



Article

# Logos, Ethos, Pathos, Sustainabilitos? About the Role of Media Companies in Reaching Sustainable Development

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Abstract: As producers of economic and cultural goods, media companies are subject to a double responsibility: regarding how they operate and how they represent reality in their products. Thus, their social responsibility is primarily the "brain print" they leave on their audience. Communication of, about, and for sustainability through mass media is therefore essential to create a shared understanding of societal values on sustainability, creating public engagement, and contributing to sustainable development. Accordingly, the present study aims at understanding how media (companies) take their responsibility as key communicators in the public sphere and analyze how they communicate and thus construct the sustainability discourse through their products. For this, sustainability-related content produced and broadcasted by the two largest commercial media companies in Germany (RTL and ProSiebenSat1; n = 50 online articles and n = 89 videos, 601 min in total) was analyzed by qualitative content analysis and rhetoric text analysis to understand what and how media communicate sustainability. Results show that most media sustainability-related content addresses food issues, followed by issues regarding resources and the environment, thus contributing to the achievement of some of the 17 Sustainable Development Goals (SDGs). Namely: SDG#2 (zero hunger), #6 (clean water and sanitation), #13 (climate action), #14 (life below water), and #15 (life on land). These issues are primarily communicated logically, appealing to the audience's reason (logos, 76%), while the ethical appeal ethos (22%) and the emotional pathos (2%) scarcely occur. The analysis also leaves room for discussion regarding the responsibility of media companies in their role as communicators of, about, and for sustainability; about how they fulfill their responsibility in accordance with the SDG Media Compact, and about the opportunities and risks of applying different rhetorical appeals.

**Keywords:** sustainability communication; sustainable development; media responsibility; media sustainability; rhetoric; rhetoric text analysis



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# 1. Introduction

Sustainability has increasingly occupied a prominent role in our society in recent years, moving beyond its buzzword status. Indeed, sustainability has established itself more and more as a moral compass for individual, societal, as well as organizational, and institutional actions in the search for a new balance between the ecosystem and our society [1–3]. In this context, the fundamental role of media is repeatedly pointed out by the literature: As producers of economic and cultural goods, media companies have a responsibility regarding the way they operate and the way they represent reality and raise criticism and ethical concerns in their products. Therefore, the social responsibility of media companies is not primarily their physical footprint but the "brain print" they leave on their audience since mass media play a decisive role in the construction and the communication of risks and crises [4–6], and consequently in how the public responds to these threats [7–10]. Furthermore, due to their complexity, sustainability issues are often not perceived as direct experiences but reach people rather through communicative means [3]. This means most people's knowledge about many sustainability issues is based on information communicated through mass media. This is further confirmed

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by both previous research (see, e.g., [11]), and as shown by recent empirical surveys [12], which particularly highlight television as the most important medium for communicating sustainability-related information to laypeople. Thus—in its constitutive role—the communication *of*, *about*, and *for* sustainability—as conceived and understood by [13]—through mass media is essential to create a common understanding of societal values on sustainability, creating public engagement, initiating societal changes, and, hence, contributing to sustainable development [14]. The intermediary role of mass media between science and the lay audience is therefore essential for society since the mass media can make the unknown known [15]. In this regard, various authors have emphasized and documented the possibility of the mass media informing and mobilizing the public and, thus, shaping public opinion [16–18].

Accordingly, the fundamental role of media (companies) as key communicators in the public sphere results in a communicative responsibility [19,20]; i.e., the responsibility of *how* issues are communicated to the public.

The presented study aims, therefore, at analyzing how media companies communicate sustainability issues and, thus, whether they recognize and assume responsibility regarding their key role of sustainability communicators to the public. Accordingly, the research question posed is: "How do media companies communicate and thus construct the sustainability discourse through their products?".

After explaining the role of media in and for the sustainability debate, the present study thus analyses how media companies communicate sustainability through their media products. For this, sustainability-related content produced and broadcasted by the two market-leading commercial media companies in Germany—RTL Group and ProSiebenSat1 Group—is analyzed by means of qualitative content and rhetoric analysis. This method allows not only to detect what is communicated concerning sustainability but also and primarily how it is communicated—i.e., what goals, techniques, and appeals are used to reach and persuade the public [21]. Thus, the analysis provides an insight into how media companies perceive and fulfill their role and responsibility as communicators of, about, and for sustainability, and how they contribute to stimulating societal change towards sustainable development, as well as about the opportunities and risks of applying different rhetorical appeals while communicating sustainability-related issues. Addressing these aspects is of fundamental relevance for both theory and practice given the central role the media (can and should) play in the turn towards sustainable development.

## 2. Sustainability and Sustainable Development

Before discussing the role of the media in reaching sustainable development, it is necessary to define the concepts of sustainability and sustainable development briefly, to be able to conduct the discussion within a defined framework.

Sustainability is nowadays understood as a fundamental concept in the process of finding a new balance between the ecosystem and the current society. The concept aims to secure human civilization on planet Earth, based on preserving the fundamentals for life while ensuring intra- and intergenerational justice [1–3]. This understanding of sustainability is based on the definition of sustainable development formulated by the World Commission on Environment and Development (WCED) of the United Nations in their final report "Our Common Future". Accordingly, "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" [22] (p. 51).

This definition established the process of sustainability as the guiding principle of the new millennium and, for the first time, conferred it a political character, which requires operationalization and implementation [23]. Since then—and not least thanks to the adoption of the 17 Sustainable Development Goals (SDGs) [24]—there have been many attempts by political as well as educational institutions, Non-Governmental Organizations (NGOs), and companies, to translate theory into practice, to realize the guiding principle of

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"sustainability" through concrete measures, thus contributing towards the achievement of sustainable development.

However, the practicability and concretization of the concept of sustainability is increasingly the subject of debate and, in some cases, conflicting lines of argument. Indeed, sustainability as a societal, overarching normative framework implies including various normative ideas, such as the fulfillment of global needs, the assumption of responsibility for the future, the protection of the environment, and the need for overall societal engagement—as well as the communication for pursuing these ideas [25]. The problem here lies in the fact that sustainability is not a concrete rule on how to act but more a normative reference framework that shall provide guidance about the direction and way to think, reflect, and communicate [26]. Here, at least in the wealthy (so-called Western) countries, there seems to be a consensus that the idea of sustainability, its underlying values, norms, and measures, needs to be negotiated and thus debated publicly, i.e., in public discourse [1]. In this context, the fundamental role of the media as communicators of, about, and for sustainability [13] seems self-explanatory—considering, for example, its agenda-setting, or publishing and thematizing function alone (see, e.g., [27,28])—making it one of the most relevant players in the sustainability debate. This will be discussed in more detail in the next section.

# 3. Media (and) Sustainability

Media are dual goods, meaning they are economic and cultural goods at the same time. They can therefore act as both economic and value-generating systems. As such, they pursue economic and socially relevant goals and (should) fulfill socially relevant and economic functions in equal measure [29,30].

As cultural goods, media (should) fulfill several functions that establish them as fundamental actors for policy and society since, for example, the political functions of media are essential for the functioning of a democratic society [31]. Accordingly, media are responsible not only for the generation of the public sphere but (should) also meet their information, explanatory, and transparency function through control and critique; as well as activate and motivate citizens for political participation and create awareness for underrepresented issues [32–34]. As cultural goods, media should then be understood as a value- and meaning-generating system that sets norms and values for social orientation [35]. Moreover, media can also be interpreted as a reality-generating system since they produce media products and offer them for reception and consumption, which recipients use to construct their own reality [36]. Accordingly, as "constructors of social reality" [34] (p. 40), media (companies) are subject to a double responsibility: as economic actors, they bear a responsibility for their economic actions—the same as every other company, too. As socially relevant actors, they bear additional responsibility for how they represent reality, perform their watchdog role, and raise (or not) criticism and (ethical) concerns in their media products [37,38]. Therefore, the social responsibility of media companies is not primarily their physical footprint but the "brain print" they leave on their audience.

The idea of media being able to leave a "brain print" on recipients is based on the well-known agenda-setting theory [27]. This theory describes the mass media's topic-setting function. The more prominently and frequently mass media report on an issue, the more (socially) relevant it appears to the audience. In other words: although media cannot determine what to think, they can set people's minds on what to think about [39].

This is true not only for political issues but also for sustainability-related issues. For example, reference [40] has shown that community concern about environmental issues grows as media attention on and reporting about these issues grows. Media reporting and a consequence of media pressure can also affect action taken or the willingness to set some measures [41].

This decisive role of mass media in the sustainability debate has already been recognized also by the United Nations themselves, who created the so-called SDG Media Compact in 2018 [42]. The SDG Media Compact was established to encourage news and entertainment media (companies) to use their potential as a voice to the public to

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accelerate the transition towards sustainable development and the achievement of the 17 SDGs through their media products and offerings. This initiative underlines media's fundamental publishing function since if media do not communicate about certain issues, those issues—so to speak—are practically non-existent for the large audience, as Luhmann already recognized in 1989: "Fish may die, or human beings swimming in lakes and rivers may cause illnesses, no more oil may come from the pumps, and average temperatures may rise or fall, but as long as this is not communicated it does not have any effect on society" [43] (pp. 28–29).

As communicators of, about, and for sustainability, media can break down high complex sustainability issues and scientific jargon for laypeople so they can understand. Indeed, most people's knowledge about sustainability issues is not based on direct experience but comes from information that has reached them through mass media [3]. Accordingly, how media report on sustainability issues is a central factor in the response of the public to and the perception of these issues. What is perceived as a risk, a crisis, a real threat, or a catastrophe by the audience depends mainly on how media have reported these particular issues [7,8]. Media can indeed act as a filter through which "information [can be] amplified, distorted, muted, or half-truthed before reaching the public" [44] (p. 4). Thus, not only whether media report (or not) on some issues, but especially how they report on them should be a major factor when investigating media reporting on sustainability and its related issues. This is where the present study comes in, by investigating how media companies communicate sustainability and its related issues through their media products.

## 4. Previous Research

Previous research that examines the sustainability discourse in the media or how media construct the sustainability discourse through their products is relatively rare. This is because—as mentioned above—sustainability is a rather abstract, complex, and long-term concept, which is difficult to communicate in concrete terms to a larger audience. One study that analyzed the sustainability debate in the media was that by [45], who investigated how different actors try to (de-)legitimize neoliberal approaches to economic policy in the media on the grounds that these approaches are (not) environmentally sustainable. Otherwise, numerous studies analyze rather concrete phenomena and issues related to sustainability in the media [17,46–69]. One of the first studies in this direction was by [46], who examined the environmental coverage of the major Finnish daily paper Helsingin Sanomat and showed how public concern about the environment increased in parallel with news coverage about the environment and its threats, confirming the link between media coverage and audience attention and concerns for certain issues. These results were further confirmed by more recent studies [47]. However, the most significant research attention among sustainability issues has been paid to the climate change and global warming debate. Accordingly, there are plenty of studies examining what and how media report on climate change and environmental issues (see, e.g., [48–54]), often with a specific national focus (e.g., [17,55,56]).

For example, reference [48] examined the role that the media plays in constructing norms and ideas in society to understand how media coverage can construct global warming and other environmental issues at a societal level. Their results show how industry and advertising lobbying significantly influence media coverage and its framing of sustainability-related issues, which are then adopted by the audience. The same result was also found by [49], who analyzed the news coverage of climate change and global warming in forty English-language newspapers of seventeen different countries on five continents. Other studies have also used content analysis to show how the framing, representation, and thematization of environmental issues has experienced a shift from the scientific to the political discourse [50] and what policy implications such media coverage implies and demands [51,52].

Some previous research also addresses the question of how such issues are (or should be) communicated, explaining, for example, the correlation between the characteristic of

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news reporting and readers' assessments of the certainty of scientific findings regarding global warming [53]. Another shows the need to communicate sustainability issues in a way that it is relevant to the audience while explaining coping strategies that add value to society as a whole [54]. In this context, framing studies are most prominent. These examine how the climate change debate, as well as some related individual phenomena, are framed in and by the media, i.e., are constructed in the public sphere [57,58], to understand why and which frames and definitions become hegemonic, while others remain marginal [59]. In this context, the most common frames are scientific, economic, and environmental frames [60]. However, the frames of sustainability-related issues (may) differ from country to country [61] as they are related to a strong politicization of the debate that is experienced and detected across borders [62–65].

The common denominator of these studies is the emphasis on the central role of the media in shaping public opinion [66–68] by being a key source of information about climate change for most people [67]. Accordingly, the effective framing of such issues is not only essential for collective opinion formation, but also plays a key role in the relationship between environmental policy and communication developments [69] and in the promotion of climate change action and sustainable measures to the public [66–68].

In this context, there are also few studies focusing on emotions. For example, reference [70] investigates which emotions media rely on when reporting climate change, while [71] shows which emotions can be evoked in the audience using visual information.

The study at hand builds on both areas of previous research. It complements them by using rhetorical text analysis to understand how media (companies) communicate sustainability and related issues through their products and what linguistic techniques are used to try to steer the audience towards sustainable development. This is of fundamental relevance since previous research largely showed the connection between the way media communicate some issues and public opinion formation. Furthermore, the present study focuses on media content produced and disseminated via television. This is in line with the relevance of television as the most important medium for communicating sustainability-related information to laypeople [12], which, however, seems to have been overlooked by previous studies.

# 5. Materials and Methods

The present study aims to analyze and understand how media (companies) take on their responsibility as key communicators *of*, *about*, and *for* sustainability and thus how they communicate and construct sustainability-related reality through their media products. To meet this purpose, sustainability-related content produced and broadcasted by the two market-leading commercial media companies in Germany—*RTL* Group and *ProSiebenSat1* Group—was analyzed.

Germany's media market is one of the largest in Europe, with around 80 million televisions in private households among a population of around 83.1 million [72,73]. When including the neighboring German-speaking countries Austria and Switzerland, and German-speaking minorities in other EU countries, the German-speaking market covers approximately 130 million people. This is the largest monolingual area in the EU [74]. This fact, along with the notion that, primarily thanks to spill-over effects, language shapes media consumption by forming language regions as markets (see, among others, [75]), established Germany as a suitable choice for the present study.

The two media groups that were chosen for the analysis—*RTL* and *ProSiebenSat1*—have been market leaders in the free TV segment for years—thus confirming the popularity and relevance of their content: in 2020, *RTL* achieved a market share of 27.6% [76], while *ProSiebenSat1* was close behind with 27.2% [77] (p. 20).

For the period last quartal 2020 and first quartal 2021, the *RTL* Group and the *ProSieben-Sat1* Group achieved a market share in Germany's free TV segment of 21.9% and 21.0%, respectively. That made them the most successful commercial media groups in that segment [78]. Both media groups also broadcasted a special issue week on sustainability

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during that period. From 7 to 13 September 2020, the RTL Group dedicated its programs to the topic of sustainability, with a focus on nutrition [79]. Referring to the special issue week, co-managing director Stephan Schäfer declared: "With our sustainability week, we would like to make our contribution to a sustainable and conscious future [ . . . ]. With comprehensive reporting on-air, online, social as well as on the intranet, we will examine and classify the topic from all angles and show our viewers, users, and employees practical tips about how everyone can make a contribution. Because only together we can make the world a little more sustainable." ([80], translated by the author).

From 15 to 19 March 2021 the *ProSiebenSat1* Group also dedicated its programs to sustainability, with a particular focus on climate protection and the environment [81]. Mark Land, deputy head of *SAT.1*, stated: "[...] In our first 'SAT.1 Forest-Record Week' we are orchestrating environmental protection and sustainability topics with exciting interviews, background reports, and entertaining shows across the entire program. Then on Friday, we'll look live with Luke Mockridge at what we've been able to achieve with the support of our viewers and are sure that together we'll set an important signal for the future." ([82], translated by the author).

Accordingly, both broadcasting groups self-declared the willingness to make a contribution to sustainable development with and through their broadcasted media content. Therefore, that content seems appropriate for the aim of the here presented study. Thus, all media content published and broadcasted by the *RTL* and the *ProSiebenSat1* Group in the framework of their sustainability weeks was collected. The sample was not put together based on specific selection criteria. All the media content included in the sample was either broadcasted (video material) or published online (articles) by one of the two media groups during their special issue weeks.

The sample thus included n = 50 online articles and n = 89 videos, lasting 601 min (RTL Group: 31 articles and 42 videos; ProSiebenSat1 Group: 19 articles and 47 videos).

In order to analyze not only what the two media groups communicate concerning sustainability but also how they communicate it, the content analysis was conducted in two steps. First, the entire sample material was analyzed by means of qualitative content analysis, following an inductive approach [83]. This type of content analysis allows a systematic, rule-based, and theory-driven analysis of content. The inductive approach enables the forming of categories directly from the research material and does not distort the essence of the material. The following of an inductive approach requires the definition of specific content analysis units and rules. For this purpose, the coding unit, the context unit, and the recording unit need to be defined first. The coding unit defines the smallest component of the material that can be coded, thus also defining the sensibility of the analysis [83]. In the present research, the coding unit was defined as a meaningful phrase. The respective online article or video was then defined as the context unit, which specifies the background for the coding decision. By definition, the recording unit is linked to the entire text material since the inductive category formation happens across the entire text material [83]. Therefore, in this case, it is defined as all articles and videos of the sample. Furthermore, the inductive approach requires the formulation of a category definition and a level of abstraction. The category definition serves as a selection criterion for choosing the text passages in the material to which categories can be formed inductively [83]. In this case, the category definition was formulated as follows: "explicit mentions of specific (sustainability-related) topics addressed in the article/video". Finally, the level of abstraction determines the level of generalizability of the category names, i.e., the level of generalization of the paraphrase [83] (see Table A1 in the Appendix A).

Through this categorization, the research material was clustered by topic, and the question of "what" media companies communicate concerning sustainability could be answered. The material was further analyzed in a second step by rhetoric text analysis.

Rhetoric is the way language is used in order to persuade an audience. Rhetorical text analysis is then used for media analysis as a specific type of discourse analysis. By using this method, rhetoric's specific rules and goals are not used for text production but

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for text analysis. Here it is less about "what" is communicated and more about "how". For this, rhetoric's modes of persuasion—*logos*, *ethos*, *pathos*—are used as analysis tools to understand the intention of the texts, i.e., what kind of appeal media companies formulate through their media products to the audience [21].

The logical appeal *logos* unfolds in three different techniques and styles aiming at achieving an agreement on a "common sense" between communicator and listener:

- 1. The informative *docere* (to instruct). This technique is characterized by emotion-free information about an issue and wants to signalize objectivity.
- 2. The argumentative *probare* (to prove). This technique is used to support the credibility of the narration through factual evidence, such as scientific data. It is used to serve the underlying argumentation, which should be referential and logical.
- 3. The logical–ethical *monere* (to warn). This technique intends to educate the recipients on a moral level by appealing to their rationality [21].

The ethical mode of persuasion *ethos* is also divided into two components: the so-called purposeful technique *conciliare* (to conciliate) and the so-called purposeless component *delectare* (to delight). The former is about persuading the recipients. It is considered the purposeful technique of the ethical appeal *ethos*, as the persuasion aim is external to the text, such as steering the recipient's behavior in a particular direction through the text. On the contrary, the purposeless technique *delectare* is used solely for the enjoyment and entertainment of the recipients [21,84].

The passionate, emotional appeal *pathos* has one style called *movere* (to move). This style does not express a static sensation referred to as a habitus or a state of mind, such as the mild appeal ethos; rather, it expresses strong emotions such as anger or hatred. The characteristic of this technique is a dramatic style [21].

These three methods of persuasion, including their different styles and techniques, serve as a basis for the empirical part by detecting them in the media content selected.

The coding, context, and recording unit remained the same as explained above for the qualitative content analysis. The category definition was taken directly from the just explained theoretical definition provided by [21].

This way, the question of how media companies communicate sustainability-related issues to contribute to sustainable development can be answered.

For both steps of the media analysis, the software *NVivo* [85] was used since it enables the organization and coding of both text and audio–visual data. This way, even the video material could be encoded directly using the software without the need for transcription. Both qualitative content and rhetoric analysis was performed by the author. Reliability was randomly tested through an intercoder agreement. It is important to mention here that qualitative analysis is not about achieving a statistically necessary standard coefficient. Although qualitative analysis aims to achieve the highest possible level of agreement between independent coders, the intercoder agreement is rather intended to achieve a practical improvement in coding quality.

#### 6. Results

In order to understand how media companies communicate sustainability and its related issues and thus construct sustainability-related reality through their media products, a media content analysis was conducted. In a first step, this meant analyzing the media content produced and broadcasted by the *RTL* and the *ProSiebenSat1* Group through qualitative content analysis [83] to answer what they communicate in relation to sustainability.

In this step, the media content was coded following an inductive approach. This way, all facets of the sustainability discourse can be identified without assigning the variety of topics to predefined categories immediately. Accordingly, the category development took place in two successive steps. The text passages were first paraphrased and then subsumed in a main category (see Table A1 in the Appendix A). Multiple coding within a context unit (i.e., an article, a video) was allowed, to detect the importance of a topic across all cases.

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Thus, seventeen categories were developed, representing the thematic breadth communicated by the media companies concerning sustainability. Results show that most media sustainability-related content addresses food issues (31%), followed by issues regarding resources (15%), and the environment (12%), in general (Figure 1).

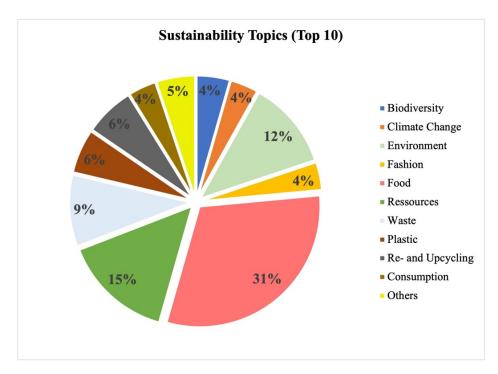


Figure 1. Top 10 Sustainability Issues.

However, how do they communicate these issues? What kind of appeals were used to communicate with the audience? Step two of the media analysis dealt with these questions by analyzing the media content using rhetoric text analysis. Here, text passages are coded in relation to the three methods of persuasion—*logos*, *ethos*, *pathos*—by identifying their different styles and techniques, as explained above (Table 1).

Table 1. Rhetoric Text Analysis.

Text Passage *	Rhetoric Technique	Method of Persuasion	
"Dirty water must be treated to become safe drinking water. Filters and membrane processes remove even the smallest particles from the water. The slow sand filter process is considered an environmentally friendly and chemical-free process."	Docere	Logos	
"According to research published in the scientific journal <i>Proceedings of the National Academy of Science</i> , regular meat consumption increases the risk of heart attack, stroke, and cancer"	Probare		
"Buy only what you really need so that nothing has to be thrown away.  In the supermarket, also look for food that has almost reached its best-before date. They are still in perfect condition and are not thrown away later."	Monere		
"Because: each of us has to buy food—and each of us can influence how sustainably this is done with our purchasing behavior."	Conciliare	- Ethos	
"Fair fashion has long said goodbye to its dusty eco-image and can no longer be distinguished from conventional mass-produced textiles in terms of style."	Delectare		
"Shocking numbers: that is how much commercial kitchens throw away every day. It almost makes you lose your appetite. It would be very easy to stop this madness."	Movere	Pathos	
*T , , 1, 11 d d			

<sup>\*</sup> Text passages are translated by the author.

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Results show that media primarily appeals to the audience's reason by communicating sustainability-related issues logically and objectively. Accordingly, the method of persuasion most used while communicating sustainability-related issues is the informative, factual logos appeal (76%). The ethical appeal *ethos* could be identified in 22% of the media content analyzed, while the emotional *pathos* scarcely occurred (2%) (Figure 2).

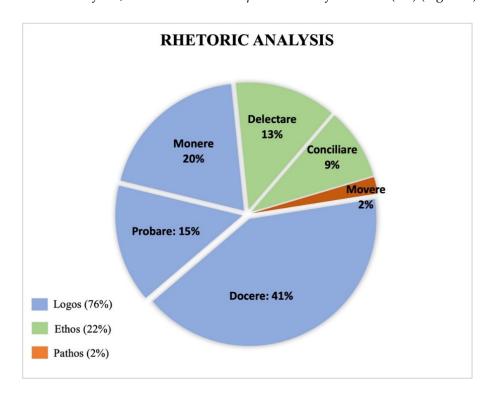


Figure 2. Rhetoric Text Analysis: Styles and Techniques.

As shown in Figure 2, the mild affective direction of action *pathos* is used more in its purposeless component *delectare*. This predominant purposeless communication regarding sustainability issues can be traced back to the tendency to communicate only the so-called "sunshine perspective" of sustainability in the public sphere—i.e., to tell a story that focuses only on the positive aspects and impacts of sustainability, such as the creation of new green jobs, the (economic) benefits of renewable energies, and the technological and economic progress coming with the turn towards sustainable development [1]. Such a narrative does not need to use appeals that aim to steer the recipient's behavior in a specific direction—such as *conciliare* or *movere*—but can be "purposelessly" communicated for the audience's entertainment.

It should be mentioned here that rhetoric appeals and styles do not differ substantially between the two media groups (RTL Group: Logos 79%, Ethos 20%, Pathos 2%; ProSieben-Sat1 Group: Logos 73%, Ethos 24%, Pathos 2%). Both the *RTL* and the *ProSiebenSat1* Group rely on the logical method of persuasion *logos*. Some differences can be identified in how the different methods of persuasion are applied while communicating the different topics. Although all topics are communicated primarily through the logical appeal *logos*, there are differences in the use of *ethos* and *pathos*.

For example, issues regarding the environment are communicated somewhat balanced by appealing to the audience's logic and ethics (55% vs. 45%, respectively) but without appealing to the recipients' emotions (pathos = 0%). Issues regarding the "food" topic, on the other hand, are mainly communicated through logos (68%). However, the appeal to the audience's emotions and the dramatic style movere can also be identified (10%). The same applies to the "waste" topic, where pathos can be found in 6% of the analyzed content. Issues regarding "resources" and "plastic", on the other hand, are communicated almost exclusively in a factual manner and through the rational appeal logos (Figure 3).

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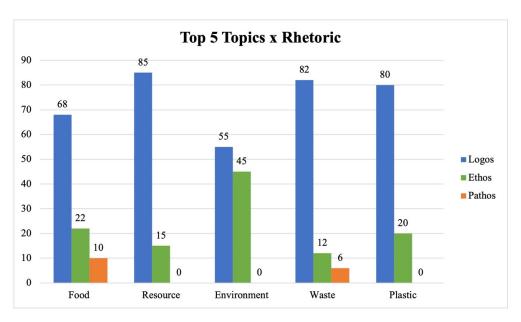


Figure 3. Rhetoric Styles in TOP 5 Topics.

As already explained in the *research design* section, the method of persuasion *logos* unfolds in three different techniques and styles: *docere*, *probare*, and *monere*. Since all topics are predominantly communicated through this appeal, it is worth looking into the coding to understand how it is applied in the media content.

The results clearly indicate that the most used technique is *docere* (Figures 2 and 4). This means media communicate emotionlessly about precise facts and thus try to ensure objectivity in their information. However, the analysis also shows that when communicating topics concerning the environment and related to plastic, the predominant style used is *monere* (Figure 4). This style is described as "logical–ethical" [21], as the technique is used to warn and educate recipients by appealing to their reason. This finding shifts the perspective slightly. The media discourse around environmental issues and the plastic problem is, thus, not exclusively constructed and communicated by bare facts, but media try to work here with a specific appeal to persuade the public to do the right thing and direct them towards (more) reasonable practices.

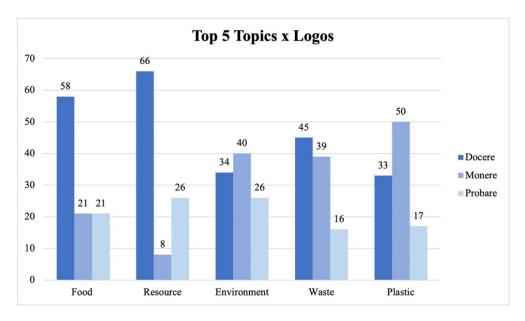


Figure 4. Logs Techniques in TOP 5 Topics.

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#### 7. Discussion

The study here aimed to understand how media companies perceive and fulfill their responsibility as communicators of, about, and for sustainability by analyzing what and how they communicate sustainability. The content analysis showed that the media companies analyzed as case studies communicate sustainability mainly concerning food, resources, waste, and plastic issues, and thus construct and link the sustainability discourse to those issues in the public sphere. If we understand their communication as an attempt to contribute with their media products towards sustainable development, the analysis also showed that the two media groups RTL and ProSiebenSat1 try to contribute in relation to seven out of the seventeen SDGs. By mainly communicating sustainability issues related to food, the media groups address SDG#2 "Zero Hunger". SDG#6 "Clean Water and Sanitation" and SDG#7 "Affordable and Clean Energy" are addressed by communicating natural and energy resources issues. The topics "Consumption", "Re- and Upcycling", "Waste", and "Plastic" can then be interpreted as the attempt of media companies to address SDG#12 "Responsible Consumption and Production". SDG#13 "Climate Action", as well as SDG#14 "Life below water" and SDG#15 "Life on Land" were mainly addressed by the media companies in the topic clusters "Environment", "Climate Change", and "Biodiversity". These findings broaden the current state of research in so far that they allow further insight into which topics are associated with sustainability by and in the media, thus enabling an additional understanding of how media construct and position the sustainability debate in the public sphere. Moreover, the results provide a first insight into the thematic focusing of commercial TV stations concerning sustainability, which remained overlooked by previous research, despite the essential role of television in disseminating sustainability-related information among laypeople.

The second step of the media content analysis dealt with how media (companies) communicate sustainability through their products and investigated what rhetoric techniques were used to steer the audience in a specific direction through appeals. The analysis has shown that media (companies) communicate through their media products predominantly with logical appeals and arguments. Accordingly, it can be stated that sustainability communication remains in the area of "Communication of Sustainability" [13], as—primarily through the rhetoric style *monere*—sustainability communication is rather conducted with an educational tone. However, this way of communicating sustainability and related issues can hide the risk of moralizing the discourse [86–88]. In fact, if the educational appeal is overused, the audience can experience the feeling of being judged. This can be problematic as it can induce an adverse response resulting in a self-protection behavior, which in turn causes a decrease in the willingness to take action and, therefore, inactivity [89]. This, of course, would be counterproductive to the process of sustainable development, as it rather requires collective action. This aspect needs to be addressed and taken into consideration by media producers in future productions thematizing sustainability and its related issues so that the desired and hoped-for effect of media reporting can be achieved not only in the sense of information transfer or the possibility of shaping public opinion but, in particular, by mobilization of the audience [16,18] in line with the SDGs and as suggested by the SDG Media Compact.

In addition, the tendency to narrate the "sunshine perspective" of sustainability for entertainment purposes should also be addressed. This is signalized in the analysis by the rhetorical style *delectare*. This may in part be traced back to the fact that the two media groups analyzed—*RTL* and *ProSiebenSat1*—are more likely to be classified as entertainment media and thus produce and broadcast media content that should serve as entertainment. Nonetheless, this tendency to communicate only the "sunny side" of sustainability seems to fall short as it tells only one side of the story. After all, the turn towards sustainable development also means the necessity for radical changes that require sacrifices and renunciation on a personal level and the turn away from current (economic) paradigms, implying the communication of unpleasant, difficult news and messages. Accordingly, disclosing this "rainy side" of sustainability in media products is advisable to position

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oneself as a trustworthy medium and communicator *of, about,* and *for* sustainability. Here, also, increased use of strong emotional appeals—such as pathos and movere—is advisable since "communication and behavior are interrelated, and behavior cannot change without proper communication" [14].

# 8. Limitations

Although the study here contributes to media sustainability and sustainability communication, investigating the role of media companies in achieving sustainable development and the SDGs, it presents some limitations. The first is the sample. Further research should expand the sample, both in terms of media groups and media content. The analysis of the media content produced and broadcasted by two media groups in the framework of two special issue weeks cannot offer representative results. The second limitation is the special issue weeks themselves. The fact that the media content analyzed was part of a special issue week somewhat shaped the answer to "what" is communicated in relation to sustainability. This is since the special issue weeks had a thematic focus: nutrition and environment. Nevertheless, this study provides insight into the variety of sub-themes that are linked to sustainability regarding these two main topics. Further studies should not limit the content analysis to the framework of special main topics to offer a more comprehensive picture.

The last limitation that needs to be addressed is the media content analysis concerning the video material. The video material was treated as text material for content analysis; no visual analysis was conducted. This should be included in further research, as it is assumed that visual (sustainability) communication works with other appeals to reach the audience on a different level, i.e., on the emotional instead of on the rational level.

#### 9. Conclusions

The present study aims to analyze and understand how media (companies) take responsibility as key communicators of, about, and for sustainability by answering the research question: "How do media companies communicate and thus construct the sustainability discourse through their products?".

By answering the question, it could be shown how the rhetorical text analysis is a fruitful way to analyze media content concerning the sustainability discourse. Furthermore, it offers a suitable alternative and complement to framing and qualitative content analysis studies, thus advancing media content analysis and sustainability communication. In addition, the study also shows how the method applied can represent an alternative and serve as a complement for communication and message-type analysis conducted in other fields, where the use of different message types (emotional vs. logical) and different appeals are already being investigated without falling back on message framing, such as in advertising (see, as an example, [90–92]).

The analysis also shows that the media's potential to speak to the public to achieve sustainable development is not yet fully exploited. The observed media practice of communicating sustainability almost exclusively through rational appeals should be at least partially reconsidered in future programming and sustainability communicators. Because of the existing link between the appeal on emotions and the possibility for behavioral change (see as an example [93–97]), media managers should pay attention to this relationship in their production and thus incorporate ethos and pathos appeals more strongly if they want to contribute to sustainable development in the sense of the SDG Media Compact. Accordingly, the presented analysis also leaves room for discussion regarding the self-perceived and attributed responsibility of the leading media groups in their role as communicators of, about, and for sustainability in stimulating societal change towards sustainable development. The analysis shows that the two media groups are aware of their role as communicators to the public and, thus, in a way as shaper of public opinion since they are trying to use their potential as a mouthpiece to the public to explain, engage, and move towards sustainable development through their media products and offerings, as encouraged and suggested by the SDG Media Compact.

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Of course, the question of how to best communicate sustainability through media products cannot be answered solely through this preliminary study. However, the study provides enough starting points for discussion and further research in relation to the use of different rhetoric styles while communicating complex issues such as sustainability. In particular, the link between rhetoric appeal and behavioral response should be further investigated so that effective and adequate sustainability communication can facilitate sustainable development.

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# Appendix A

**Table A1.** Inductive Category Development.

Text Passage *	Paraphrase	Main Category
"Biodiversity forms the basis of our life. It is essential to preserve biodiversity and species diversity. The two terms are often used as synonyms. However, the term biodiversity includes much more than species diversity: it is about the interrelationship of organism and the environment."	Biodiversity is more than diversity of species	Biodiversity
"The greenest building in Europe. We present you sustainable architecture with climate protection."	Green architecture with climate protection	Buildings
"What are the causes and risks of climate change? How does the greenhouse effect work? What are simple tricks everyone can apply to help protect the climate? Here you can find out more!"	Causes and risks of climate change and what can be done about it	Climate Change
"Germans buy on average 60 clothing articles every year—even if they never wear around 40 percent of them. What do the wardrobeof our celebrities look like?"	Consumption practices of German celebrities	Consumption
"Sustainable tips from Grandma Tita: Saving water and money in the household it's easy with these tricks."	How to save money and water	Cost saving
"The small Danish Island of Ærø with its 4000 inhabitants is a role model for environmental protection and energy transition. One particularly advanced feature is that environmental protection is a regular subject on the school timetable."	Environmental protection as regular subject at school	Education
"Things are very bad for the green lung—our forest! In Germany alone, over 120,000 hectares of forest have died since 2018. Fires, storms, drought, and parasites continue to threaten the forest."	Life-threatening conditions for the forest	Environment
"The old saying 'you are what you eat' can be well applied to our own carbon footprint. Our diet is an important factor in determining how many climate-damaging greenhouse gases we produce in our daily lives and how large our ecological footprint is."	Food choices have an impact on our carbon footprint	Food
"On Friday, there will be an unusual experiment: Singer Wincent Weiss will compete on a trip from Hamburg to Mannheim against a fan driving from Dresden to Cologne. Both will complete the 570-km route from north to south and from east to west in e-cars, showing how 'fit' Germany is when it comes to e-mobility."	Challenge to examine Germany's e-mobility development	Mobility

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Table A1. Cont.

Text Passage *	Paraphrase	Main Category
"On supermarket shelves, huge numbers of products are packaged in plastic. But there almost always alternatives—sometimes they are only a little bit hidden."	Plastic packages in supermarkets and its alternatives	Plastic
"Pirmin Berille has committed himself to reducing his ecological footprint. Since 2019, he has been living with his two children in a yurt made largely of upcycled material."	Alternative lifestyle through re- and upcycling	Re- and Upcycling
"We consume an average of 130 L of water per day per person in our households. Quite a lot if you imagine this amount filled into bottles. Only about 3 to 4% of it is drunk or used for cooking. Instead, most of the water flows through our tap when we shower or is used for flushing the toilet. However, if you change a few of your habits, you can easily reduce your water consumption."	How to reduce water waste and consumption	Resources
"This is how harvesters are ripped off in Germany. 'Modern slavery' for our cheap fruit and vegetables. Harvesters were bitterly disappointed in search of a better life."	Exploitation of cheap workers	Social Sustainability
"Everyone is talking about sustainability—but what does it actually mean? In a classic sense, sustainability means that we should not consume more resources than can be regenerated or provided."	Explanation of the term sustainability	Sustainability
"The list of problems caused by mass tourism is endless—let's tackle them! 5 pro-tips for sustainable travel that everyone can implement!"	Mass tourism problems and possible solutions	Travel
"Around 12 million tons of food are thrown away in Germany every year—more than half of it in private households. Yet around 40 percent of this food would be still edible."	Food is thrown away even thought is still edible	Waste

<sup>\*</sup> Text passages are translated by the author.

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