## How Italian Newspapers Narrate Climate Change. The Role of Media Representations in the Cultivation of Sustainable Collective Imaginary

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#### ABSTRACT

Global warming represents one of the most important societal challenges of our time, but it is often inaccessible to direct human experience. On the contrary, it is largely constituted in the public mind from media narrations. Indeed, media have the power to catch people's attention and to create collective imaginaries on that issue. For this reason, understanding the way in which media represent climate change can be a strategic starting point in the comprehension of sustainable collective imagination. In the European scenario, Italy symbolizes an interesting case study, not only due to the challenges of sustainable management that this country has to face, but also because, according to Eurobarometer surveys, Italians seem being not particularly concerned about climate change mitigation. Consequently, and considering the impressive development of the Internet, our research is aimed to identify the typology of climate change representation provided by the two most important Italian online newspapers and the role this representations have had on people's sustainable concerns and narrations (through interview analysis). Our findings allow us to define similarities between media narrations and interviewees' stories and to understand how important media representations are in raising sustainable awareness among the audiences.

Keywords: Sustainability, climate change, media representation, media influence, Italy

# 1. Introduction. We do not Need Media Stories for Supporting Sustainable Development, or do We?

The need to mitigate climate change is one of humanity's greatest challenges for the 21st Century, and it requires a concerted effort from all social agents. Our paper focuses on two of these agents and the synergies between them, namely common people and media (specifically online newspapers), and we scrutinize the role of these social agents in an Italian context. The question to be discussed is whether media can facilitate social learning, knowledge and processes of socialization towards sustainable development. As Elias (1990) reminds us, knowledge does not only develop from experience or observation, but also through communication, hence also through media reports. Consequently, media has to be considered a determining factor in the creation and cultivation of collective imaginaries, shared meanings, and public opinion. Additionally, they are a strategic megaphone for disseminating competences and common sense. This is not the least case when the issue of climate change mitigation is communicated. The connections between everyday actions and climate impacts cannot be experienced firsthand, but are mediated through narrations in media (and elsewhere). In other words, media have the power to affect audiences in a way strong enough to push people towards a sustainable redefinition of the collective meanings and knowledge, with potential implications for everyday practices.

The media landscape has changed radically over the past 10-20 years. This does however not alter the fact that knowledge and conceptions of climate change and sustainable development are derived from sources outside personal, everyday experience and disseminated through fora that reach large publics. But it does compel research to direct its attention not just to print and broadcast media but also to online information channels, which are capable of moving public opinion and cultivating citizens' imaginaries. This is not only a consequence of the fact that web audiences are generally more mindful and dynamic than traditional media audiences (see, among others, Jacobelli 2001), but also because digital papers have a potential penetration that vastly surpasses that of printed media (also due the linking through social networks).

Italy constitutes a useful case for investigating the role of media in cultivating social imaginaries and everyday competences for sustainable development. Italians show a general lack of concern about climate change. Only 9% of respondents from Italy perceive it as an important problem for the European Union, whereas in Northern European countries, such as Sweden (37%) or Denmark (30%), climate change is perceived as the single most severe challenge the world is facing (Special Eurobarometer 435, 2015). In this scenario, it might be fair to assume that if we can find signals that people's imaginaries, competences and meaning can change and be cultivated in a more sustainable direction through the influence of media narrations, then such media influences can be found in other societies with stronger environmental concerns.

In summary, this paper aims to detect which effects online information can have on people's meanings, knowledge and competences regarding climate change and climate change mitigation. To pursue that purpose, we identify and analyse media representations through the lens of framing theories and content analysis. Once identified media representations, these ones will be compared with an interview exploration, aimed to understand people's conceptions, competences and attitudes on the matter. Our purpose is to comprehend how the examined media output might have influenced discourses and statements during the interviews.

In the following, after presenting our theoretical framework, we will compare some recurrent frames and contents used by the online newspapers with the ones performed by interviewees for understanding the connection between media and pro-environmental world-views

Together, the findings support our claim that change processes are sustained, facilitated and also *generated* by media.

#### 2. Theoretical Insights for Understanding the Importance of Media Stories

The advent of the new information and communication technologies in the media landscape of the so-called information and knowledge society is significantly inspiring debates on media effects (Wartella & Reeves, 2003, p. 54). In recent times, there have been several and successful attempts to draw out attention to media influences, also in the light of the digital revolution (for instance, Rössler (Eds), 2017). According to Cacciatore et al. (2016), in fact, the online environment can produce a reinforcement effect in the relationship between media and audiences due to what the

authors call "preference-base effect". In other words, "tailoring" news consumption, the online environment may facilitate media effects, also in a way stronger than interpersonal discussion or mainstream media (Messing & Westwood, 2012). Quoting Jeffres et al. (2012:63), instrumental learning, which occurs when people seek out specific information, might increase levels of knowledge for motivated segments of the audiences. The positive influence of digital media on knowledge and awareness are not merely limited to the above-mentioned effects. In the same work, in fact, Jeffres et al. noted how information and news on internet provide more opportunities for audiences to encounter incidental contents able to generate positive impact on knowledge and know-how, enabling the so-called *incidental learning*. For the authors, digital media are a tool for gaining considerable knowledge, as they have stronger effects on knowledge than more mainstream media sources. Moreover, recent studies suggest that information about causes and solutions for issues as climate change have a significant role in translating audience's knowledge into intentional behavior (see also Van de Velde et al., 2010:5541).

Starting from this assumption, our paper will focus on the role online information have not only on people's knowledge, but also, through the lens of framing operations, on meaning creation.

Even if framing constitutes one of the most popular area of interest for scholars in communication, according to Cacciatore et al. (2016) the communication literature on the topic offers a wide variety of conceptualizations on frame and framing, that we suggest to divide in "source oriented" and "audiences oriented". Referring to the first division, Goffman (1974:10), for instance, defines frames as principle of organization, while Gitlin (1980:6) as principle of selection, emphasis and presentation. Moreover, Cappella and Jamieson (1997:39), discussing about journalistic field, argue that the frame is the way in which a story is written or produced. The second tradition, instead, has shown the tendency to focus its attention also on audiences and on the effects that framing operations can have on readers. In fact, frame theory described by Gamson and Modigliani (1987) seems to emphasize the aspects related to the collective imaginaries, as framing is defined as the process that addresses audiences in interpreting and understanding stories, symbols, metaphors and images. On that purpose, indeed, Ferree et al., (2002) define framing as the way in which people construct meanings and the everyday world, while Bryant et al. (2009) address it as one of the most important operations of reader orientation, due to its double function of accompaniment and guidance in the construction of media meanings. In fact, if we support Goffman's position on the impossibility for individuals of fully understand the world and the need to apply interpretive schemas or "primary frameworks" (Goffman, 1974: 24) to classify information and interpret the reality meaningfully, it is clear that frames become invaluable tools for presenting relatively complex issues. Frames simplify the storywriting process for journalists (labelling their articles) and help audiences make sense of what they encounter in the news (Scheufele, Tewksbury, 2007). Likewise, Scheufele and Tewksbury (2007:15) point out that some news often associate tax policy and unemployment rates, which means that for the audiences "[...] considerations about unemployment are applicable to questions about taxes". Hence, it is fair to assume that, if our newspapers analysis will indicate an association between policy and climate change,

for instance, our respondents might apply a political frame while talking about climate change. In other words, choices made by editors and journalists can play a role in determining imaginaries related to specific issues, but also in how people understand the world.

Considering all these aspect at work, we assume that through news framing operations online newspapers can build new collective imageries, while acting on shared meanings and improving collective knowledge, generating a sort of change in practices. This, at this stage of our reasoning, prompts a fundamental question about how, working on worldviews and knowledge, media can push audiences towards the development of sustainable lifestyles. In other words, previous research have shown that media, operating on knowledge and meanings, can affect people's practice change, but there still is a lack related to how this change happens. Hence, we need a tool for connecting the intermediate mechanism between knowledge-meanings changes and lifestyle alterations. We suggest that the key link in understanding the correlation between media effects and sustainable practice modifications can be Practice Theory. In fact, according to practice theories (Shove et al., 2012), the factors through which practices are shaped, established and enacted are, inter alia: a) the embodied competences (know-how/knowledge) involved in performing all practices, and b) the meanings (i.e. norms, engagements, worldviews, and orientations that saturate and guide them). Thus, meanings and knowledge changes may result in practice changes. Assuming this position hints at the conclusion that media might also push audiences towards the adoption of sustainable actions starting right with the re-definitions of meanings and knowledge.

In this pages we intend to analyze media effects on two of the factors that underlie sustainable routine changes: meanings and knowledge.

### 3. A Multi-method Approach for Studying Media Influence

For understanding how framing operations and media contents can affect people's imaginaries, competences and meanings, we divided our inquiry in three substudies: a quantitative media search on frames, a qualitative investigation into media contents (both are functional for defining media representations) and an interview study with people who had applied some form and some level of pro-environmental practice change. The first sub-study is specifically attributable to framing studies, while the content analysis allowed us to make a general overview of media narrations of climate change. This multi-method research has been conducted on the online version of the two most important Italian newspapers: corriere.it and repubblica.it. The initial operation consisted in the definition of the corpus, obtained by searching the newspapers' online archives using the search term "cambiamento climatico" (climate change). Considering that media effects have to be intended as cumulative over time and that interviews have been conducted in 2017, we decided to study online newspaper stories from 1st January to 31st December 2016, so that these narrations could potentially have had time to affect people's statements. The resulting corpus consists in 426 articles (77 in corriere.it, 349 in repubblica.it).

Once the corpus was defined, we initiated the quantitative analysis on framing, collecting namely the frames (labels or tags) that the newspapers attributed on their own to articles

on climate change. In fact, every article has been catalogued according to predetermined editorial sections, such as: Current Affairs, Environment, Politics, Economy, Technologies, Health, Foreign affairs, Culture, Other. These sections represent visual labels/tags that may also allow and facilitate a first framing operation both for readers and newspapers (Cacciatore et al, 2016). For instance, thanks to these frames, audiences know that they are reading an economy article, rather than a politic one within which climate change is addressed. After aggregating these tags, the articles have been read and, through a qualitative examination, we identified the recurring types of content for each tag/frame. This included article format (opinions, speeches, news, scientific reports, interviews), meanings, media languages (tone of voice), presence/absence of positive stories and practical advices.

The second research level is an analysis of practitioners through interviews designed to look into people's attention to sustainability, their practices, their sources of inspiration and information, as well as their media consumption. The aim of the interviews was to detect imageries, knowledge and meaning around climate change, as well as interpretative framing processes. The interviews, through inductive process, have been evaluated in accordance to: a) labelling activities carried out for defining climate change b) contents related to global/local concerns, self-perceived awareness and competence on climate change, their involvement in mitigation process and role of institutions/politics.

During the interview study, we analysed the statements of 16 Italians residing in Lazio Region. Our interviewees ranged in age from 20 to 71 years old, and there were 10 women and 6 men with differing education levels, professions and civil status.

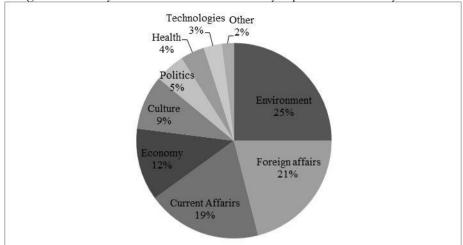
All the collected data have been compared, revealing interesting connections between framing, media narrations and people's pronouncements.

### 4. The Importance of a Story. How Media will Change the Society

Moving from these methodological considerations, we will now present an overview of our discoveries regarding media influence on respondents' discourses. The aspect we are going to focus on is the comparison between online news and contents emerged during the interviews. We will start with an exploration of framings at work in both media texts and practitioners' articulations. Therefore, the establishment of the narrative frame turned out to be a useful tool as well as an important opportunity for understanding the potential impact of media contents.

Thus, we will illustrate a chart covering the frames provided by the online newspapers themselves for labelling the reference area of the article published. Then, we will indicate the frequency with which these tags occurred in 2016. Secondly, as a result of the content analysis, for the sake of brevity we will describe subjects and trends only for the three most frequent labels/tags. The outcomes of these two examinations compose the media representation of climate change in accordance with framing subdivision. For every detected section, we will explain how, according with our interview study, these representations can have had an impact on people's discourses as well as in which directions these connections go.

The quantitative analysis of the labels the editors assigned to articles on climate change shows that the issue of climate change is presented under a broad variety of labels,



mirroring the versatility of an issue that affects every aspect of our society. See Chart 1.

Chart 1: Tags assigned by corriere.it and repubblica.it — Cambiamento climatico 2016 Database: 426 articles — online archives: corriere.it and repubblica.it

As the chart displays, the Environment (25% of the articles) represents the most frequent label used for articulating climate change issues, followed with a relatively small difference by Foreign affairs (21%) and Current Affairs (19%). These findings are not unexpected, although the low proportion of articles under the tag of Politics (5%) is somewhat surprising. Nevertheless, we have to anticipate that it is only an apparent underrepresentation, because, as we will explain through content analysis, Politics has to be considered as a cross-section topic, which implies that politics, policies, politicians, parties and so on are, as a matter of fact, the real protagonists of the whole telling.

Moving forward, the category *Environment* is composed by a constellation of news characterized by an exorbitant recourse to the point of view of researchers and scientists. Accordingly, we found a consistent predominance of scientific reports, data and interviews with academics and scholars, offered to readers with a scientific tone of voice, full of catastrophism and alarmism. That repetition of a catastrophic-scientific frame contained by the Environment section seems to confine climate change within a challenging sector-specific knowledge, precluded to most people. Indeed, the combination of the language of science and the recourse to a "novel of the terror" can increase in audiences the perception of a sort of complexification of the topic itself, making it inaccessible for those who consider themselves non-scholars. This is mirrored in some of the sentiments expressed by interviewees:

«Of course I am concerned about climate change [...]. What I fear the most is ending up in a situation I cannot handle [...]. I am afraid of feelings of uncertainty [...]. Moreover, I think that climate change is a scientific and complex issue. It is a very sector-specific topic, because when you talk about it, it seems you know nothing. There is so much to know about it, but we are not able to [understand it properly]». (GM)

The implications of this narration might be the growth of the perception of the *risk for* the unknown, as well as a lack of confidence in people, which believe they do not have

enough skills for understanding climate change. In fact, even if respondents declared to be attentive to and to actively look for information on climate change, they never diagnosed themselves as competent or aware people. They declared to feel inadequate when confronted with such a technical topic, considering they were not scientists, while in fact disclosing a capability of perfectly arguing their point of view, their decisions and assertions. Despite the lack of self-confidence, their explanations were often precise and meticulous, which means that, if on one hand this kind of narrations have the merit of spreading knowledge, on the other hand, it can generate feelings of inadequacy, confusion, and fear among audiences. In view of that, we can state that media can have important consequences not only on the way in which people organise perceptions of their surroundings into knowledge, but also on the readability of certain pieces of information (Cacciatore et al, 2016: 12).

One step down on the podium, we can find the group of articles related to *Foreign affairs*. In this case, the content analysis has revealed *two different lines*:

- 1. Examples of initiatives or case stories performed in foreign countries, which are described, in the most part, as a model to be inspired to;
- 2. News related to international agreements, summits, EU policies, global solutions and so on. In a few words, in this case Foreign affairs is crosscut by the only apparently under-represented topic of Politic.

The large occurrence of climate change reports dealing with other nations has to be considered as an interesting signal of cultural change. Traditionally, the scientific literature on that topic used to describe the Italian perception of environmental issues as shaped by chronicles about the repercussions of calamity and natural disaster on local territories. Accordingly, sustainable concerns in Italy were (and partially still are) strictly associated to landscape, strong affection for homeland, localism and cultural heritage (Fontana, Ferrucci, 2014). For this reason, Italian scholars developed the tendency to define Italy as trapped into an 'environmental anomaly' (Della Seta, 2000). However, it appears that the progressive media openness to an increasingly planetary vision of sustainability signifies a first step toward the re-definition of a new collective imaginary, best suited on a global matter. Undeniably, our interviews mentioned local issues and landscape protection during their speech, but at the same time we noticed a change of direction in their general perspective, as all interviewed demonstrated an interesting sensitivity towards the Planet as a whole, as well as for future generations. In short, this worldwide perspective frame has to be considered like something worth investing in for expanding a global vision of the sustainability.

In addition, we observed that the description of good initiatives in foreign countries have had also practical implications on the audiences, emphasizing the lever of *aspirations* and desires for a higher quality of life. Media are, indeed, important sources of inspiration for changing practices, especially in the occasion in which they report best practices and policies:

«I was reading that sustainable transportation is encouraged in Netherland, especially in case of journeys by bike. Bikes are sold at a competitive price, and there are no problems in buying or renting a bike. They have admirable bike lanes. It made me want to buy a bike». (VDA)

These findings suggest that, if coherent, media stories can have interesting outcomes not

only in the facilitation of the *opening-up of interpretative horizons*, but also in the redefinition of worldviews, orientations and aspirations. This result leads us to assume that media can be the levers that permit practice and lifestyle changes.

Following up on Foreign affairs' second line (news related international agreements and policies), we detected a massive reference to international agreements, summits, EU policies and politicians, which overlaps the Politics. Similar reflections can also be noted for Current affairs, which is composed by Politics news for the most part. Thus, our considerations on politics are the result of joint comments from Foreign and Current affairs.

In fact, articles falling in the category of *Current affairs* constitute an extremely heterogeneous body of texts. Very often the label Current affairs covers issues in political or economic businesses, corruption, mismanagement, as well as natural disasters, sustainable companies/initiatives, and immigration. In other cases, we could find storytelling under which an actor, talking about his lifestyle, mentioned also climate change. This variety of contents often offered a description of facts that moved from climate change to other issues, hence global warming became only an aspect of a wider narration. That also denotes some of the Current affairs articles dealt firmly with climate change, whereas others were scarcely connected with the issue. Considering that variety of topics, we will examine only the findings related to politics, which is the most adopted frame.

The general inspection of Politics displayed a massive *underrepresentation* of citizens and common people, while it offered a steady, concentrated and frequent presence of institutions, politicians or parties. In other words, according to the digital newspapers, climate change might easily be intended as a political and institutional issue, whereas audiences can only look on as leaders act. People, thereby, considering their non-presence, can be understood as passive witnesses of a report about "good/bad" politicians, which do or do not make good policies for society, climate change included. These narrations, moreover, appear evidently poor of practical implementing views and perspectives for individuals. The fallout from this *people-excluding* narrative was found also in the statements made by people who claimed that little daily sustainable practices are important actions to protect the Planet. In fact, even if our respondents maintain the convincement that their sustainable performs contribute to environmental protection, they recognized to politicians and institutions a predominant involvement in mitigation strategies.

«Now, this ties in with what I said in the previous about why it [climate change] is something that politic would make. I care of the planet and in my small way I act sensible: waste separation, I always go by bike, I recycle materials such as plastic. Though, the problem is that without the institutional support of politics it seems to me that my contribution becomes rather limited» (CB).

It is understood that this is a narration that can facilitate people in perceiving themselves as marginalized members of the society and, presumably, audiences will wait for institutional intervention before acting, creating in that way a vicious circle made of passivity and a lack of responsibility (similar effects on of framing on responsibility have already been shown in Iyengar, 1987). This feeling can be connected not only to the overrepresentation of politics, but also to the above-mentioned non-existent presence of

advices within the analyzed media texts, that minimalize citizens' responsibility in climate change mitigation. This supplementary consideration allows us to think about how media affect the way in which people perceive their role as members of the community and as part of a collective sustainable development. The lack of practical advice for common people and the simultaneous emphasis that newspapers gave to politics/institutions can presumably generate a sense of powerlessness and low involvement in readers, which feel their own contribution is not considerable nor significant enough.

This synopsis on the connections between framing, contents and interviews led us to believe that media actually have strong impact on discourses, imaginaries, meaning creations and knowledge, which suggests that potentially media can have great repercussions also on practice change.

# 5. Conclusions. Yes, We Need Media Stories for Supporting Sustainable Development

The aim of the study we conducted was to identify connections between media representations and audiences' imageries around climate change. Our preliminary assumptions were related to the role of additional sources of experience for facilitating the understanding of climate change. In view of their socialization role, their massive presence in the society and the technological development, we considered online newspapers a precious opportunity for creating a new sustainable conscience. In fact, their narrations and frame are capable of cultivating orientations, worldviews, meaning and knowledge, which are, according to practice theories, some of the aspects that shape practices. Thus, changing the factors that establish practices may also correspond to a pattern of action modifications. Accordingly, media can not only facilitate, but also generate practice changes starting from the re-definition of the collective imagery. Our outcomes, indeed, endorse the role that media framing and narrations can have on:

- 1. Competences audience attribute themselves. The catastrophic-scientific representation of climate change seems to imply, on one hand, the growth of the perception of the risk for the unknown and fear for the future. On the other hand, this tendency improves a lack of confidence in audiences, with the result that these people feel inadequate and in a position of inferiority during the reading activity.
- 2. Knowledge, as all the abundance of data and reports very likely allowed people to provide detailed scientific information.
- 3. World views/meaning, as the adoption of a world-wide perspective frame (Foreing affaris) led readers to a redefinition of the concept of sustainability from a local to a global vision.
- 4. Aspirations for a better standard of living. Reporting fruitful and enviable sustainable behaviours which improve quality of life, online newspapers have been able to cultivate the desire for practice changes.
- 5. *Imageries* related to the role people play as members of the society as well as in sustainable development processes. The people-excluding narration trend, in fact, had the consequence to increase interviewees' powerlessness feelings as well as to marginalize their perceived involvement in climate change mitigation.

The reasons why we consider media as powerful tools in changing processes seem now extremely clear. In view of their large scale ramifications, we should nowadays be able to

accept the role of social conscience and socialization agency media have in our societies, ceasing to underestimate their potential for cultivating audiences towards a sustainable growth.

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