#5 ***Before the Flood*** **Trailer (National Geographic, 2016, 2:18).**	#5 *Daughter of the Lake´* Trailer (Guarango Films, 2015, 2:27).
Source: Personal collection	

Overall, when adding this fifth position, the young audiences ended up being coincidental across countries in three of the five most recommended videos. Therefore, universal narratives were signalled, along with media examples that indicates some continuity with traditional currents of environmentalism of the North (the prominence of the Cult to Wilderness), while environmental justice has been expanded to both hemispheres as recent assessments had suggested (Anguelovski & Martínez Alier, 2014), and Eco-Efficiency permeated Southern common citizens in its eco-consumerism version.

However, this audience rarely highlights the environmental discourse articulated in each media example. Alternatively, they focus on the languages of the audiovisual genre (Prince Ea's video clip, John Oliver's late-night show, Steve Cutt's animation); and, in particular, in concrete strategies such as in situ testimony (*Before the Flood, Daughter of the Lake,* "Ecoalf") or fantastic precautionary tales (*Man*, "Nature is Speaking"). In Uruguay, this trend is more balanced with attention to the textual script, the story and the rational arguments beyond images and other resources of appeal to emotions. In Ireland, the Cult to Wilderness discourse of "Nature is Speaking" is the exception, as it emerges strongly as the privileged reading of this piece. Generally, the innovative storytelling approaches and the visual power are highlighted as crucial features of videos perceived as effective for promoting environmental awareness.

According to these young adults surveyed in Ireland, distance with the environmental risks is bridged with universal fictional narratives or creative imaginaries acting as precautionary tales in the first place ("Dear Future Generations, Sorry"; "Nature is Speaking"*; Man*). In the second place, they posit factual videos with differential production values such as effective political humour (*Last Week Tonight* episode on Paris Agreement) or the combination of celebrity hosting with globally situated testimonies (*Before the Flood*).

According to young adults surveyed in Uruguay, distance from the environmental risks is bridged mainly through realistic portraits. Although creative imaginative pieces as Steve Cutt´s and Prince Ea´s videos are part of this Top 5 ranking, documentary approaches are clearly preferred in Uruguay. They privileged documentaries not only for getting to know real suffering others as in *Before the Flood* or *Daughter of the Lake* but also to access innovative solutions to the crisis as with the success story of Ecoalf.

Finally, *Man* emerges as the most universally effective video piece. Uruguayans have the same interpretation of its value as the audience surveyed in Ireland: apparently innocent but deeply

insightful, therefore with a vast "awakening" effect. This media example is so powerful that audiences forget the claim for solutions pragmatically posed toother messages discussed.

Across the interpretations, there were no references to any form of self-efficacy associated to the viewing of the pro-environmental videos selected. This was consistent with their choices of exposure and recommendations, with the exception of the story of the recycled clothes Ecoalf and the video clip "Dear Future Generations, Sorry", which depicted clear opportunities for pro-environmental action.

These preferences confirm that, at least at a conscious level, the advisability of prioritising environmental communication that appeals to the brain experiential processing system instead of gearing towards the analytical processing system (Center for Research on Environmental Decisions and ecoAmerica, 2014). Regarding the use of concrete images and human experiences that illustrates the issue's importance, this study adds no evidence supporting the warning against the overuse of emotional appeals (CRED, 2014). On the contrary, persuasion -or reassurance- seems to work not only through non-scripted documentary approaches provoking emotions but also through genres that involve emotional pleasures beyond the rational, as poetry or humour might be, especially among the Irish set of focus groups.

Besides recurrent choices, mapping all the recommendations provided, group by group, adds some further insights regarding eco-video preferences across the sample. If it offered no clear viewing patterns according to group identity, the analysis revealed a more globalised level of media consumption and valuation in Uruguay compared to Ireland, where at least half of the groups highlighted local narratives. Another insight obtained from this complete picture is the consistency between the group´ distribution of perspectives in the previous discussion of environmental risks and the subsequent selection of prominent eco-videos, which confirms theoretically approaches relying on mutual text-audience influences in media reception and previous findings around the powerful filtering through identity extensively reported in Chapter Three. Apparently, the terms set for the conversation guided the exposure and interpretation of the different media examples, as evident in their video choices and the arguments provided to foreground the selection. Finally, this analyses enabled the assessment of differential media literacy inside the national samples, uncovering groups less involved in eco video watching or discussion (Social Inclusion Programme participants in both countries and Farmers in Ireland).

While comparing group by group between countries is beyond the scope of this study, it is interesting to note how the eco-villagers, who were included as a benchmark for assessing non-environmentalists

young adults, are highly consistent in their video choices across countries. In these two groups, the videos arouse great interest, and various titles were recommended. The only difference between the participants in Ireland and Uruguay mirrored the main contrast between regions revealed by the top 5 videos, suggesting a region effect in selective exposure to media. Irish eco-villagers included John Oliver´s show and *Seven Worlds, One Planet* trailer, while the Uruguayan eco-villagers did so with the case of plastic made clothes Ecoalf.

After having gone through the findings around environmental risks in Chapter Five and summarised the insights of the media centred session of the focus group discussions in this chapter, it is time to extract some general conclusions of the research conducted across Ireland and Uruguay.

CHAPTER 7. FINAL DISCUSSION AND CONCLUDING REMARKS

This PhD journey started with an interest in understanding the environmental engagement potential of short-form videos, generally of infotainment content, which circulates mainly through online social networks, becoming very popular in specific segments of the population and sometimes becoming viral in terms of million-plus views. These were Playground or AJPlus stories, animation short films, trailers for intriguing documentaries, NatGeo video explainers, fictional spots for advertising campaigns, recorded TED Talks. However, the first empirical explorations and the search for scientific publications revealed that it is not so easy to answer specific questions about this new mode of environmental communication. It is hard to isolate the consumption of this type of short-form video from the consumption of media in general, which currently converges across the Internet and accompanies new generational audiences through their electronic devices. Moreover, given the intensity of consumption, young people - the segment of the audience chosen to start this exploration - were apparently not so proficient at recalling online videos they viewed, even the most media literate survey respondents among university students of diverse origin (Brereton, 2021; Brereton & Gómez, 2020). Perhaps that was why empirical audience research was avoided favouring textual analysis, with some exceptions that take advantage of the interaction via comments from these social media platforms. Therefore, the scope of this study had to be broadened to address media repertoires and try to discover what place these videos might occupy for such cohorts of audiences.

These considerations naturally guided the study to go further than simply evaluating "texts" coupled with the specific occasion of encountering a viewer as subjects of investigation. It was necessary to look at everything that surrounds and precedes that interpretative meeting between media and such audiences. That is, situating the research within an audience reception perspective of environmental communication. Later, the literature review revealed the weight that Inglehart's post-materialist theory attributes to economic variables with regards to environmental awareness, including individual income levels and the country's general development. However, beyond the economic and sociodemographic approach, having grown up in a rural or urban space also appeared decisive for the conformation of an environmental sensibility and another series of cultural and social aspects that transcend Inglehart's perspective. They are instead located in the value-belief-norm model explanation of the complexity surrounding environmental knowledge, attitude and behaviour. Given this, and in contrast to previous studies, this project searched for a varied sample that could cover different profiles and situations that potentially offer various audience perspectives, rather than simply observing the consumption of eco-media by young university students from a range of middle or upper-middle classes cohorts.

If this approach was already interesting to apply in a country like Uruguay, where there are very few studies on environmental communication, another critical component was added to the project: the comparison with Ireland. When one delves into the environmental crisis - its origins, evolution, current characteristics - the relationship with the global economic system that has prevailed for centuries becomes apparent. Above all, one needs to take on board how colonial distribution of roles between core and periphery regions remains, with small variations, the key avenue to account for the asymmetries in the distribution of environmental risks and mitigating or regenerative efforts all of which depend on affluence. Beyond the economy, some views garnered from cultural studies and political ecology also serves to highlight a region's importance while identifying Global North and Global South currents of environmentalism. From this perspective, highly eco-centric environmental ideologies were found as a potential source of inspiration for a global transformation towards sustainability, although still marginal in the public discourse and emerging mainly in situated socio-environmental conflicts over natural livelyhoods. Uruguay, located on the periphery of the world system, could offer a very different lens to Ireland, a country located at the global core region, especially in terms of the experience of environmental risk and taking on board general environmental awareness. Furthermore, their similar agro-export profiles make both countries comparable cases regarding the environmental impact of food production and place them at the centre of current debates around low carbon diets, at a national and international level (see Chapter 2).

Furthermore, within an environmental communications lens, looking at this phenomenon across two different geographical spaces also has relevance for global media consumption. One of the main features that distinguish this new online video format from "old" legacy media is its accessibility from anywhere with a non-filtered Internet. In addition, due to cultural globalisation modalities and the global popularity of some of the celebrities featured in these platforms – thinking, for example of Di Caprio - there is a distribution opportunity that previously only blockbuster franchises offered to mainstream global audiences and not even simultaneously. Consequently, the people of Uruguay and Ireland would have the same content available when navigating this virtual (transnational) space, facilitated by the high Internet connection penetration in the two countries. It was interesting to see if young adults living across both regions, with all the contextual particularities identified in Chapter Two, would relate to the same pro-environmental content and how coincidental their interpretations might concur when this is interrogated.

After more than twenty hours of focused discussion with natural groups of young adults, involving about a hundred participants across Ireland and Uruguay, these ambitious interrogations started to uncover some patterns and salient responses. The first research question was focused on the online

exposure and interpretation of eco-video (Parham, 2016; Brereton, 2018), covering diverse strands of global environmentalism (Guha & Martínez Alier, 1997). It was successfully explored through reported and performed selective exposure to pro-environment short-form video texts, along with interpretations and assessment of the perceived influence on environmental awareness of such audiovisual content. The second research question pointed to cultural sources of audience mediations and it was partially answered through capturing social representations associated to environmental risks and the human responses to it, which emerged in an initial open discussion about the environmental crisis. The exploration of participants´ media repertoire that followed also contributed to map audience mediations of environmental content, along with their perceptions of media influence in engagement with environmental risks. Finally, they were asked to individually check a selected list of pro-environment YouTube Videos, where they could select their preferred ones, and, after viewing, they were asked to discuss with the group the choices made. According to the audience theoretical framework of this study, all these findings are relevant to understand the non-linear and culturally embedded process of media reception.

Eco-Media Exposure and Interpretation

One of the most striking findings of the extensive report about media reception developed in Chapter 6 is the coincidence in three of the five most recurrent videos between young adults in Ireland and Uruguay. The video clip "Dear Future Generations, Sorry" (2015), the animation short film *Man* (2012) and the *Before the Flood* trailer (2016) stood out among almost twenty possible options provided. Furthermore, young adults reported very similar highlights after viewing these audiovisual media despite being located in two distant settings and speaking different languages, suggesting a shared exposure and, at a meta-level, a tentative common interpretation. Illustration of this can be highlighted through calling attention to NatGeo type imagery or a mixture of visual languages, along with sound and music, outperforming more conventional textual content and linguistic arguments –more acute in Ireland. Emotional appeals, including the perspective of loss, coupled with generational or species' guilt was regarded as most significant for many respondents, even if full of storytelling clichés as the paradigmatic case of *Avatar*, and without avoiding so-called ´negative´ feelings of fear.

Despite evidence of hope and solutions found in a thorough reading of many of the recurrent videos recommended, it was not necessarily what the audience highlighted or valued most in their detailed responses. If fiction 'beats' documentaries in Ireland, the opposite appears to be what is reported in Uruguay. Both formats tend to privilege the direct address of the unethical human-led destruction of non-human nature, which mirrors previous findings of the prominence of ´shared moral challenge

narratives´ in YouTube popular climate change videos (Meza, Shapiro, & Park, 2018; Shapiro & Park, 2015).

According to this finding and observation, transnational interpretive communities that are also ethical communities (Sarkar & Walker, 2009) created around content could not be only hopeful speculation but possibly a reality, where scripted imaginative narratives might be almost as compelling as documentaries. Nevertheless, this kind of study falls short of observing the mid-or long-term effects of this element of emotional catharsis, so as to find out if it is just "an opportunistic position, a mere pretense" (Sarkar & Walker, 2009, p. 580), or alternatively could reinforce the broad political efficacy of audiences which requires extensive further analysis. A preliminary hint is provided by the absence of reported assets pointing to reinforcing self-efficacy in the participants of this study.

The remaining two leading video choices as chosen by the focus groups in each country revealed other significant media consumption trends emerging from the discussions with young adults, suggesting both continuities and changes within regional currents of environmentalism (Guha & Martínez Alier, 1997). The Ecology of the Poor appears as another point of convergence between regions, according to young adults' recommendations of videos (*Before the Flood*, *Daughter of the Lake*, *Last Week Tonight*) and coincidental with an assessment of the growing popularity of the environmental justice movement that Martínez Alier observed in a 2014 update of his seminal work with Guha around global currents of environmentalism (Anguelovski & Martínez Alier, 2014). However, if political economy in a broader sense of uncovering the global distribution of power is welcomed in pro-environment media examples, as evident in Leo Di Caprio' *Before the Flood* and Trump-focused *Last Week Tonight* episode on the Paris AGreement, global environmental justice is not pointed out as an asset of such content when young adults discuss their video choices. Instead, the effect of loved and loathed personalities is constantly highlighted; confirming previous findings of YouTube audiences (Meza, Shapiro, & Park, 2018; Shapiro & Park, 2015), along with privileging specific audiovisual formats or high production values.

Supplementary findings suggest that the North-South divide remains in the Cult to Wilderness strand of environmentalism, represented by "Nature is Speaking", which is particularly privileged among Irish residents. At the same time, the convergent discourse across regions is no longer Eco-Efficiency or ecological modernisation, which remains a top choice only for Uruguayan respondents, through their salient preference for the story "Ecoalf - Garbage made clothes to clean the oceans of plastics". Far from public policies of green modernisation, a private initiative of Eco-Efficiency enables the regaining of centrality for this current in the Southern country, outperforming the high preference for global environmental injustice narratives when looking at the other videos

located at the top 5 of the ranking in Uruguay. However, the low recall of a video that focused on Uruguay's unprecedented change to renewable energy, along with the reasons for recommending the case of Ecoalf, suggest that the appeal was more connected with eco-consumerism and social innovation, an approach already highlighted when discussing personal agency in the environmental crisis, rather than supporting techno-fix solutions by themselves.

Overall, and especially in Ireland, these young adults believe in the power of media for promoting environmental awareness. However, as a result of this selected exposure to videos, no incremental knowledge or changes of perspective were reported in most cases, instead, a reinforcement of previous attitudes and opinions prevails within most participants' expressions. This finding seems to confirm representations of the relative power of media expressed by the majority of focus group participants in Uruguay and some respondents in Ireland. Nonetheless, non-linear cause-effect relations are dismissed in audience reception approaches as argued in chapter 2 and 5: texts can be designated ´effects´ of the audience as much as the opposite (Fiske, 1992).

The second objective of this research was analysing engagement with environmental risks (Beck, 2009; Urry, 2013), as constituting a crucial factor in the audience reception process (Martín-Barbero, 1987; 2018). Engagement with environmental risks (Weintrobe, 2013) was addressed through investigating participants' levels of issue awareness, together with their perceived responsibility and agency (Bourdieu, 1980; Clarke & Agyeman, 2011), regarding dealing with the environmental crisis.

Issue Awareness

While the puzzling array of issues reported in each country accounts for the three critical areas signalled in the official diagnosis of the environmental crisis - climate, biodiversity and pollution emergencies (United Nations Environment Programme, 2021) - there is a clear regional divide in the priorities of diverse environmental issues. Climate change certainly displaces any other environmental risk in the discourses of young adults in Ireland, emerging as a totalising meta-narrative (Hulme, 2009). Alternatively, it is scarcely ever discussed in Uruguay, where other environmental risks seem more obtrusive according to the experiences they report in the first person. Neither local vulnerabilities to climate change nor contributions to global emissions received any attention in the southern part of the study, despite the dominant meat-producing profile of Uruguay and the remarkable change to renewable energy that attracted international attention in the last decade. Furthermore, the groups in Ireland where climate change did not emerge in the initial discussion were probably not surprisingly those whose participants came from other global regions,

such as Brazil, Mexico, Turkey, Ethiopia. Another notorious deviation in knowledge about the environmental crisis, found mainly in Uruguay, and also underlying some of the discussions conducted in Ireland for that matter, refers to dealing with such wicked problems in a timely manner or timeframe: namely when to situate the tipping point in the future for humanity to be severely or irreversibly affected by environmental problems. With much scientific analysis of only having around a decade to turn the tables around, most of the discussions tend to avoid or simply postpone the date for such future generations' scenarios. Therefore, the object of concern presents variations and reveals only partial knowledge of the current well documented scientific risks.

A generalised concern about the current environmental crisis is expressed when placing protection of the environment among the top problems that societies face nowadays. Furthermore, climate change denialism appears almost not evident in the sample. This notion of consensus is a good signal or indicator, given the socially-oriented findings pointing to the relevance of believing that others hold biospheric values and expectations about our own environmental performance (Bouman & Steg, 2019). The global green culture which is further mediated and re-forged by electronic interaction within younger generations (Díaz Estévez, García de Frutos, & Pena Moya, 2014; Eckersley, 1999) is affirmed, with few exceptions, to the point that it would be possible to tick all the statements of the New Environmental Paradigm, while applying the NEP scale to these young adults' expressed worldviews. However, when looking below the surface, there is a country called Uruguay where climate change is the least concerning issue on view, one that the respondents hardly know, alongside another country – Ireland - which sees climate change firmly on the agenda, but appears to present an incomplete picture that often excludes current and more immediate effects in distant places. Therefore, this shared green culture seems more like a measure of global sensitivity, but with insufficient evidence of fully fledged levels of environmental literacy (Brereton, 2018) and negligible traces of making connections with the overall effect on general environmental behaviours resulting from a process of healthy engagement with environmental risk (Weintrobe, 2013).

Belonging to the core or the periphery as a potential source of further division and mediation is confirmed when further exploring participants' relationships with environmental risks. Personal and close testimonies of affected populations withstanding high levels of pollution or in recognising the loss of biodiversity appears in Uruguay. In Ireland, by contrast, the direct on the ground experience has more to do with specific causes of climate change associated with consumption and lifestyle choices. However, somewhat surprisingly, participants hardly referred to issues around global environmental injustice, even after viewing (and recommending) media that explicitly focused on the dilemma of who loses more in the current and future environmental crisis. Furthermore,

environmental injustice cases reported most vividly in Uruguay seem to be in some sense normalised in the discourse, as if people suffering the consequences of pollution somehow do not de facto have a global citizens' right to a healthy environment – almost as if it was just a matter of geographical misfortune.

Responsibility and Agency

Regarding responsibility attribution and citizen agency as it applies to the environmental crisis, a preliminary approach to young adults' discourses suggests that they have inherited what structural forces failed to achieve. Although usually accused of not analysing power balances enough in its risk society model, Beck, for instance, stated that the three pillars of security were crumbling: "the state, science and the economy are failing to provide security - and are naming the self-conscious citizen as their legal heir" (Beck, 2009, pp. 45-46). These young citizens – lay-people, consumers – no longer apparently expect much from governments, politicians and companies, and most surprisingly, they do not even mention environmental NGO's or other global organisations. A worrying impression by any measure of analysis. Instead, following Agyeman and other environmental justice scholars´critique, these young adults seem to align with the environmental sustainability agenda, which poses democratisation of responsibilities, instead of focusing on citizens' rights and expecting protection from the institutions which should ensure these rights. This emphasis resonates with the quote that synthetises the findings of a previous study on lay-people views on climate change, included in its title: "We´are the ones to blame" (Olausson, 2011)

When being pushed to think how the story of the environmental crisis might end and what can be done, ethical failures appeared to be the main barriers for success regarding participants in Ireland, who in turn keep this burden almost as a crutch in framing their analysis and as active members of an unsustainable system which appears unable to change in a timely manner. While alternatively, young adults in Uruguay appeared to step back for blaming structural forces that militates against or even ended up stopping well-intentioned people from succeeding. Rather, they pointed to core nations as those with the power to do something and make a change, while talking openly instead of regeneration and adaptation. Again, while resembling the traditional division between guilty First World citizens versus Third World victims who apparently accept their historically more challenging fate, only marginal voices posed this kind of reflections in bold terms. An Italian Eco-villager living in Uruguay said: "Today we put everything under the umbrella of climate change, right? As if all the related effects were affecting all sectors of the population in the same way. But the Global South and the poor in the Global South are the first, as you see how the economic power and the wealthiest statuses will always be able to have access to the services or the tools". On behalf of the powerless, a

University student in Uruguay further highlighted how her country could not afford to put environment protection over industries that help the fragile balance of a minor dependent economy.

Nonetheless, there is a clear trend evident across the entire sample and certainly is even more evident in Uruguay. It would appear that such young audiences all see their agency mainly through the lens of ecological consumerism or conscious consumer disposal choices. The extended concern for plastic and other types of waste in the initial conversation made it clear across the two countries (see Chapter 5). Whether discussing climate change, agrochemicals or waste, no activism or the 'Greta effect' (Sabherwal, et al., 2021) became clearly evident on the ground in either country. As suggested by previous findings, there is emergent environmentalism that can be set apart from activism (Zhang & Skoric, 2018) and, therefore, does not connect directly with environmental citizenship in its conventional terms. Environmental citizenship associated with political party affiliations or political ideologies remains marginal references in the discussion of responsibility and active agency. Despite guilt and anxiety in Ireland, despite identifying close environmental threats in Uruguay, activism or even voting for green politicians somehow appears not to be clearly connected with the environmental crisis for most participants. This absence is clearly marked by contrast, when groups like the eco-villagers in Uruguay present their highly articulated (and encouraging) views on citizen agency, even including cooperative roles for urban and rural populations but without references to voting schemes:

> **Subject A:** I also feel that we, here, for example, are looking for a solution, right? As we choose to leave the city and find a way beyond what television brings, each one of us is looking for a solution to our way of life, by integrating ourselves into nature, which in the city is very difficult. That helps so much to environmental pollution.
>
> **Subject B:** The solution exists, I think it begins with ourselves and if we people organise ourselves and create a model. Let's talk about a new model so that when the old one disappears, there is already a living flag and there are no leaks. So, I think people, for example, in the cities … Political action, let's say, activism … (…) It is to go there to the places of power, where decisions are made, and ask for it. To successfully protest, to chain yourself, to complain. (…) And both are important, it is necessary that people go and ask for changes, right? To raise their voices, to demonstrate as well, to face repression. People who chain themselves to the trees, people who aim at stopping the mega mining, are as important as those who organise and try to create a local economy.

As expected, the exception to the undermining of environmental citizenship remains Eco-villagers or Farmers, whose nature-based productive activities and lifestyles facilitate a solid shared identity, alongside a more focused political agenda drawing on the benefits of a collective agency.

Therefore, according to the tentative findings of this study, it might be the case that the market channels the perceived self-efficacy that needs to accompany the sense of urgency that these young adults receive from their video exposure, as evidence indicates a balance of fear and self-efficacy as a means to help kickstart effective environmental behaviour. Doubts remain about the disconnections between the appeal of environmental justice claims regarding video narratives choices, versus the initial discussion where the environmental crisis was hardly analysed in the light of injustices and their perceived agency mostly dismiss civic engagement around rights or responsibilities.

From Awareness to Behaviour?

Since high levels of environmental concern were detected both in the sample of young adults taking part in this study and within the general population of Ireland and Uruguay (see Chapter 2), scepticism, denialism or negation of the environmental crisis are not as relevant as disavowal for explaining the ambiguous behaviour intentions reported above. In this cohort at least, the main challenge to tackle would not be the complete refusal of the existence of climate change, for instance, or further conspiracy accusations diminishing the certainty of environmental risks. Scepticism and denialism has been the main focus of extensive research on environmental attitudes worldwide (Franzen & Vogl, 2013; Capstick, Whitmarsh, Poortinga, Pidgeon, & Upham, 2015; Zhou, 2015), but disavowal involves knowing and not knowing simultaneously, which challenges quantitative measures with closed survey questions, as the scary reality is accepted but somewhat minimised as part of a coping mechanism. Moreover, the young participants of this research confirm the phenomenon of a majority of students of Brazil and Cuba who would not take part in ecological/environmental activities, despite acknowledging the importance of the environment and having a critical perspective of global and local environmental problems (Gallardo Milanés, Satié de Olivera Pataro, & Mezzomo, 2017). According to these coincidental findings, what has been called the value-action gap remains a challenge. As previously hypothesised after reviewing levels of environmental concern across time contrasting with the lack of significant mobilisation or massive lifestyle changes worldwide, these new findings support the notion that it remains crucial to analyse more sophisticated forms of denial, connecting with communication barriers associated to psychological mechanisms for dealing with dissonance, doom, distance and identity (Stoknes, 2014).

However, the useful contributions of psychology to make sense of contradictory attitudes around media reception should not undermine the acknowledgement of macro-dynamics at place when building and audiencing environmental risks, exposed in Chapter Two and also mentioned as barriers for a shift to sustainable living by many participants across focus groups. The underlying assumption

of many studies that put people´ mind under the investigator´ lens is that, for instance, feeling powerless is a psychological mechanism of denial and not an adjusted assessment of the resources at hand to provoke meaningful change. Instead, the dramatic decline in ontological security in everyone's lifeworld that Ulrich Beck signalled might offer a contextual clue linking with dynamics of a risk society. Offering an alternative interpretation of discourses that climate change denial´ studies had labelled as mere justifications for inaction (powerlessness, fabricated constraints, rejection of blame, etc.), he asked "How are individuals supposed to accomplish what state, sciences and economic enterprises are unable to achieve?" (Beck, 2009, p. 46). From this perspective, the various forms of stress and frustration reported, especially in Ireland, seem justified. Furthermore, social representations like the following might be interpreted as both democratic game Greta-type common sense and as derivation of personal responsibility, depending on the analytical perspective: "when you live in a democratic society, when you pay taxes, when you pay for governance, the government should be the people who lead collectively in the best interests of their people" (Advanced University Student, Ireland). However, social media influencers and anyone speaking in front of an audience could be a recipient of these kinds of expectations that clearly decrease the self-efficacy assessment needed to do their part, whichever that might be: "I don't know if it's the same in other countries, but for Irish people, for me anyway, it's nerve-wracking to speak up in a big lecture. I don't know ... I think, a problem that comes to mind with climate change is always assuming the person above you has the answer" (First Year University Student).

At this point, it seems timely to recall the foregrounding assumptions of this study, regarding responsibility and agency in the face of the environmental crisis. Besides domestic behaviours which account for a much needed shift to sustainable lifestyles, citizen transformative agency is conceived as capable of altering structures, through protest and through multi-stakeholder cooperation (government, companies, social organisations, universities). Lay-people are under the lens in this specific research, but the underlying theory of change points to a mixture of bottom-up and top-down processes where media and communication are paramount.

Environmental Communications

In conclusion, according to the findings of this particular research, environmental communication –along with other disciplines and policy approaches that communication might even help engaging in dialogue, while bridging with their publics– must find a way to deal with massive levels of disavowal, affecting perceived responsibility and agency in the world at risk. Messages and media experiences must constantly relate to real on the ground people's anxieties and their need to mourn such losses while facing reality as harsh as it is, as the only way to move on. This healthy

engagement with environmental risks is determined by an individual psychological process and not only the product of the momentum of climatic existential crisis but is closely related to the economic, social and cultural dynamics in which each audience is inserted. Therefore, it might not be a good idea to substitute the myth of the ignorant public with the myth of the psychologically balanced super-hero capable of following instructions from pro-environmental media to save the planet.

Planned environmental communications should continue to appeal to a universal ethical horizon through formats that prioritise the experiential mode of expression, either within a documentary or fictional manner, but that use segmentation tools to offer other incentives, according to the stage in which the audiences are within the process of a balanced acceptance of personal and collective responsibility in the environmental crisis. Thus, perhaps, it will be possible to bet on information in those groups for which it is still relevant and, above all, to tackle the massive disavowal so that each citizen can assert themselves in actions according to their situation - leading, following or questioning, depending on what risk surrounds them and how power asymmetries play for their case.

Regarding how engagement with environmental risks -issue awareness, representations of responsibility and agency- act as a mediation source in eco-video reception, it might be helpful to recall how:

- Young adults are more critical and committed with an environmental justice analysis when they choose videos than when initially discussing the environmental crisis;
- The contrasting levels of knowledge and importance of climate change in the two countries did not stop these young adults converging in the positive evaluation of climate change videos, but they would appreciate different assets of these media examples;
- The generalisation of responsibility, associated to the environmental sustainability agenda instead of just sustainability, might explain globalised media consumption, not only production values or a celebrity effect;
- The opposite could also be the case as these young adults are constantly exposed to mediatisations of the environmental crisis that could influence their social representations of responsibilities, as cultivation theory argued for television exposure;
- The extended preference for narratives emphasising a shared moral challenge are consistent with the initial diagnosis of ethical failures as the main barriers for changing the course, slightly stronger in Ireland;

- Eco-consumerism as a salient answer to the environmental crisis is not mirrored, in Ireland, in the video choices made afterward;
- There is a local focus when discussing environmental risks in Uruguay, in contrast with a strongly globalised YouTube viewing, while the opposite happens in Ireland, where a low localisation of environmental risks appears along with a higher interest in local media content.

This study suggests which kind of media narratives are helpful to start the conversation with these different profiles of young people, that is, going beyond viewing statistics to find out what content is universally accepted and can trigger those interventions that will probably have to go beyond the consumption of short-form video. However, these YouTube contents might provide the much needed gateway to this audience through the emotional, ethical appeal of the experiential and the personal, whether in fiction or documentary. Resembling Brereton's conclusion of his analysis of film and ecology for the Routledge Handbook of Environment and Communication, which the young adults studied seem to endorse: "arguments will only have force if we physically feel them. In other words, if an argument fails to generate feelings, or tap into the affective component of public engagement, then it will probably not persuade" (…) "Such arguments only motivate when it induces feelings, including satisfaction, pleasure, excitement, interest, anger or distress" (Brereton, 2015, p. 269).

Emotional and value-oriented appeals might be a powerful mean to accomplish this agenda, helped by pervasive short-form audiovisual narratives distributed through social media, but at the same time without dismissing segmented information that in turn might fuel action. Individuals could gradually engage with environmental risks, helped by a media repertoire that includes supplementary ideas and approaches – 'an urgent disaster is going on, it is undoubtedly sad and sometimes unbearable, and we have been failing, but here is what you can do, you are equipped for the challenge and you can come up with more ideas as there is no silver bullet'. Not only at the initial moment of 'honest ignorance' but also after a nuanced assessment of personal and collective agency has been done, mediated narrativised information-sharing might also have a role, as Garbage Warrior did by revealing a clear technical "solution" to an activist audience that was ready to embrace action.

Furthermore, there might be a significant role for legacy media in this process (Östman, 2013), in a raise with COVID-19 broadcasting revival and as they remain the reference for local current events and reliable information, according to these young adults report, despite the massive devotion to

social network sites. If the dynamic of algorithm redundancy and gatekeeping by people alike leaves little space for diversity in content exposure, especially in political terms, the marginal interest that persists in local mainstream media offers a chance to broaden ecological perspectives. An oasis of non-tailored media that they still choose -or bear at least- might offer an unexpected answer to echo chambers potentially blocking the development of environmental engagement, as long as these have the will to frame the environmental crisis in rightful terms (Center for Research on Environmental Decisions and ecoAmerica, 2014; Robbins, 2018). Not many shots to try it, though, in the market of young audiences' attention, which is dispersed in numerous platforms and content.

Therefore, shared trends and particular insights, with all their nuances, must be acknowledged if we think that the media can play a role in this process of individually and socially processing what is happening, changing the relationship with nature, and taking practical action. It would be crucial for environmental communicators to understand the diversity that lies under the simplistic label of a green generation to accompany processes that will be different because the starting points vary, especially according to the world's regions, alongside ever more complex worldviews and media repertoires. In order to better understand lay-people, especially out of the environmentalist bubble where activists and academics might converge, it is necessary to attend to this diversity, which is a challenge that must be faced with a clear agenda of social justice and which is also a reservoir of alternatives to the mainstream Modern Techno-industrial (MTI) form of civilisation (Nelson, 2014). In this sense, these findings must add a small contribution to the path envisaged at the end of Chapter 2, which still seems far given the low salience of alternative eco-centric environmental ethics across the discussions with young adults in Ireland and Uruguay. Some ecological perspectives precisely assign to this diversity the capacity for balance and regeneration of ecosystems, which hopefully help also balance social and natural systems that need to strive together. As some activist claims, the work is to nurture a new form of human civilisation into robust life.

Limitations and Further Study

As just sketched, many paths remain opened after this research. Partly because of the weaknesses of this specific project. Partly because of the insights obtained, leading to new promising questions.

To prevent any form of bias and foster transparency, the process from the voice of the participants to tentative conclusions on environmental communication might have been overwhelmingly full of details, although partially justified by the initial promise of dense descriptions. At the same time, devoting so much time and effort to unravel the perceptions and linguistic meanings of these numerous participants in Ireland and Uruguay provokes an enormous temptation to offer

generalisations. However, no matter how diverse the sample looks compared to other studies, it still lacks the capacity of extending its conclusions to all young adults in these countries, l*et al*one others in the two regions, as the approach involving focus groups was at all times limited to a certain number of groups. An overall limitation of the research method chosen, partly addressed with the simulation of media exposure, is that the focus group method relies on the report that the subjects do of their actions. Furthermore, testing such dynamic content with concrete examples presents the challenge of outdated material being used for reference. Finally, the slow-motion of a doctorate process contrasts with the fast trends of media consumption online, including which platforms are relevant.

Besides the appeal to include in future research youth grouped by religious, sport or political identities, several questions had to be abandoned when finding out how time spent was a determinant variable for the possibility of having non-environmentalist people discussing environmental issues without material incentives. Ideally, the conversation should be long enough to include questions to evaluate online media use dynamics more effectively. For instance, delving into who and how provided the intentional or inertial gatekeeping of content in participants' social networks and who outside of them mediates their knowledge and positions on the environmental problem. In addition, it would have been interesting to recreate the story of how their unique environmental mindset/ideology was developed over time. Moreover, having longer or several encounters would have helped develop non-discursive activities that enable less literate participants to express further their perspectives on the topics discussed.

Contributions of the Study

Even with these restrictions however, the study contributes to and occupies a still broad niche of situated accounts of new media reception of environmental communication messages, which could also speak to current audiences' global nature. (1) It helps to understand what place short-form videos from platforms such as YouTube tend to occupy in the process of environmental engagement with environmental risks and within a broader repertoire of media. (2) It reveals the universal efficacy of certain formats and appeals in environmental messages, which account for a globalised perception of risk and a construction of meaning that transcends the local. (3) However, in a logic of environmental justice and as a further significant emphasis, it also reveals the persistent North-South division in the revisioning of the problem, the solutions suggested and the citizen agency, which partially conditions the media exposure, the interpretation and the perceived influence of the media in promoting environmental awareness.

As stated in the introduction to the inaugural issue of Media+Environment, it is time to seriously acknowledge that "Media have become vital cognitive and political tools, enabling publics to reckon with the immanence and systemic substrate of disastrous occurrence. We need all media on deck and critical media literacies fully activated to resist, intervene in, and ameliorate the status quo" (Perks & Walker, 2021). Furthermore, media narratives might also envisage and help co-creating better futures, as considered in the perspectives of civic imagination for social change (Jenkins, Peters-Lazaro, & Shresthova, 2020; Baiocchi, Bennett, Cordner, Klein, & Savell, 2015).

Humans might learn from non-human nature to rely on connected diversity for the cultural and social enterprise of reacting with wisdom and compassion to the survival challenges that "we" created. The universalist approach of sustainable development and eco-cosmopolitanism projects remain valuable in fostering a sense of planet, recently confirmed effective by the narrative of a pandemic which recognised no frontiers in a highly connected world at risk. However, diversity cannot be overlooked when looking for innovative solutions and social justice: across regions, across countries, across people of different age, gender, race, class... It would be an anthropocentric effort, foregrounded in an ecocentric perspective which acknowledges the mutual dependences that sustain human life. The words of one of the participants of this study resembles this strategy, while quoting her for a closure constitutes a step in the direction of humbly listening to (and trying to translate into a common language) lay-people voices in search for answers that we might not have in the academy:

> What impedes society doing the job is precisely not being able to see the roots, focusing just on the aspects and not in all the causes. So, there lies the problem for me: the lack of integration, the lack of knowing that we are not the centre of everything, but we are someone who can give an energy in movement. We are not the ones who have the truth but, instead, we can take the truth of cycles, of nature, of the rhythms … We are missing that, that kind of humility.

REFERENCES

Ader, C., 1995. A longitudinal study of agenda setting for the issue of environmental pollution. *Journalism & Mass Communication Quarterly,* Volumen 72, p. 300–311.

Agard, J. y otros, 2014. *Climate Change 2014 Annex II: glossary,* s.l.: s.n.

Agyeman, J., 2005. Alternatives for Community and Environment: Where justice and sustainability meet. *Environment,* 47(6), p. 10–23.

Anderson, A. A., 2017. Effects of social media use on climate change opinion, knowledge, and behavior.. *Oxford Research Encyclopedia of Climate Science,* pp. 1-20.

Anderson, A., Brossard, D. & Scheufele, D., 2014. The "nasty effect": Online incivility and risk perceptions of emerging technologies: Crude comments and concern.. *Journal of Computer-Mediated Communication,* 19(3), p. 373–387.

Anderson, A. y otros, 2016. Toxic talk: How online incivility can undermine perceptions of media.. *International Journal of Public Opinion Research.,* 30(1), pp. 156-168.

Ang, I., 1990. Culture and Communication: Towards an Ethnographic Critique of Media Consumption in the Trasnational Media System. *European Journal of Communication,* Volumen 5, pp. 239-260.

Ang, I., 1996. *Living room wars: Rethinking media audiences for a postmodern world..* London: Routledge.

Anttila, T., Poikolainen, K., Uutela, A. & Lonnqvist, J., 2000. Structure and determinants of worrying among adolescent girls.. *Journal of youth studies,* 3(1), pp. 49-60.

Arendt, F. & Matthes, J., 2014. Nature Documentaries, Connectedness to Nature, and Pro-environmental Behavior. *Environmental Communication,* 10(4), pp. 453-472.

Arlt, D., Hoppe, I. & Wolling, J., 2011. Climate change and media usage: Effects on problem awareness and behavioural intentions. *International Communication Gazette,* 73(1), pp. 45-63.

Bain, P., Hornsey, M., Bongiorno, R. & Jeffries, C., 2012. Promoting pro-environmental action in climate change deniers. *Nature Climate Change,* 2(8), pp. 600-603.

Ballantyne, A., Wibeck, V. & Neset, T., 2016. Images of climate change: a pilot study of young people's perceptions of ICT-based climate visualization. *Climatic Change,* 134(1-2), pp. 73-85.

Ballew, M., Omoto, A. & Winter, P., 2015. Using Web 2.0 and social media technologies to foster proenvironmental action. Sustainability. 7(10), p. 620–48.

Bamberg, S. & Moser, G., 2007. Twenty Years after Hines, Hungerford, and Tomera: A New Meta-Analysis of Psycho-Social Determinants of Pro-Environmental Behavior. *Journal of Environmental Psychology,* Volumen 27, pp. 14-25.

Barker, M., 2006. I have seen the future and it is not here yet. Or, on being ambitious for audience research.. *The Communication Review,* p. 123–141.

Barry, J., 2020. This what a real emergency looks like: what the response to Coronavirus can teach us about how we can and need to respond to the planetary emergency. *Green House Think Tank,* April.

Bauwens, J., 2007. *Jongeren en Internet [Youngsters and the Internet]*. [En línea]
Available at: http://www.uvv.be/uvv5/pub/cinfo/jo/pdf/01.pdf
[Último acceso: 1 March 2018].

Beck, U., 1992. *Risk society, towards a new modernity.* London: Sage.

Beck, U., 2006. *Cosmopolitan vision.* Cambridge: Polity Press.

Beck, U., 2009. *World at risk.* Cambridge: Polity Press..

Beck, U. & Beck-Gernsheim, E., 2002. *Individualization: Institutionalized Individualism.* London: Sage.

Bernstein, J. & Szuster, B., 2018. Beyond Unidimensionality: Segmenting Contemporary Pro-Environmental Worldviews Through Surveys and Repertory Grid Analysis. *Environmental Communication,* 12(8), pp. 1062-1076.

Bird, E., 2011. Are we all produsers now? Convergence and media audience practices.. *Cultural Studies,* Volumen 4–5, p. 502–516.

Boissat, L., Thomas-Walters, L. & Veríssimo, D., 2021. Nature documentaries as catalysts for change: Mapping out the 'Blackfish Effect'.. *People and Nature.*

Boschma, J. & Groen, I., 2006. *Generation Einstein: smart, social and superfast. Communicating with Young People in the 21st Century.* Netherlands: Keesie Agency.

Bouman, T. & Steg, L., 2019. *Motivating Society-wide Pro-environmental Change,* s.l.: One Earth.

Bourdieu, P., 1972. *Outline of a Theory of Practice.* Cambridge: Cambridge University Press.

Bourdieu, P., 1990. *The Logic of Practice.* Stanford: Stanford University Press.

Boyd, D., 2010. Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications. En: *Networked Self: Identity, Community, and Culture on Social Network Sites.* New York: Routledge, pp. 39-58.

Boyd, D. & Ellison, N., 2008. Social network sites: Definition, history and scholarship. *Journal of Computer-Mediated Communication,* Volumen 13, pp. 210-230.

Boykoff, M. & Boykoff, J., 2007. Climate change and journalistic norms: A case-study of US mass-media coverage. *Geoforum,* pp. 1-15.

Brereton, P., 2005. *Hollywood Utopia: Ecology in Contemporary American Cinema.* Bristol: Intellect.

Brereton, P., 2015. Cinema, Ecology and Environment. En: *The Routledge Handbook Of Environment And Communication.* London: Routledge, pp. 258-269.

Brereton, P., 2016. *Environmental ethics and film.* New York: Routledge.

Brereton, P., 2018. *Environmental Literacy and New Digital Audiences.* London: Routledge.

Brereton, P. & Gómez, V., 2020. Brereton, P., & Gomez, V. (2020). Media Students, Climate Change, and YouTube Celebrities: Readings of Dear Future Generations: Sorry Video Clip.. *ISLE: Interdisciplinary Studies in Literature and Environment.,* p. isaa021.

Brereton, P. & Hong, C.-P., 2013. Audience responses to environmental fiction and non-fiction films. *Interactions: Studies in Communication & Culture,* 4(2), pp. 171-199.

Buell, L., 2005. *The Future of Environmental Criticism: Environmental Crisis and Literature Imagination.*. Malden, MA: Blackwell.

Bullard, R., 1990. *Dumping in Dixie.* Boulder: Westview Press.

Bullard, R., Agyeman, J. & Evans, B., 2003. *Just sustainabilities: development in an unequal world.* London: MIT Press.

Burgess, J., Harrison, C. & Maiteny, P., 1991. Contested meanings: The consumption of news about nature conservation.. *Media, Culture and Society,* Volumen 13, pp. 499-519.

Buttel, F., 2000. Ecological modernization as social theory. *Geoforum,* 31(1), pp. 57-65.

Calhoun, C., LiPuma, E. & Postone, M., 1993. *Bourdieu: Critical Perspectives.* Chicago: University of Chicago Press.

Capstick, S. y otros, 2015. International trends in public perceptions of climate change over the past quarter century.. *Wiley Interdisciplinary Reviews: Climate Change,* 6(1), pp. 35-61.

Carpentier, N., 2011. Contextualising author-audience convergences. 'New' technologies' claims to increased participation, novelty and uniqueness.. *Cultural Studies,* 25(4–5), p. 517– 533.

Carpentier, N., 2011. New Configurations of the Audience? The Challenges of User-Generated Content for Audience Theory and Media Participation. En: *The Handbook of Media Audiences.* s.l.:Blackwell, pp. 190-212.

Carter, N., 2007. Sustainable development and ecological modernisation. . En: *The Politics of the Environment: Ideas, Activism, Policy.* Cambridge: Cambridge University Press, pp. 207-240.

Castells, M., 1996. *The Rise of the Network Society.* Cambridge, MA: Blackwell Publishers.

Castells, M., 2013. *La sociedad red : Una visión global.* Madrid: Alianza Editorial.

Center for Research on Environmental Decisions and ecoAmerica, 2014. *Connecting on Climate: A Guide to Effective Climate Change Communication. New York, NY and Washington, DC: Center for Research on Environmental Decisions and ecoAmerica; 2014, 2–3.*. [En línea]
Available at: http://ecoamerica.org/wp-content/uploads/2014/12/ecoAmerica-CRED-2014-Connecting-on-Climate.pdf
[Último acceso: 1 July 2019].

Chapman, D. A., Lickel, B. & Markowitz, E., 2017. Reassessing Emotion in Climate Change Communication. *Nature Climate Change,* pp. 850-852.

Clarke, L. & Agyeman, J., 2011. Shifting the balance in environmental governance: ethnicity, environmental citizenship and discourses of responsibility. *Antipode,* 43(5), pp. 1773-1800.

Cody, E., Reagan, A. J., Mitchell, L. & Dodds, P., 2015. Climate change sentiment on Twitter: An unsolicited public opinion poll.. *PLoS ONE,* 10(8), p. 1–18.

Cohen, M., 1999. Sustainable Development and Ecological Modernisation: National Capacity for Rigorous Environmental Reform.. En: *Environmental Policy and Societal Aims. Studies in Ecological Economy.* s.l.:Springer, pp. 103-128.

Cohen, S., 2013. *States of denial: Knowing about atrocities and suffering.* London: John Wiley & Sons.

Coleman, C. L., 1993. The influence of mass media and interpersonal communicationon societal and personal risk judgment. *Communication Research,* Volumen 20, p. 611–628.

Corbett, J. B., 2006. *Communicating nature: How we create and understand environmental messages.* New York: Island Press.

Corporación Latinobarómetro, 2018. *Informe Latinobarómetro 2017,* Santiago de Chile: s.n.

Crutzen, P., 2002. Geology of mankind. *Nature,* Volume 415, p. 23.

Crutzen, P. & Stroemer, E., 2000. *Have we entered the "Anthropocene"?,* s.l.: s.n.

Cubitt, S., 2014. Ecomedia futures. *International Journal of Media and Cultural Politics,* 10(2), pp. 163-170.

Dahlgren, P., 2015. Civic Engagement. In: *The International Encyclopedia of Political Communication.* s.l.:John Wiley & Sons, Inc..

Dahlstrom, M. F. & Scheufele, D. A., 2010. Diversity of television exposure and its association with the cultivation of concern for environmental risks.. *Environmental Communication,* Volumen 4, pp. 54-65.

Das, B. & Sahoo, J. S., 2011. Social networking sites-A critical analysis of its impact on personal and social life. *International Journal of Business and Social Science,* 2(14), pp. 222-228.

de Groot, J. & Steg, L., 2008. Value orientations to explain beliefs related to environmental significant behaviour: how to measure egoistic, altruistic, and biospheric value orientation. *Environment & Behavior,* Volumen 40, pp. 330-354.

De Oliveira, L., 2012. *Visoes de un quase acontecimento: Belo Monte e o discurso da sustentabilidade.* Montevideo: s.n.

De Sousa Santos, B., 2016. Epistemologies of the South and the future. *From the European South: a transdisciplinary journal of postcolonial humanities,* Issue 1, pp. 17-29.

Demetrious, K., 2019. 'Energy wars': Global PR and public debate in the 21st century. *Public Relations Inquiry,* 8(1), pp. 7-22.

Devaney, L., Torney, D., Brereton, P. & Coleman, M., 2020. *Deepening Public Engagement on Climate Change: Lessons from the Citizens' Assembly,* Dublin: EPA.

Díaz Estévez, M., García de Frutos, R. A. & Pena Moya, J., 2014. Communication of the scientific consensus on climate change to the citizenship: Knowledge and perception of young university students from five countries regarding the media. *Interactions: Studies in Communication & Culture,* 5(1), pp. 51-70.

Diehl, T., Huber, B., Gil de Zúñiga, H. & Liu, J., 2019. Social Media and Beliefs about Climate Change: A Cross-National Analysis of News Use, Political Ideology, and Trust in Science.. *International Journal of Public Opinion Research.,* p. edz040.

Dow, K., 2006. *The atlas of climate change: mapping the world's greatest challenge..* Berkeley: Myriad Editions.

Dryzek, J., 2005. *The politics of the Earth: Environmental Discourses.* Oxford; New York: Oxford University Press.

Dunlap , R. & Van Liere, K., 1978. The “New Environmental Paradigm”: a proposed measuring instrument and preliminary results. *Journal of Environmental Education,* Issue 9, pp. 10-19.

Dunlap, R., 2013. Climate change skepticism and denial: An introduction.. *American Behavioral Scientist,* 57(6), p. 691–698.

Dunlap, R. & York, R., 2008. The globalization of environmental concern and the limits of the postmaterialist values explanation: Evidence from four multinational surveys. *The Sociological Quarterly,* 49(3).

Dussel, E., 1995. *The invention of the Americas: Eclipse of "the other" and the myth of modernity..* New York: Continuum.

Dussel, E., 2005. Europa, modernidad y eurocentrismo. En: E. Lander, ed. *La colonialidad del saber: Eurocentrismo y ciencias sociales. perspectivas latinoamericanas.* Buenos Aires: CLACSO.

Echegaray, F., Brachya, V., Vergragt, P. J. & Zhang, L., 2021. *Sustainable Lifestyles after Covid-19.* London: Routledge.

Eckersley, R., 1999. Dreams and expectations: Young People’s expected and preferred futures and their significance for education. *Futures,* 31(1), pp. 73-90.

Environmental Protection Agency - EPA, 2016. *Ireland's Environment. An assessment.,* Dublin: EPA.

Erb, C., 2014. A Spiritual Blockbuster: Avatar, Environmentalism, and the New Religions. *Journal of Film and Video,* 66(3), pp. 3-17.

Escoto Castillo, A., Sánchez Peña, L. & Gachuz Delgado, S., 2017. Trayectorias Socioeconómicas Compartidas (SSP): nuevas maneras de comprender el cambio climático y social. *Estudios Demográficos y Urbanos,* 32(3), pp. 669-693.

Eurobarometer, 2011. *Special Eurobarometer 364: Public awareness and acceptance of CO 2capture and storage.,* s.l.: Eurobarometer..

European Commission and European Parliament , 2018. *Eurobarometer 87.1,* Cologne: GESIS data archive.

European Commission, 2019. *Eurobarometer 92.4,* Cologne: GESIS Data Archive.

Fagan, M. & Huang, C., 2019. *Spring 2018 Global Attitudes Survey,* New York: Pew Research Center.

Fish, S., 1980. *Is there a text in the class?.* Cambridge, MA: Harvard University Press.

Fiske, J., 1987. *Television culture.* London: Methuen.

Fiske, J., 1992. Audiencing: A cultural studies approach to watching television.. *Poetics,* Volumen 21, p. 345–359.

Freedom House, 2019. *Freedom of the Net 2019,* s.l.: Freedom House.

Gallardo Milanés, O. A., Satié de Olivera Pataro, C. & Mezzomo, F. A., 2017. Percepciones ambientales de los jóvenes universitarios: estudio comparado entre UNESPAR, Brasil y la Universidad de Holguín, Cuba. *Revista Eletrônica do Mestrado em Educacao Ambiental,* 34(2), pp. 296-317.

Gardner, G., Prugh, T. & Renner, M., 2015. *Un mundo frágil. Hacer frente a las amenazas a la sostenibilidad: la situación del mundo 2015. Informe anual del Worldwatch Institute..* Barcelona: Icaria.

Ghosh, A., 2016. *The Great Derangement: Climate Change and the Unthinkable*. Chicago: University of Chicago Press.

Giddens, A., 1990. *The consequences of modernity.* Cambridge: Polity Press.

Giddens, A., 1991. *Modernidad e Identidad del yo. El yo y la sociedad en la época contemporánea.*. Barcelona: Península.

Gil de Zúñiga, H., Jung, N. & Valenzuela, S., 2012. Social media use for news and individuals' social capital, civic engagement and political participation.. *Journal of Computer-Mediated Communication,* 17(3), p. 319–336.

Global Change Data Lab & University of Oxford, 2017. *Share of Individuals Using the Internet.* [En línea] Available at: https://ourworldindata.org/grapher/share-of-individuals-using-the-internet [Último acceso: 22 June 2020].

Good, J., 2006. Internet use and environmental attitudes: a social capital approach. En: *The Environmental Communication Yearbook.* New York: Routledge, pp. 211-233.

Gottfried, J. & Shearer, E., 2016. *News use across social media platforms 2016.*, s.l.: Pew Research Center.

Greitemeyer, T., 2013. Beware of climate change skeptic films. *Journal of Environmental Psychology*, Volumen 35, pp. 105-109.

Gudynas, E., 2010. The new extractivism of the 21st century: Ten urgent theses about extractivism in relation to current South American progressivism. *Americas Program Report,* Issue 21, pp. 1-14.

Gudynas, E., 2012. Estado compensador y nuevos extractivismos: Las ambivalencias del progresismo sudamericano.. *Nueva sociedad,* Issue 237, pp. 128-146.

Gudynas, E., 2016. Beyond varieties of development: disputes and alternatives. *Third World Quarterly*, 37(4), pp. 721-732.

Gudynas, E. & Acosta, A., 2011. El buen vivir o la disolución de la idea del progreso. En: M. Rojas, ed. *La medición del progreso y del bienestar–Propuestas desde américa latina.* Mexico: Forum for Scientific and Technological Consultation.

Guha, R. & Martínez Alier, J., 1997. *Varieties of environmentalism.* London: Routledge.

Gumucio-Dagron, A. & Tufte, T., 2006. *Communication for Social Change Anthology: Historical and Contemporary Readings.* New York: Communication for Social Change Consortium.

Haddon, L. & Mante-Meijer, E., 2016. *Generational use of new media.* London: Routledge.

Hajer, M., 1995. *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process.* Oxford: Clarendon Press.

Hakemulder, F. y otros, 2017. *Narrative Absorption.* s.l.:John Benjamins Publishing.

Halpern, D., Rosengerg, A. & Arraiagada, E., 2013. Who are those Green Guys? Understanding Online Activism in Chile from a Communicational Perspective. *Palabra Clave*, 16(3), pp. 729-759.

Harring, N., Jagers, S. & Martinsson, J., 2011. Explaining ups and downs in the public's environmental concern in sweden: The effects of ecological modernization, the economy, and the media. *Organization and Environment*, 24(4), pp. 388-403.

Hart, P., Nisbet, E. & Shanahan, J., 2011. Environmental Values and the Social Amplification of Risk: An Examination of How Environmental Values and Media Use Influence Predispositions for Public Engagement in Wildlife Management Decision Making. *Society and Natural Resources,* 24(3), pp. 276-291.

Harvey, D., 2003. *The New Imperialism.*. Oxford: Oxford University Press.

Hasebrink, U. & Popp, J., 2006. Media repertoires as a result of selective media use. A conceptual approach to the analysis of pattern of exposure.. *Communications,* 31(3), p. 369–387.

Heffes, G., 2014. Introducción. Para una ecocrítica latinoamericana: entre la postulación de un ecocentrismo crítico y la crítica a un antropocentrismo hegemónico. *Revista de crítica literaria latinoamericana,* 40(79), pp. 11-34.

Heise, U., 2008. *Sense of place and sense of planet: The environmental imagination of the global.* Oxford: Oxford University Press.

Hennessy, M., Hawkins, L. & Jamieson, K., 2017. The 2014 Walrus Haul Out: A Case Study of Selective Exposure to Environmental News Coverage. *Environmental Communication,* 11(1), pp. 63-74.

Hills, M., 2002. *Fan cultures.* New York: Routledge.

Hiltner, B., 2015. *Ecocriticism: the Essential Reader.* New York: Routledge.

Höijer, B., 1990. Studying Viewers' Reception of Television Programmes: Theoretical and Methodological Considerations. *European Journal of Communication,* Volumen 5, pp. 29-56.

Holbert, R. L., Kwak, N. & Shah, D. V., 2003. Environmental concern, patterns of television viewing, and pro-environmental behaviors: Integrating models of media consumption and effects.. *Journal of Broadcasting & Electronic Media,* Volumen 47, pp. 177-196.

Holtmeier, M., 2011. Post-Pandoran Depression or Na'vi Sympathy: Avatar, Affect, and Audience Reception.. *Journal for the Study of Religion, Nature & Culture,* 4(4), pp. 414-424.

Horton, T. & Doron, N., 2011. *Climate change and sustainable consumption: What do the public think is fair.*. York: Joseph Rowntree Foundation.

Ho, S., Liao, Y. & Rosenthal, S., 2014. Applying the theory of planned behaviour and media dependency theory: Predictors of public pro-environmental behavioral intentions in Singapore.. *Environmental Communication,* Volumen 9, pp. 77-99.

Huang, H., 2016. Media use, environmental beliefs, self-efficacy, and pro-environmental behavior. *Journal of Business Research,* 69(6), pp. 2206-2212.

Huang, Q., 2018. Public trust in local governments and environmental risks in China: the effects of media use, perceived dread, and perceived inequality. *Chinese Journal of Communication,* 11(1), pp. 88-104.

Hulme, M., 2009. *Why we Disagree about Climate Change: Understanding Controversy, Inaction and Opportunity.* Cambridge: Cambridge University Press.

Hulme, M., 2018. *'We Always Get the Weather We Deserve': The Tenacious Grip of Moral Accountability..* s.l.:God's Climates' symposium, University of Northumbria..

Hunting, K. & Hinck, A., 2017. 'I`ll See you in Mystic Falls': Intimacy, feelings, and public issues in Ian Somerhalder's celebrity activism. *Critical Studies in Media Communication,* 34(5), pp. 432-448.

Inglehart, R., 1981. Post-Materialism in an Environment of Insecurity. *American Political Science Review* , 75(4), pp. 880-900.

Inglehart, R., 1995. Public support for environmental protection: objective problems and subjective values in 43 societies. *Political Science and Politics,* Volumen 28, pp. 57-72.

Inglehart, R., 1997. *Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies.* Princeton, NJ: Princetos University Press.

James, S., Morgan, M. & Madsen , M., 1997. Green or brown? Television and the cultivation of environmental concern. *Journal of Broadcasting & Electronic Media,* 41(3), pp. 305-323.

Jamieson, D., 2008. *Ethics and the Environment: an Introduction.* Cambridge: Cambridge University Press.

Jang, S. & Hart, P., 2015. Polarized frames on "climate change" and "global warming" across countries and states: Evidence from Twitter big data.. *Global Environmental Change,* Volumen 32, p. 11–17.

Jaspal, R., Nerlich, B. & Koteyko, N., 2012. Contesting science by appealing to its norms: Readers discuss climate science in the Daily Mail.. *Science Communication,* 35(3), p. 383–410.

Jenkins, H., 2006. *Convergence Culture: Where Old and New Media Collide.* New York: New York University Press.

Jensen, . K. J. & Rosengren, K. E., 1990. Five traditions in search of the audience. *European Journal of Communication,* 5(2), p. 207–238.

Jerslev, A., 2016. In the Time of the Microcelebrity: Celebrification and the YouTuber Zoella. *International Journal of Communication,* Volumen 10, p. 5233–5251.

Jimenez-Castillo, D. & Ortega-Egea, J. M., 2015. Too positive to change? Examining optimism bias as a barrier to media effects on environmental activism. *Journal of Environmental Psychology,* Volumen 43, pp. 216-225.

Jochum, G., 2015. The Debate on Sustainable Development: the Origins and Dynamics of a Discourse for the Future. *Revista de Geografía Espacios,* 5(9), pp. 47-63.

Kahan, D., Jenkins-Smith, H. & Braman, D., 2011. Cultural cognition of scientific consensus. *J. Risk Res,* Volumen 14, p. 147–174.

Kahan, D., Peters, E., Wittlin, M. & Slovic, P., 2012. The polarizing impact of science literacy and numeracy on perceived climate change risks. *Nature Climate Change,* Volumen 2, pp. 732-735.

Kahlor, L. & Rosenthal, S., 2009. If we seek, do we learn? Predicting knowledge of global warming.. *Science Communication,* 30(3), p. 380–414.

Kaiser, M. L., Hand, M. D. & Pence, E. K., 2020. Individual and Community Engagement in Response to Environmental Challenges Experienced in Four Low-Income Urban Neighborhoods. *International journal of environmental research and public health,* 17(6), p. 1831.

Katz-Kimchi , M. & Manosevitch, I., 2015. Mobilizing Facebook users against Facebook's energy policy: The case of Greenpeace unfriend coal campaign. *Environmental communication,* 9(2), pp. 248-267.

Kelly, M., 2007. *Environmental Debates and the Public in Ireland.* Dublin: IPA.

Kelsey, E. & Dillon, J., 2010. If the Public knew better, they would Act better? The Pervasive Power of the Myth of the Ignorant Public. En: *Engaging Environmental Education: Learning, Culture and Agency.* Rotterdam: Sense Publishers, pp. 99-110.

Khan, M. & Manderson, L., 1992. Focus groups in tropical diseases research.. *Health Policy and Planning,* Volumen 7, pp. 56-66.

Kirby, P. & O'Mahony, T., 2018. Development and Sustainability in the Global South: Different Routes to Transition and a Sustainable Society.. In: *The Political Economy of the Low-Carbon Transition.*. Basingstoke: Palgrave Macmillan, pp. 173-200.

Kitzinger, J., 1994. The methodology of focus groups: The importance of interaction between research participants. *Sociology of Health & Illness,* 16(1), pp. 103-121.

Klein, N., 2015. *This changes everything: Capitalism vs. the climate.*. Toronto: Simon and Schuster.

Kortenkamp, K. & Basten, B., 2015. Environmental Science in the Media: Effects of Opposing Viewpoints on Risk and Uncertainty Perceptions. *Science Communication,* 37(3), pp. 287-313.

Krajewski, J. M., Schumacher, A. & Dalrymple, K., 2017. Just turn off the faucet: a Content Analysis of PSAs about the Global Water Crisis on YouTube. *Environmental Communication,* 0(0), pp. 1-21.

Krippendorff, K., 2012. *Content analysis: An introduction to its methodology. : ., 3rd. Edition, ..* 3rd. ed. Beverly Hills, CA: Sage Publications Inc.

Lakoff, G., 2010. Why it Matters How We Frame the Environment. *Environmental Communication: A Journal of Nature and Culture,* 4(1), pp. 70-81.

Latinobarometer Corporation, 2017. *Latinobarometer 2017. Estudio nº LAT-2017. v20190707.*, s.l.: s.n.

Lee, K., 2011. The role of media exposure, social exposure and biospheric value orientation in the environmental attitude-intention-behavior model in adolescents.. *Journal of Environmental Psychology,* Volumen 31, pp. 301-308.

Lee, T. y otros, 2015. Predictors of public climate change awareness and risk perception around the world.. *Nature Climate Change,* Volumen 5, p. 1014–1020.

Leiserowitz, A., 2005. American risk perceptions: Is climate change dangerous?. *Risk Analysis,* 25(6), p. 1433–1442.

Lenin, V. I., 1948. *Imperialism, the Highest Stage of Capitalism.* London: Lawrence and Wishart.

Lertzman, R., 2015. *Environmental Melancholia: Psychoanalytic dimensions of engagement.* London: Routledge.

Liao, Y., Ho, S. S. & Yang, X., 2016. Motivators of Pro-Environmental Behavior: Examining the Underlying Processes in the Influence of Presumed Media Influence Model. *Science Communication,* 38(1), pp. 51-73.

Liebes , T. & Katz, E., 1990. *The export of meaning: Cross-cultural readings of Dallas.*. New York: Oxford Univ. Press.

Lindlof, T. & Taylor, B., 2002. *Qualitative communication research methods.* 2nd. Edition ed. Thousand Oaks: Sage Publications.

Lineman, M., Do, Y., Kim, J. & Joo, G., 2015. Talking about climate change and global warming. *PLoS ONE,* 10(9), p. e0138996.

Livingstone, S., 1998. *Making sense of television: The psychology of audience interpretation.*. London: Routledge.

Livingstone, S., 2004. The challenge of changing audiences: Or, what is the audience researcher to do in the internet age?. *European Journal of Communication,* 19(1), p. 75–86.

Livingstone, S., 2013. *The changing nature of audiences: from the mass audience to the interactive media user,* London: LSE Research Online.

Livingstone, S. & Das, R., 2013. Interpretation/reception. In: P. Moy, ed. *Oxford bibliographies online: Communication.* Oxford: Oxford University Press.

Livingstone, S. & Das, R., 2013. The End of Audiences? Theoretical echoes of reception amidst the uncertainties of use. En: *Blackwell Companion to New Media Dynamics.* Oxford: Blackwell, pp. 104-121.

López, A., 2012. *The media ecosystem: What ecology can teach us about responsible media practice.*. Berkeley: North Atlantic Books.

Lorenzoni, I. & Hulme, M., 2009. Believing is seeing: Laypeople's views of future socio-economic and climate change in England and in Italy.. *Public Understanding of Science,* 18(4), p. 383–400.

Lunt, P. & Livingstone, S., 1996. Rethinking the Focus Group in Media and Communications Research. *Journal of Communication,* 46(2), pp. 79-98.

Mainolescu, M., 1931. *The Theory of Protection and International Trade.* London: P.S. King & Son.

Marcone, J., 2013. *Eco Criticism and Latin America.* [Online]
Available at: http://asle.ku.edu/Preconference/marcone.php
[Accessed 12 March 2017].

Martín-Barbero, J., 1987. *De los medios a las mediaciones.* Barcelona: Gili.

Martín-Barbero, J., 2018. From Media to Mediations - 3 Introductions. *Matrizes,* 12(1), pp. 9-31.

Martínez Alier, J., 1991. Ecology and the poor: A neglected dimension of Latin American history. *Journal of Latin American Studies,* 23(3), pp. 621-639.

Martínez Alier, J., 2008. Conflictos ecológicos y justicia ambiental. *Papeles,* Volumen 103, pp. 11-27.

Martínez Alier, J., 2011. *El ecologismo de los pobres: Conflictos ambientales y lenguajes de valoración.* Barcelona: Icaria.

Marwick, A., 2015. You May Know Me From YouTube: (Micro)-Celebrity in Social Media. En: *A Companion to Celebrity.*. Hoboken, NJ: JohnWiley & Sons, p. 333–50.

Maxwell, R., Raundalen, J. & Lager Vestberg, N., 2015. *Media and the Ecological Crisis.* New York: Routledge.

McCallum, D., Hammond, S. & Covello, V., 1991. Communicating about environmental risks: How the public uses and perceives information sources. *Health Education & Behavior,* Volumen 18, p. 349–361.

McCright, A. & Dunlap, R., 2011. Cool dudes: the denial of climate change among conservative white males in the United States.. *Global Environmental Change,* Volumen 21, p. 1163–1172.

McNally, B., 2015. Media and Carbon Literacy: Shaping opportunities for cognitive engagement with Low Carbon Transition in Irish media, 2000-2013. *Razón y Palabra,* Issue 91, pp. 119-150.

McNally, B., 2020. *Citizens' Views of Climate Action in Ireland: Insights on Media Use, Trusted Sources and Perceptions,* Dublin: EPA.

Meadows, D. & Meadows, D., 1973. *Toward global equilibrium,* Boston: Wright-Allen Press.

Medianou, M. & Miller, D., 2013. Polymedia: Towards a new theory of digital media in interpersonal communication. *International Journal of Cultural Studies,* Volumen 16, pp. 169-187.

Merton, R. K., 1987. The focussed interview and focus groups: Continuities and discontinuities.. *Public Opinion Quarterly,* Volumen 51, pp. 550-566.

Metag, J. & Schafer, M. S., 2018. Audience Segments in Environmental and Science Communication: Recent Findings and Future Perspectives. *Environmental Communications,* Volumen 12, pp. 995-1004.

Meza, X., Shapiro, M. & Park, H. W., 2018. Climate Change Emotions on YouTube: The Case of *Before the Flood*.. *Journal of the Korean Data Analysis Society,* 20(4), pp. 1697-1708.

Michelle, C., Davis, C. & Vladica, F., 2012. Understanding Variation in Audience Engagement and Response: An Application of the Composite Model to Receptions of Avatar. *Communication Review,* 15(2), pp. 106-143.

Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente - MVOTMA, 2017. *Primer Informe Bienal de Actualización de Uruguay a la Convención Marco de las Naciones Unidas sobre el Cambio Climático,* Montevideo: MVOTMA.

Morgan, T., 2017. Alienated Nature, Reified Culture: Understanding the Limits to Climate Change Responses under Existing Socio-Ecological Formations. *The Political Economy of Communication,* 5(1), pp. 30-50.

Morley, D., 1980. *The Nationwide audience: Structure and decoding (British Film Institute Television Monograph No. 11).* London: British Film Institute.

Moscovici, S., 1984. The phenomenon of social representations. En: *Social representations.* Cambridge: Cambridge University Press, pp. 3-69.

Moscovici, S., 2000. *Social representations: Explorations in social psychology.* Cambridge: Polity Press.

National Geographic, 2016. *Before the Flood - Trailer | National Geographic.* [Online]
Available at: https://youtu.be/D9xFFyUOpXo

Nisbet, M., 2014. Disruptive ideas: Public intellectuals and their arguments for action on climate change. *Wiley Interdisciplinary Reviews: Climate Change,* 5(6), p. 809–823.

Nisbet, M., Hixon, M., Moore, K. & Nelson, M., 2010. Four cultures: new synergies for engaging society on climate change. *Frontiers in Ecology and Environment,* 8(6), pp. 329-331.

Nisbet, M. & Myers, T., 2007. Trends: Twenty Years of Public Opinion about Global Warming. *The Public Opinion Quarterly,* 71(3), pp. 444-470.

Nixon, R., 2011. *Slow Violence and the Environmentalism of the Poor.*. Boston: Harvard University Press.

Norgaard, K., 2011. *Living in denial: Climate change, emotions, and everyday life.*. Boston: MIT Press.

Nyumba, T., Wilson, K., Derrick, C. & Mukherjee, N., 2018. The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution,* Volumen 9, pp. 20-32.

O'Neill, S. y otros, 2015. Dominant frames in legacy and social media coverage of the IPCC Fifth Assessment Report.. *Nature Climate Change,* 5(4), p. 380–385.

Oblak, T. & Luthar, B., 2017. Media repertoires and discursive communities: Studying audiences in the multimedia age.. *Communications,* 42(4), pp. 415-439.

Ofori-Parku, S. S., 2014. Reality effect or media effect? Television's moulding of the environmental sanitation agenda in Ghana. *Ecquid Novi: African Journalism,* 35(2), pp. 40-57.

Olausson, U., 2009. Global warming – global responsibility? Media frames of collective action and scientific certainty. Volumen 18, p. 421–436..

Olausson, U., 2011. "We're the Ones to Blame": Citizens' Representations of Climate Change and the Role of the Media. *Environmental Communication: A Journal of Nature and Culture,* 5(3), pp. 281-299.

Olausson, U., 2018. "Stop blaming the cows!": How livestock production is legitimized in everyday discourse on Facebook.. *Environmental Communication,* 12(1), pp. 28-43.

Olausson, U. & Uggla, Y., 2019. Celebrities celebrifying nature: the discursive construction of the human-nature relationship in the 'Nature Is Speaking'campaign.. *Celebrity Studies,* pp. 1-18.

Olsson, L. y otros, 2014. Livelihoods and poverty.. En: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.* Cambridge: Cambridge University Press, pp. 793-832.

Olsson, T. & Dahlgren, P., 2010. *Young people ICTs and democracy: Theories, policies, identities, and websites.* Goteborg: Nordicom.

O'Malley Gannon, C., 2014. *Exploring the Links between Communality, the Metabolic Relationship, and Ecological Sustainability: A Case Study of a North-West of Ireland Community (c.l930s-50s).*, Maynooth: University of Maynooth.

O'Neill, S. & Nicholson-Cole, S., 2009. "Fear Won't Do It". Promoting Positive Engagement With Climate Change Through Visual and Iconic Representations. *Science Communication,* 30(3), pp. 355-379.

Orange, D. M., 2016. *Climate Crisis, Psychoanalysis, and Radical Ethics.* New York: Routledge.

Orozco, G., 1996. *Televisión y audiencias: un enfoque cualitativo.* Madrid: Ediciones De la Torre.

Orozco, G., 2000. Travesías y desafíos de la investigación de la recepción en América Latina. *Comunicación y Sociedad,* Issue 38, pp. 11-36.

Östman, J., 2013. Family talk, peer talk and young people's civic orientation. *European Journal of Communication,* 28(3), pp. 294-308.

Östman, J., 2013. The Influence of Media Use on Environmental Engagement: A Political Socialization Approach. *Environmental Communication: A Journal of Nature and Culture,* 8(1), pp. 92-109.

Ostman, R. & Parker, J., 1986. A public's environmental informational sources and evaluations of mass media Journal of Environmental Education. 18(2), pp. 9-17.

Paredes, J. & McLean, B., 2000. Hacia una tipología de la literatura ecologísta en el Mundo Hispánico. *Ixquic, revista Hispánica internacional de análisis y creación.,* Issue 2, pp. 1-18.

Parham, J., 2016. *Green Media and Popular Culture. An Introduction.* London-New York: Palgrave Macmillan.

Park, C. S., 2013. Does Twitter motivate involvement in politics? Tweeting, opinion leadership, and political engagement.. *Computers in Human Behavior,* 29(4), p. 1641– 1648.

Parks, L. & Walker, J., 2020. Disaster Media: Bending the Curve of Ecological Disruption and Moving toward Social Justice. *Media+Environment,* 2(1).

Pearson, E. y otros, 2016. Can we tweet, post, and share our way to a more sustainable society? A review of the current contributions and future potential of #socialmediaforsustainability.. *Annual Review of Enof Environment and Resources,* Volumen 41, pp. 363-397 .

Peralta, A., 2006. *Ecological Debt: The peoples of the south are the creditors.*. Geneva: World Council of Churches.

Pew Research Center, 2019. *Climate Change Still Seen as the Top Global Threat, but Cyberattacks a Rising Concern,* New York: Pew Research Center.

Pogge, T., 2010. Keynote Address: Poverty, Climate Change and Overpopulation. *GA. J. INT'L & COMP. L.,* Volume 38, pp. 525-542.

Porter, A. & Hellsten, I., 2014. Investigating participatory dynamics through social media using a multideterminant "frame" approach: The case of climategate on YouTube. , 19(4),. *Journal of Computer Mediated Communication,* 19(4), p. 1024–1041.

Prebisch, R., 1950. *The economic development of Latin America and its principal problems. ,* Lake Success: U.N. Dep. of Economic Affairs.

Rainie, L., Smith, A., Schlozman, K. L. & Brady, H., 2012. *Social media and political engagement.,* s.l.: Pew Research Center..

REN21, 2018. *Renewables 2018. Global Status Report.,* Paris: REN21 Secretariat.

Rogers, R. y otros, 2017. Analyzing the existence and relation of optimistic bias and first-person perception for an impersonal environmental. *International Journal of Communication,* Volumen 11, pp. 1466-1485.

Rojek, C., 2001. *Celebrity.* London: Reaktion Books.

Rostow, W., 1990. *The stages of economic growth: A non-communist manifesto.*. Cambridge: Cambridge University Press.

Roudometof, V., 2003. Glocalization, Space and Modernity. *The European Legacy,* 8(1), p. 37–60.

Roudometof, V., 2005. Transnationalism, Cosmopolitanism and Glocalization.. *Current Sociology,* 53(1), p. 113–135.

Rushkoff, D., 2002. *Cyberia - Life in the Trenches of Hyperspace.* Manchester: Clinamen Press.

Rust, S., Monani, S. & Cubitt, S., 2015. *Ecomedia: Key issues.* New York: Routledge.

Ryan, D. & Gorfinkiel, D., 2016. *Toma de decisiones y cambio climático: acercando la ciencia y la política en América Latina y el Caribe.*, Montevideo: UNESCO.

Scabin, F., Novaes Pedroso Jr., N., Cortez da Cunha Cruz, J. & de Castro dos Santos, A., 2016. Desafíos y expectativas para la construcción regional de herramientas para la toma de decisiones sobre cambio climático. En: *Toma de decisiones y cambio climático: acercando la ciencia y la política en América Latina y el Caribe.* Montevideo: UNESCO, pp. 72-98.

Schäfer, M. y otros, 2016. *Investigating mediated climate change communication: A best-practice guide.*. Jönköping: School of Education and Communication, Jönköping University.

Scheufele, D. A., 2018. Beyond the Choir? The Need to Understand Multiple Publics for Science. *Environmental Communication,* 12(8), pp. 1123-1126.

Schnaiberg, A., 1980. *The environment: From surplus to scarcity.*. New York: Oxford University Press.

Schneider-Mayerson, M., 2018. The Influence of Climate Fiction An Empirical Survey of Readers. *Environmental Humanities,* 10(2), pp. 473-500.

Schneider-Mayerson, M., Weik von Mossner, A. & Malecki, W., 2020. Empirical ecocriticism: environmental texts and empirical methods.. *ISLE: Interdisciplinary Studies in Literature and Environment,* 27(2), pp. 327-336.

Scholtz, B., Calitz, A. P. & Tlebere, T., 2017. Evaluating students' social media use for extra-curricular education. *Journal of Applied Research in Higher Education,* Volumen 91, pp. 5-23.

Schroder, K. C., 1994. Audience semiotics, interpretive communities and the 'ethnographic turn' in media research. *Media, Culrure & Society*, Volumen 16, pp. 337-347.

Seelig, M., 2019. Popularizing the Environment in Modern Media. *The Communications Review*, 22(1), p. 45–83.

Servaes, J., 2000. Comunicación para el desarrollo: tres paradigmas, dos modelos. *Temas y Problemas de Comunicación,* 10(8), pp. 5-28.

Servaes, J., 2008. *Communication for development and social change.* New Delhi: SAGE.

Severo, E., Guimarães, J. & Dellarmelin, M., 2019. The Influence of Social Networks on Environmental Awareness and the Social Responsibility of Generations.. *Brazilian Business Review,* 16(5), pp. 500-518.

Shah, D. *et al*., 2007. Campaign ads, online messaging, and participation: Extending the communication mediation model.. *Journal of Communication,* 57(4), p. 676–703.

Shapiro, M. & Park, H., 2015. More than entertainment: YouTube and public responses to thescience of global warming and climate change. *Social Science Information,* 54(1), pp. 115-145.

Shapiro, M. & Park, H., 2018. Climate change and youtube: deliberation potential in post-video discussions. *Environmental Communication,* 12(1), pp. 115-13.

Shiau, H., 2016. Fissures in the commercial cinematic space: Screening Taiwanese documentary blockbusters. *Cogent Arts & Humanities*, Volumen 3, pp. 1-14.

Slater, E. & Flaherty, E., 2009. Marx on Primitive Communism: The Irish Rundale Agrarian Commune, Its Internal Dynamics and the Metabolic Rift. *Irish Journal of Anthropology,* 12(2), pp. 5-34.

Slovic, S., 2010. The Third Wave of Ecocriticism: North American Reflections on the Current Phase of the Discipline. *Ecozon@,* 1(1), pp. 4-10.

Starkey, G., Gazi, A., Dimitrakopoulou, D. & Cordeiro, P., 2014. Generation C" and audio media: a cross-cultural analysis of differences in media consumption in four European countries. *Participations: Journal of Audience and Reception Studies,* 11(2), pp. 239-257.

Starosielski, N. & Walker, J., 2016. *Sustainable media: Critical approaches to media and environment. Routledge.*. New York: Routledge.

Stehli, M., 2013. *Oficio y modificaciones corporales: el caso de algunos tatuadores y perforadores profesionales de la ciudad de Santa Fe.*. Buenos Aires, Facultad de Ciencias Sociales, Universidad de Buenos Aires.

Stern, P. & Dietz, T., 1994. The value basis of environmental concern. *Journal of Social Issues,* Volumen 50, pp. 65-84.

Stern, P. y otros, 1999. A value-belief-norm theory of support for social movements: the case of environmentalism. *Human Ecology Review,* Volumen 6, pp. 81-97.

Stoknes, P., 2014. Rethinking climate communications and the "psychological climate paradox". *Energy Research & Social Science,* Volume 1, pp. 161-170.

Stoknes, P. E., 2015. *What We Think About When We Try Not to Think About Global Warming: Towards a New Psychology of Climate Change.* White River Junction, VT: Chelsie Green Publishing.

Sunstein, C., 2007. *Republic.com 2.0.*. Princeton, NJ: Princeton University Press..

Svampa, M., 2008. La disputa por el desarrollo: territorio, movimientos de carácter socio-ambiental y discursos dominantes.. En: *Cambio de época. Movimientos sociales y poder político.*. Buenos Aires: Siglo XXI, pp. 1-31.

Svoboda, M., 2016. Cli-fi on the screen (s): patterns in the representations of climate change in fictional films. *WIREs Clim Change,* Volumen 7, pp. 43-64.

Taddicken, M., 2013. Climate change from the user's perspective.. *Journal of Media Psychology: Theories, Methods, and Applications,* 25(1), p. 39–52.

Tandoc Jr, E. & Eng, N., 2017. Climate Change Communication on Facebook, Twitter, Sina Weibo, and Other Social Media Platforms.. *Oxford Research Encyclopedia of Climate Science.*

Tandoc, E. & Takahashi, B., 2013. The complex road to happiness: the influence of human development, a healthy environment and a free press. *Social Indicators Research,* Volumen 113, pp. 537-550.

Taylor, B., 2013. *Avatar and nature spirituality.* Waterloo: Wilfrid Laurier University Press.

Temper, L., Del Bene, D. & Martínez Alier, J., 2015. *Environmental Justice Atlas.* [Online]
Available at: http://ejatlas.org
[Accessed 1 August 2018].

Terracina-Hartman, C., Bienkowski, B. & Myers, M., 2013. Social media for environmental action: What prompts engagement and intent toward activism?. *International Journal of Technology, Knowledge and Society,* 9(4), pp. 143-161.

Thaker, J., Zhao, X. & Leiserowitz, A., 2017. Media Use and Public Perceptions of Global Warming in India. *Environmental Communication,* 11(3), pp. 353-369.

Thompson, J., 1995. *The Media and Modernity: A Social Theory of the Media.*. Cambridge: Polity Press.

Threadgold, S., 2012. 'I reckon by life will be easy, but my kids will be buggered': Ambivalence in young people's positive perception of individual futures and their visions of environmental collapse'. , vol. 5, , pp.. *Journal of Youth Studies,* 5(1), pp. 17-32.

Thunberg, G., 2019. *No One is Too Small to Make a Difference.* London: Allen Lane.

Tomlinson, J., 1991. *Cultural imperialism: A critical introduction.*. London: Continuum.

Tonon, G., 2015. *Qualitative Studies in Quality of Life: Methodology and Practice.* New York: Springer.

Tufte, T., 2015. *Comunicación para el cambio social.* Barcelona: Icaria.

United Nations Environment Programme, 2021. *Making Peace with Nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies.,* New York: UNEP.

United Nations, 1987. *Our common future,* Oxford: Oxford University Press.

United Nations, 2015. *Transforming our world: the 2030 agenda for sustainable development.,* New York (NY): United Nations.

Urry, J., 2002. *Global Complexity.* London: Polity Press..

Urry, J., 2011. *Climate change and society.* Cambridge, U.K; Malden, Mass: Polity Press.

Urry, J., 2013. *Societies beyond oil: Oil dregs and social futures.* London: Zed Books.

van der Linden, S., Malbach, E. & Leiserowitz, A., 2015. Improving public Engagement with Climate Change: Five 'Basic Practice' Insights from Psychological Science' Perspectives. *Psychological Science,* 10(6), pp. 758-763.

van Dijck, J., 2013. *The culture of connectivity: A critical history of social media.* New York: Oxford University Press.

van Dijk, J., 2006. *The Network Society: Social Aspects of New Media.* Thousand Oaks, CA: Sage.

van Rees, K. & van Eijck, K., 2003. Media repertoires of selective audiences: The impact of status, gender, and age on media use.. *Poetics,* 31(5), p. 465–490.

Van Zoonen, L., 2005. *Entertaining the citizen: When politics and popular culture converge.* Lanham, MD: Rowman & Littlefield.

Vanhulst, J., 2015. El laberinto de los discursos del Buen Vivir: entre Sumak Kawsay y Socialismo del siglo XXI.. *Polis (En línea),* Volumen 40.

Viola Recasens, A., 2000. *Antropología del desarrollo.* Barcelona: Paidós.

Visser, P. & Krosnik, J. A., 1998. The Development of Attitude Strength over the Life Cycle: Surge and Decline. *Journal of Personality and Social Psychology,* Volumen 75, pp. 1389-1410.

Vlek, C. & Steg, L., 2007. Human behaviour and environmental sustainability: problems, driving forces and research topics. *Journal of Social Issues,* 63(1), pp. 771-789.

Vraga, E. K., Anderson, A. A., Kotcher, J. & Maibach, E., 2015. Issue-specific engagement: How Facebook contributes to opinion leadership and efficacy on energy and climate issues.. *Journal of Information Technology & Politics,* 12(2), p. 200–218.

Vraga, E., Tully, M., Akin, H. & Rojas, H., 2012. Modifying perceptions of hostility and credibility of news coverage of an environmental controversy through media literacy. *Journalism,* 13(7), pp. 942-959.

Wallace-Wells, D., 2019. *The Uninhabitable Earth. A story of the future.*. London: Penguin.

Wallerstein, I., 1974. *The modern world-system; capitalist agriculture and the origins of the European world-economy in the sixteenth century.* New York: Academic Press.

Wallerstein, I., 1974. The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis. *Comparative Studies in Society and History,* 16(4), pp. 387-415.

Wang, X. & Lin, L., 2018. The relationships among actual weather events, perceived unusual weather, media use, and global warming belief certainty in China. *Weather, Climate, and Society,* 10(1), pp. 137-144.

Warner, L., Lamm, A. & Rumble, J., 2018. Can videos play a role in promoting good landscape management behaviors?. *Applied Environmental Education and Communication,* 17(3), pp. 187-197.

Watson, B., Riffe, D., Smithson-Stanley, L. & Ogilvie, E., 2013. Mass Media and Perceived and Objective Environmental Risk: Race and Place of Residence. *Howard Journal of Communications,* 24(2), pp. 134-153.

Weik von Mossner, A., 2012. The Human Face of Global Warming: Varieties of Eco-Cosmopolitanism in Climate Change Documentaries. *Revista Canaria de Estudios Ingleses,* Volumen 64, pp. 145-160.

Weik von Mossner, A., 2017. *Affective Ecologies: Empathy, Emotion and Environmental Narration.*. Columbus, OH: Ohio State University Press.

Weik von Mossner, A., 2017. Vulnerable Lives: The Affective Dimensions of Risk in Young Adult Cli-Fi. *Textual Practice,* 31(3), pp. 553-566.

Weintrobe, S., 2013. *Engaging with climate change: Psychoanalytic and interdisciplinary perspectives.* New York: Routledge.

Wendling, Z., Emerson, J., de Sherbinin, . A. & Esty, D., 2020. *Environmental Performance Index.,* New Haven, CT: Yale Center for Environmental Law & Policy.

Whitmarsh, L., 2009. What's in a name? Commonalities and differences in public understanding of ''climate change'' and ''global warming''. *Public Understanding of Science,* 18(4), pp. 401-420.

Whitmarsh, L., 2011. Scepticism and uncertainty about climate change: Dimensions, determinants and change over time.. *Global Environmental Change,* 21(2), p. 690–700.

Wibeck, V., 2014. Social representations of climate change in Swedish lay focus groups: Local or distant, gradual or catastrophic?. *Public Understanding of Science,* 23(2), pp. 204-219.

Wibeck, V., Dahlgren, M. & Öberg, G., 2007. Learning in focus groups: An analytical dimension for enhancing focus group research.. *Qualitative research,* 7(2), pp. 249-267.

Witte, K. & Allen, M., 2000. A meta-analysis of fear appeals: implications for effective public health campaigns. *Health Education Behaviour,* 17(5), pp. 591-615.

Yale Program on Climate Change Communication, 2020. *Climate Activism: A Six-Americas Analysis Report,* New Haven: Yale Program on Climate Change Communication.

Yockey, M., 2012. Wonder Woman for a day: Affect, agency, and Amazons. *Transformative Works and Cultures,* Volume 10.

Zhang, N. & Skoric, M., 2018. Media use and environmental engagement: Examining differential gains from news media and social media. *International Journal of Communication,* Volumen 12, pp. 380-403.

Zhao, X., 2009. Media use and global warming perceptions: A snapshot of the reinforcing spirals.. *Communication Research,* 36(5), p. 698–723.

Zhao, X., 2012. Personal Values and Environmental Concern in China and the US: The Mediating Role of Informational Media Use. *Communication Monographs,* 79(2), pp. 137-159.

Appendix A: Focus Groups Instruments

Guide for Discussion

Researcher's Guide for Focus Group Discussion (English Version)

I. ENGAGEMENT WITH ENVIRONMENTAL RISKS (Objective 2 and Objective 3)
Section 1.A (introductory round and exploration of place attachment) Please say your name and which is the place in the world that you consider home, the place or places that you feel attached to and feel part of.
Section 1.B (environmental risks and human responses) - Which environmental problems can you identify and how serious are they? - How do you feel related to them if you do? - Where would you rank environmental problems compared with other concerns like economy, education, health, politics, etc.? Why? Which, for each one of you, is the most pressing problem in the world today? - Who are or will be affected by these problems? How and when? - What do we need to solve it? Can we or we just adapt? - Whose responsibility is it to solve them?
Section 1.C (mediation of environmental risks and human responses) - Where do you hear more about environmental problems? - If you did not refer to the media before, how much do you think environmental problems are treated in the media? Which media treat them better?
II. EXPOSURE AND INTERPRETATION OF MEDIA/ECO-MEDIA (Objective 1 and Objective 3)
Section 2.A (exposure and social uses of media) -What media do you consume or use and how they relate to your concerns? For instance, you could read Farmers Journal for information on XX but a movie on TV for just forgetting about some of your concerns. -Which media are more important for you (ie frequency of consumption, reliability, fun, etc.)? Could you specify the role of online media and why is it important for you if it is? (consider information, education, entertainment, and also socialising with others).
Section 2.B (exposure and interpretation of online eco-video, assumed role of media) Exercise: Please enter the Media section of the website and have a look of that list of YouTube videos. After devoting around 5 minutes to explore them –some you might now from before, some not, feel free to watch what attracts you, etc.- please select 1 or 2 that you consider effective regarding environmental awareness. - Did you already know any of them? - Which one/s do you choose and why? (consider diverse aspects of content and context) - Does it influence your opinions or your acts in any way? How? - Can you recall on a different type of video which is more effective than these listed? - What do you think is this type of media' contribution to deal with environmental issues, if any?

Note: it is advisable to adapt the sequence of sections, the level of explanation and the exemplification to the diverse group contexts and dynamics, including the production of physical individual and group registries (maps, posters, etc.) instead of only exchanging verbal answers.

Individual Form

Individual Questionnaire for Focus Group Participants (English Version)

Time and Date of Focus Group:

1. First name:

2. Age:

3. Gender: F___ M___ Other___

4. Where you grew up? Rural area/village___ Small/Middle town___ Large town___ Mix of rural and urban___

5. Where you live now? Rural area/village___ Small/Middle town___ Large town___ Mix of large town and other___

6. What is your current occupation? Student___ Part-time Job___ Full-time Job___ Other___

7. Are you member of any club, society or other voluntary social activity? No___ Yes___

If Yes, which one/s?

Blog with Lists of Videos

The pre-experimental exercise of individually checking a list of selected videos used the following blog platform, which was also useful to reinforce the access to the plain statement about the research by focus groups participants.

https://mediaforsustainability.wordpress.com/

The buttons on the left of the page give access to the two lists of videos: the one used for English speakers and the one used for Spanish speakers, reflecting the variations explained in Chapter Four (Methodology).

Appendix B: Approval from DCU Research Ethics Committee

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

DCU

Ms María Victoria Gómez Márquez

School of Communication

8th February 2019

REC Reference: DCUREC/2018/257

Proposal Title: Stories for sustainability in the semi-peripheries of theworld system: online audiovisual media influence on young peoples attitudes in ireland and uruguay

Applicant(s): Ms María Victoria Gómez Márquez

Dear María,

Further to expedited review, the DCU Research Ethics Committee approves this research proposal.

Materials used to recruit participants should note that ethical approval for this project has been obtained from the Dublin City University Research Ethics Committee.

Should substantial modifications to the research protocol be required at a later stage,a further amendment submission should be made to the REC.

Yours sincerely,

Donal O' Gorman

Dr Dónal O'Gorman

Chairperson

DCU Research Ethics Committee

DCU
Research & Innovation

Taighde & Nuálaíocht Tacaíocht
Ollscoil Chathair Bhaile Átha Cliath,
Baile Átha Cliath, Éire

Research & Innovation Support
Dublin City University,
Dublin 9, Ireland

T +353 1 700 8000
F +353 1 700 8002
E research@dcu.ie
www.dcu.ie

ENDNOTES

1 From a precautionary principle perspective, a complete consensus on the risk is not a pre-requisite to action: “Even if it is highly unlikely that human action could lead to a collapse in fundamental Earth system, the consequences of such a collapse would be so devastating that avoiding the risk altogether would be preferable. Just as it best not to have to rely on the life-saving properties of the airbags in one´s car, so it would be best not to have to rely on the resilience of the Earth’s basic systems” (Jamieson, 2008, p. 8).

2 Even though other authors provide a similar classification of environmental discourses (Litfin, 1994; Buttimer, 1992; Hajer, 1995), Dryzek's more general approach to deliberations about environmental policies and politics since the eighties, not limited to specific issues like acid rain in Hajer or ozone layer depletion in Litfin, potentially cover the variety of environmental concerns within the world system.

3 In social sciences, following Pierre Bourdieu conceptualisations around habitus (1972), agency is defined as the capacity of individuals to act independently and to make their own free choices. By contrast, structure are those factors of influence (such as social class, religion, gender, ethnicity, ability, customs, etc.) that determine or limit agents and their decisions.

4 As Maristella Svampa notes, the issue of development is a recurrent and foundational theme in Latin American social thinking (2008) and is present in what Boaventura De Sousa Santos named 'epistemologies of the South' (De Sousa Santos, 2009), as one challenge he noted is how to build a social emancipation without endorsing Northern imported ideas like development, progress and modernisation (p. 358).

5 Great Acceleration is a term sometimes used for referring to the dramatic, continuous and roughly simultaneous surge in growth rate across a large range of measures of human activity, first recorded in mid-20th century and continuing to this day (Future Earth, 2015).

6 Argentinian Raúl Prebisch had already developed this explanation of the global economy in the late forties, disseminating it through different CEPAL reports, which was acknowledged by Wallerstein when presenting his own world system theory. Dependency theories, derived from Prebisch's analysis, grew roots in the Economic Commission for Latin America and Caribbean (CEPAL) offices in Santiago (Chile) in the sixties.

7Of course that traditional ecological knowledge can also be found in Europe, but it does not belong to an articulated alternative proposal for development as a whole or an explicit alternative value system (Hernández-Morcillo, et al., 2014), but instead, it appears connected to specific production practices, for instance.

8 This dynamic map portrays the monitoring work and analysis of Joan Martínez Alier´research team regarding long-term, socioenvironmental conflicts especially in the world peripheries but also across core regions. Martínez Alier is a Spanish referent in ecological economy and political ecology, with an extensive trajectory of fieldwork in the so-called ‘Third World’. The Atlas and his research team are based at the Autonomous University of Barcelona.

9 This study was developed primarily for the USA but the approach was recently synthesised by empirically proving the effectiveness of a shorter version of the well-established survey used to create the groups of respondents (Chryst, et al., 2018), after the challenges of many attempts at reproducing it that were conducted in other countries such as Australia, Germany, India and Singapore.

10 Less than a dozen of twenty first century books on ecological imaginations in Latin American literature constitute recent production in the field (Barbas, 2011; Binns, 2004; De Loughrey, 2005; Forns, 2012; French, 2005; Handley, 2007; Kane, 2010).

11 A circular economy is a regenerative system in which resource input and waste, emission, and energy leakage are minimised by slowing, closing, and narrowing energy and material loops; this can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, recycling, and upcycling.

12 Resulting guidelines for climate change communication (ENGAGES Model) will also serve as a local reference when analysing findings of the present study.

13Searches using different combinations of keywords related to environmental awareness/attitudes/concern/behaviour and the five main traditions of audience research (Effects, Uses and Gratifications, Literary Criticism, Cultural Studies, and Reception) were conducted in Scopus and other scientific databases.

14 Overemphasising individual agency and grouping media with any machine are critiques not yet overcome by either the interesting revision developed by uses and dependency theory (Rubin & Windahl, 1986) or the most recent useful reminder of the achievements of Uses and Gratification as an alternative to the dominance of Stuart Hall’s encoding/decoding model for media-audience relations (Barker, 2006).

15The book was translated into English later on, in 1993. Along with the Mexican-Argentinian Néstor García Canclini and the Peruvian Rosa María Alfaro Jorge González, among others, the Colombian Jesús Martín-Barbero is one of the main voices of the “the increased focus on the role of popular culture in processes of development emerged in Latin America during the 1980s, with articles highlighting the Latin American debate about media, popular culture and identity in relation to development of the region” (Gumucio-Dagron & Tufte, 2006, p. 1146).

16 Nowadays, Robin Mansell and Jose Van Dyjck are signaled as European researchers who best follow Martín-Barbero theorisations, as Roger Livingstone and David Morley were decades ago (Couldry, 2017).

17 Contemporary findings around the use of media especially in younger generations and new platforms show evidence of an undeniable ritualisation of online consumption that make audiences quite dependent of certain media, as Rubin & Windahl (Rubin & Windahl, 1986) early describe in the justification of this theory that seems worth remembering.

18Between 60 and 100 scientific articles on climate change communications were indexed yearly in Scopus from 2015 to 2019, for instance.

19 First-person perception, as opposed to third-person perception, is the tendency to perceive that oneself is more affected than others by a risk or at any given situation.

20 Publications from Columbia University’s Center for Research on Environmental Decisions are also key sources regarding the psychological aspects involved in audience reception of environmental messages, together with the 2014 guide Connecting on Climate, one of the most comprehensive evidence-based resources available for communicating climate change.

21 The study confirmed that exposure to news source relates to the respondents’ ideological dispositions and exposure to coverage of the event are related to ideology, the selectivity of political news habits, and climate change knowledge (Hennessy, Hawkins, & Jamieson, 2017).

22 Using local messengers with whom the audience might feel a greater sense of affiliation, is a complementary efficient strategy identified in previous studies reviewed by the CRED.

23 More lessons for Green marketing strategies come from another recent study carried out in the US, where the effects on eco-purchasing intentions of a corporate social responsibility online campaign were analysed. Instead of advertising formats, "the superiority of news releases and articles used in social media to promote eco-purchasing involvements is validated by this test, and the role of the consumer-communicator is affirmed" (Byrum, 2019, p. 218) instead of the traditional business-to-consumer model. The authority of the emitter is therefore differentiated and probably evolving, as previously shown when it comes to climate change campaigns led by celebrities. The phenomenon of indirectly promoting sustainable practices in spite of audiences not being aware of pro-environmental messages has another representative example in the study of organic food consumption choices in Poland, which confirmed how consumers' created media, especially in SNS, might promote these sustainable practices without an environmental awareness call or interpretation by their followers (Filimonau, et al., 2018).

24 The researchers answered the questions of how frequently Chileans use social media to inform themselves about major environmental issues and engaging in online activism, such as joining Facebook pages or groups, posting comments, watching videos and giving their opinions on those topics.

25 The sceptical effects of controversy perception in young audiences were also explored among Midwest USA university students but broadening the scope to include any environmental science-related issue (Kortenkamp & Basten, 2015). Following evidence that giving equal weight to opposing viewpoints in media reports, can make science seem more controversial than it actually is, this study examined whether discrediting one expert viewpoint would minimise these false perceptions of controversy. This message-building tactic would not improve false perceptions of controversy as "results showed that a discredited opposing viewpoint often influenced risk and uncertainty perceptions in similar ways to a balanced opposing viewpoint" (p. 287).

26 Environmental and science communication are often considered as the same category (Metag & Schafer, 2018).

27 A total of 19 different discussions, comprising 140 young adults, were conducted during the fieldwork phase, but some did not meet the age criteria, other were duplications of group profiles or were less cross-nationally comparable.

28 Liebes and Katz (1990) for example in carrying out audience research on the cult TV series Dallas' reception, use 66 groups with three couples each, of common ethnic origin, who were already friends. Following the same path, Olausson used 15 natural groups to explore Swedish social representations, arguing that "people who share experiences and interests are, according to Jarrett (1993), more disposed to express their views and find it easier to speak their minds" (Olausson U. , 2011, p. 284); Ballantyne et al. (2016) similarly used this criterion when selecting students who met each other from the classroom.

29 Di Caprio's Oscar Speech (talk/speech), Di Caprio's *Before the flood* (documentary), Al Gore's Ted Talk, (talk/speech), Al Gore's *An Inconvenient Truth* (documentary), scientist Bill Nye's Climate Change 101 (talk/speech but in YouTube 'language/codes'), Morgan Freeman's *Our Future* (short documentary), Prince Ea's "Dear Future Generations, Sorry" (music video clip), *This Changes Everything* (documentary), *Cowspiracy* (documentary), Yourofsky's "the most important speech you will ever hear" (speech/talk), *Man* (animation short video), 4Ocean (infotainment piece), *Geostorm* (movie trailer), *Last Week Tonight*' report on Paris Agreement (TV late night show).

30 In Morley's classic study of the TV show Nationwide' audiences (1980) - one of the most cited in recent media research when it comes to the use of focus groups and to pointing to diversity in audience reception - 27 homogeneous groups of between 3 and 13 people took part, covering wide variation in social class, educational level, and political affiliation.

31 Arguments in favour of smaller groups point to the benefit of giving voice to all the participants and the diverting dynamics of sub-groups, while authors favouring larger groups argue that they enable a diversity of opinions to emerge (Kreuger & Casey, 2000; Morgan, 1998).

32 As the proposed research involves human participants and activities outside Ireland, it required approval by the DCU Ethics Committee, which was obtained in February 2019 after an expedited review (see Letter of Approval in Final Annex of Thesis Dissertation).

33 The complete list of 25 videos is available online in the bilingual research' blog mediaforsustainability.wordpress.com.

34 The Hollywood blockbuster Avatar, another interesting example meeting this criterion from fiction and with a high global profile, was not included as the theoretical sample was limited to 2014 or later, in search of the most contemporary phenomenon, while its trailer was published as early as 2009.

35 This is one of the studies that proved the importance of preconceptions in the interpretation of media narratives, at least when it comes to the denotative level of exploring visual media.

36 The description does not reach the 'thickness' of Geertz' method of interpreting culture (Geertz, 2008) as here the ethnographical attempt is limited to one short encounter with the participants instead of multiple encounters or the prolonged immersion in their everyday life.

37 Hoijer suggests to give an account of the analytical procedure by submitting a close analysis of an interview, where to follow each step of the detailed exploration, or to develop some kind of coding scheme that should be developed "in the interplay of the texts/interviews and the reader/researcher's perspective and purposes" (1990, p. 41).

38 Native South American traditions were considered for these study within the transformative ideologies, along with North American native traditions. Traditional ecological knowledge identified in Europe will be considered in the analysis, although existing publications present them as isolated productive practices instead of multidimensional ecological ideologies as those of natives.

39 Regarding the videos preferred by participants, it is important to recall that the narrative qualities, rather than the propositional content alone, constitute the basis for the effectiveness of environmental narratives vis-à-vis audiences, as tested for the case of shale gas drilling (Shen, Ahern, & Baker, 2014). Furthermore, the visual design remains a key aspect to consider as "it has been shown that such (scientific figures, photographs, cartoons, or maps created or recreated by media) visual representations shape the how audiences think about climate change (Leiserowitz 2006; O'Neill & Nicholson-Cole 2009; O'Neill et al. 2013), and that visual framings may shape the cultural politics of climate change (O'Neill 2013)" (Schäfer, et al., 2016, p. 11).

[40] If classifications developed by Hajer (1995) or Dryzek (2005) after analysing discourses of environment and sustainable modes of development are highly useful in understanding the phenomenon at the policy level, they were excluded as too sophisticated to be reliably applied to a laypeople discussions.

[41] If narratives and environmental ideologies are a very attractive and powerful approach to the analysis of environmental messaging, when applying it to audience discussions, there is a danger of not having enough elements to consider participants' expressions as a complete story but rather just an isolated point of view. "To live up to its full potential and distinguish itself from framing analysis, narrative analysis of mediated communication of climate change ought to clearly specify the narrative devices by which the message is rendered as a story rather than an argument", explain Schäfer et al. (2016, p. 7).

[42] An instant messaging app similar to WhatsApp. It was developed by Nikolai and Pavel Durov in 2013, founders of Russian social media platform VK.