



Environment, Science and Risk Communication Working Group

Abstracts of papers accepted for presentation in the Online Conference Papers of the
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Framing Analysis of GhanaWeb's coverage of Deforestation in Ghana within the context of Sustainable Development.

Authors

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Abstract

This paper analyzed the role of the media in improving environmental management and examining sustainable development in Ghana. This study aims to enhance the issue-attention cycle and the framing theory and create a theoretic basis for ecologically sustainable development news coverage. Also, the paper examined the media's role in improving climate governance and monitored sustainable development in Ghana, as well as explored the relationship between the government of Ghana and media coverage. With the proliferation in online news consumption, *GhanaWeb* has risen to become generally the third most visited web page and the leading website for online news stories in Ghana (Alexa, 2019). This paper conducted a quantitative content analysis of *GhanaWeb*'s coverage of deforestation from January 1st, 2001 to December 31st, 2018. This study selected 2001 to 2018 as the timeframe for the study because according to Mongabay (2020) the highest yearly loss of Ghana's primary tree cover and forest cover reached 7.4% representing 1,021,659 hectares (ha) within that period. That has amounted to causing deforestation in the sub-Saharan African country.

This study employed the issue-attention cycle and framing theory, to analyze the frames, news sources, and media slants (positive, negative, neutral) that were used in deforestation coverage, from 2001 to 2018, by *GhanaWeb*, a news portal. The findings showed that media coverage of deforestation in *GhanaWeb* displays an issue-attention cycle. The paper revealed that most of the deforestation coverage had a positive slant, mostly used frames *suggest remedies* and *define problems*, often cited sources from government officials and associations, NGOs, and the lay public. Also, the use of the *suggest remedies* frame highly correlated with the citing of officials and associations as news sources. The action initiative frame meaningfully correlated with the citing of NGOs and the lay public. The science education frame is highly correlated with the citing of experts and scholars.

Deforestation has become an international political matter, upsetting different countries with one goal to reach sustainability. The higher deforestation affects Ghana, the greater environmental degradation it spreads through the country and neighboring nations too. Deforestation is not only an environmental problem for a specific country but also affects the global space as Ghana is the second top producer in Africa of cocoa after Côte d'Ivoire after as it produced about 812 thousand tons of cocoa beans in 2018/2019 (Statista, 2020). Therefore deforestation will affect agricultural production and hinder sustainable development. Hence, this impedes the accomplishment of the UN's SDGs and affects Ghana's economy and humanity. So, it is prudent for the Ghanaian government to take urgent steps both locally and internationally collaborations to curb deforestation to achieve sustainable development.

Submission ID

90

Overmoralization of (m)eating behavior?

Authors

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Abstract

(Theoretical) Background

Sustainability seems to be a highly complex issue that requires comprehensiveness, transparency, proximity and balance to avoid being (ab)used by mainly corporates to replace what was innovation or future orientation a decade ago. On an individual level, it gets even harder to deal with sustainability as “buzz word”, bringing in a certain degree of morality in everyday life choices regarding transportation and mobility, food or retail. Thus, from a theoretical perspective, we are interested in the degree of morality in sustainability communication in general and in social practices in particular.

Study

In recent years, there has been growing critical debate about meat consumption due to health risks, environmental concerns and economic aspects. Being one of the most energy-intensive and ecologically heavy foods, meat products are said to be highly unsustainable (Dagevos & Voordouw, 2013). On the contrary, the need for sustainable food choices has become more known to consumers, going hand in hand with organizations increasingly displaying more information on sustainability as core value in their production and processes (Wognuma, Bremmers, Trienekens, Vorst, & Bloemhof, 2011).

Furthermore, increasing information in the media and particularly in the social media about food trends and, furthermore, ecological costs etc., influence individual habits (Bellotti & Panzone, 2015; Verbeke, 2008) and more sustainable consumption (Fischer et al., 2017; Krause, 2009). With the empirical study at hand, we seek to better understand sustainability as moral compass, influencing eating behaviour and mainly meat or plant-based food choices. The methodological background is that narratives represent storied ways of those perceptions, meaning making and communicating, thus, have always been a key feature in media and communication research (Bryman, 2016; Weder et al., 2019b).

Convenience samples of individuals aged between 20 and 40 years in Austria (n = 20), Australia (n = 10) and Indonesia (n = 5) were interviewed in face-to-face settings, in telephone interviews or online-sessions depending on current Covid19-restrictions.

Findings & Outlook

The two major findings, that we would like to put up for discussion at the conference are that (1) sustainability apparently plays a minor role in food choices; furthermore, even if climate change is perceived as threat, thinking about the horrors of industrial livestock farming, animal rights, pollution and waste, it does not directly influence people to change from a meat- to a plant-based diet; (2) individual food choices and changes from meat consumption to veganism or becoming vegetarian are mainly influenced by being exposed to new ideas within the closer network of family and friends, rather than media or key events. Even more interesting for a discussion at the conference is that mainly accessibility as well as general cooking and eating practices (food is celebration vs. food is necessary for survival) influence meat- or plant-based food choices.

Submission ID

268

The evolution of the sustainability story in corporate communication

Authors

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Abstract

The United Nations state that "the world is making progress towards Goal 7, with encouraging signs that energy is becoming more sustainable and widely available" (UN, 2021). In this presentation, the authors carve out the central role of strategic communication for the emergence and evolution of sustainable development as a narrative of the future in the communication of the 15 biggest global energy corporations over the past 30 years.

Narrative approaches seem to be fruitful to grasp the largely amorphous concept of sustainability that gets bent into many different shapes in organizations and the wider public (Author et al., 2019a; Dimitrov, 2018). We mainly refer to Frank (2017), who explains that "if we can change narratives, we change something fundamental in the moral and political constitution of the society; thus, it is in narrative that new visions of sustainable living begin" (Frank, 2017, p. 312).

Thus, from a critical and constructivist communication perspective, we assume that over a certain period of time, there is a transition in corporate reporting from the ‘old story’ of climate change, telling us about human mastery over nature, ecological destruction, growth, individual consumerism and related struggle and resource scarcity to a new story of sustainability, of inter-being, co-creation of ecocultural identity, inter-being and harmony as well as post-growth. As guideposts to follow this process of transition or evolution of the new narrative we chose the characteristics of evolution: variation, inheritance, time, and adaption (Darwin, 2017; Pirlet, 2005).

With these characteristics, we analyzed 30 years of corporate “Environment(al) Reports” (1990-2000), “CSR Reports” (2000-2015) and “Sustainability Reports” (since 2015) of internationally operating *energy companies* (n = 15). This explorative content analysis (Bryman, 2016; Mayring 2014) supports the theory of the evolution of sustainable development as new narrative in corporate communication. In the 1970ies/80ies until the early 90ies, corporate reporting was characterized by debates about environmental problems, global warming and climate change – and possible solutions. “Corporate Citizenship”, “Environmental Responsibility” and “Future Generations” were the key words. In the second phase, from the mid 1990es to the introduction of the SDGs in 2015, a stronger political and mainly economic discourse started and discussions about “non sustainable developments”, globalization, and the concept of sustainable development found their way in corporate CSR strategies and related communication. The key terminology used was “people, planet and profit”, “public-private partnerships” and “doing better than others”. Today, we are in the third phase, the phase of radical social change and crisis, calling for new approaches dealing with anthropogenic environment problems – and with improving humanities ability to coexist in the world: sustainable development is seen as pathway of innovation, progress, transformation and even “re-birth”, “re-definition”.

The talk finishes by discussing the potential of the ‘evolutionary’ approach and the future of sustainability as moral framework for mainly SDG #7-related activities and communication .

Submission ID

269

The network agenda-setting power of legacy media: A case study of WeChat public accounts’ coverage of the Trans Mountain pipeline controversy

Authors

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Abstract

Over the past decade, concerns about resource extraction have emerged as a central part of Canadian political contestation, with the Trans Mountain pipeline controversy being a recent case that has caught both domestic and overseas media attention. Focusing on this high-profile case, this study aims to enhance our understanding of the communication dynamics surrounding Canada's fossil fuel industry by attending to a rarely studied form of community media: WeChat public accounts targeting Chinese diasporas currently living in Canada.

The news stories in question are those released via WeChat's "public account" (also called "official account") function, which imitates RSS readers by allowing WeChat users to subscribe to different feeds. For Chinese diasporas living in major Canadian metropolises, public accounts such as "52van", "Toronto Life", and "Calgary Life" have been their go-to sources for local information. Although most messages published by such public accounts are lifestyle related content (e.g., real estate ads, restaurant discounts, upcoming local public activities, etc.), they have regularly reached out to the political domain by publishing content addressing Canada's current affairs. Thus, these public accounts have taken the role of community media for many young, net-savvy Chinese diasporas in Canada. This unique segment of the Canadian media system has not been studied to date.

This study takes on the task by looking at (1) how WeChat public accounts framed the Trans Mountain pipeline controversy and (2) how their narratives interacted with Canadian legacy media. Using "Sougou Weixin" (<https://weixin.sogou.com/>), a Chinese search engine indexing WeChat posts, a total of 389 news items mentioning "Trans Mountain pipeline" were collected. The data were then analyzed following a mixed-methods framework combining quantitative content analysis and qualitative discourse analysis.

The analysis revealed an overall negative toward environmental groups and Indigenous activists, which, to a large extent, was due to WeChat public accounts' sole dependence on Canadian mainstream media's dominant frames on the controversy. Thus, Canadian mainstream media's centre-right stances on climate change and energy transition have set the news agenda of these public accounts. In light of this finding, the study concludes by emphasizing the importance of (1) adopting transnational perspectives during environmental movements and (2) developing non-English alternative media for engaging ethnic minority groups in wider public conversations on climate change mitigation.

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338

THE PLASTIC WASTE MENACE: COMMUNICATING GLOBAL AND LOCAL ENVIRONMENTAL CONNECTIONS IN KENYA

Authors

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Abstract

Plastic waste has attracted global and local concern, inviting controversies among nations and organizations dealing with environmental harms and degradation. Globally, humans use 5 trillion plastic bags (World Counts) per year! Less than 20 percent of this plastic is recycled or incinerated, leaving nearly 80 percent to accumulate in landfills or as litter in our environments.

In Kenya, plastic waste is now considered a menace because of its negative impact on people, animals, land, water, and air. There is an annual production of about 400,000 tonnes of plastic in the country (Horvath et al., 2018). In 2017, after two previously failed attempts, Kenya officials successfully banned the use, manufacture, and importation of all plastic bags for commercial and household packaging (National Environment Management Authority (NEMA), 2017). This action placed Kenya among the 127 countries (FRANCE24, 2019) that have some plastic bag legislation, 34 of which are African.

The ban was met with substantial initial uproar and rejection, especially from the manufacturing sector. Different environmental and political actors raised awareness about the ban through electronic media, print media, and a two-day public exhibition of alternative packaging materials. Penalties for violation of the act were communicated in the form of electronic and print media by the Ministry of Environment and NEMA.

Given the global and local problem of the so-called plastic menace and related legislation, there is an urgent need for action by stakeholders to raise the public's environmental consciousness and sensitize community members to the negative impacts of plastic waste. This effort creates important critical spaces for academic thought and communication to contribute to exchanges that shape the present and future of life on Earth. In doing so, this paper resonates with the conference subthemes of activism and global social justice movements, especially environmental and climate justice, and health, climate change, and education communication.

The aim of this study is to examine what communication theories and methodologies can be used to create environmental consciousness among people in Kenya and in other similar contexts to encourage participation of all stakeholders towards a sustainable solution to the plastic waste issue. To do so, first I provide a contextual overview of Kenya's plastic bag ban and other eco-cultural realities that shape and are shaped by different communicative acts. Second, I turn to a literature review of global successful environmental communication practices and how they can be applied in the Kenyan context. Findings from this literature review demonstrate that targeted comprehensive communication approaches, the circular economy concept, agentic orientation, *Mottainai* (a Japanese word that means "Don't waste! What a waste!") spirit, and feminist rhetorical theories hold much potential for addressing the plastic menace in Kenya. Third and finally, this study concludes that applying these concepts may be instructive for Kenyan leaders to create public awareness, engender action, and encourage compliance to global environmental regulations that could benefit the environment and the public - with implications impacting and extending beyond Kenya and Eastern Africa.

Keywords: agentic orientation, environmental communication, feminist rhetoric, intercultural communication, Kenya, legislation, plastic

Submission ID

369

Communication about sustainability: Analysis of Colombian companies included in the 2020 Sustainability Index

Authors

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Abstract

The United Nations has established sustainability as one of the Millennium Goals and organizations of diverse nature have committed to contribute to this achievement. As part of a cutting-edge organizational need, sustainability has become not only an increasingly frequent practice, but also a fertile field of study (Mitra & Buzzanell, 2018). In order to go beyond the studies that offer inventory of sustainable organizational practices, several researchers have highlighted the need to understand the way in which sustainability is discursively positioned in organizations (Mitra & Buzzanell, 2018), and, above all, the need to approach less studied organizations such as those of the so-called global south. (Leipold, Feindt, Winkel & Keller, 2019).

Considering this knowledge gap, we analyze how the Colombian companies included in the 2020 *Dow Jones Sustainability Index* communicate sustainability through social media. We articulate two theoretical approaches to study the communication of sustainability: On one hand, we draw on the field of corporate sustainability (Hahn, Figge, Aragón & Sharma, 2015); on the other, we embrace the tradition of organizational discourse studies represented in the work of Fairclough (1999, 2005) and Mumby (2011). Current studies in corporate sustainability consider sustainability as a discursive concept that go beyond measurement of practices (Boiral y Henri, 2017; Gil-Sánchez, 2017 O'Connor y Gronewold, 2013). Approached as a practice intrinsically mediated by language, the discourse on sustainability reflects both interorganizational collaboration and disruption as it is the result of a clash of diverse discourses, genres, ideologies, and processes from different organizations.

From a methodological standpoint, to analyze the different programs of action (Burke, 1969) that underlie sustainability discourses, we aim to understand the exegetical frameworks from which Colombian organizational agents communicate this practice. To achieve this goal, we perform a quantitative and qualitative discourse analysis of the messages that the Colombian organizations included in 2020 *Dow Jones Sustainability Index* published over that year in the social network *Facebook*. Through this discourse analysis we examine both the content of the messages and its reception by Facebook users. In the first case, we analyze the genre, format, content, and type of sustainability (economic, social, and environmental) communicated by organizations. Then, we discuss the content of the users' response to these messages in terms of their engagement and communication

of emotions. The articulation of both message and audience response leads us to understand not only the nature of organizational discourses on sustainability and their scope, but also to reflect on the type of dialogue that emerges between organizations and stakeholders about sustainability.

Submission ID

395

A Political Tool or a Real Climate Risk? Trends in Climate Change Risk Communication in Chinese Newspapers, 2000–2020

Authors

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Abstract

Given that the hazards of climate change are almost invisible to humans, most people acquire relevant information through the media. Since China's environmental policy is defined as top-down "authoritarian environmentalism", political propaganda and media censorship heavily affect news coverage about climate risk.

This article analyses the role of Chinese newspapers in the construction of climate risk using Critical Discourse Analysis (CDA) in text and context. The research was carried out along a horizontal axe (analysing the same issues in different newspapers) and a vertical line (exploring the time sequence and the evolution of events). The analysis is based on a news database from the People's Daily and the Guangming Daily over the period 2000–2020. These two newspapers represent the propaganda intention and direction of the Communist Party of China and set the agenda for public opinion. Additional "outspoken media" outlets were investigated as a reference for horizontal comparison in the study.

The empirical study identified three historical stages in climate risk reporting in China: 2000–2006, 2007–2014, and 2015–2020. After the Kyoto Protocol was signed by China, climate change issues began to emerge in the media. Terms such as *risk* and *disaster* appeared frequently from 2005. Yet China did not make any emission reduction commitments until 2007, and this influenced the tone of reporting. In the first phase identified, newspapers deliberately weakened the risks and uncertainties of climate change by reporting acclaimed environmental protection projects and blaming developed countries for the absence of climate change mitigation. In the second phase, the agenda setting became strongly influenced by political events (i.e., UNFCCC in Bali). Meanwhile, the connection between climate change and CO₂ emissions was no longer political sensitive, as evidenced in the terms utilised (*emissions reduction* appeared in 2007, and *low carbon* in 2009). Unfortunately, during this period, only a few reports focused purely on climate change risks and threats. In the third phase, newspapers used climate change reporting to demonstrate China's superpower image and robust international leadership, especially after the United States announced its withdrawal from the Paris Agreement.

The most important contribution of this article is to fill the gap in previous research, by bringing the political perspective into the analysis of climate change communication within Chinese media. The article demonstrates that coverage of climate change has been strongly linked to the political agenda on this issue, especially when the issue concerns China's national image and international status. In addition, by constructing a special context for the risks and uncertainties of climate change, the media has effectively weakened them. In this respect, in Chinese newspapers, the term "climate change" functions more like a political tool for the Chinese government rather than denoting dangerous climate risk itself.

Submission ID

483

We Speak for the Nile: Globalization and Water Commons in the Grand Ethiopian Renaissance Dam (GERD) Conflict

Authors

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Dr. Patrick Murphy - Temple University

Abstract

On October 15th, 2020, *The Washington Post* published a story titled "Africa's largest dam fills Ethiopia with hope and Egypt with dread" thus adding to the ongoing international coverage of one of the most contentious development projects in North-East Africa. A few days later, the authors Bearak and Raghavan (2020) updated the piece with a new headline reading, "Africa's largest dam powers dreams of prosperity in Ethiopia — and fears of hunger in Egypt." This pivoting bears attention for multiple reasons, namely the subject being covered, the parties involved in the looming conflict, and most importantly, the source or who is telling this story.

Water as a shared resource can quickly become a source of conflict and present yet another iteration of the kind of antagonisms that can emerge within a "common-pool resource" (Ostrom, 2010), evoking Garret Hardin's metaphor of "tragedy of the commons" (Hardin, 1968) in which individual actors can overharvest from a shared resource, leaving others to suffer the consequences. Unfortunately, the Nile basin offers the perfect setting for this metaphor, as conflicts about the river have persisted since the 1950s (Abdullah, Dyduck, & Ahmed, 2020). In the current context, Ethiopia is building a large infrastructure called the Grand Ethiopian Renaissance Dam (GERD) on its stretch of the historic river (Kushkush, 2015). The most vehement reaction to the project is from Egypt, which fears that the source of all its water will thus be held back to fill the reservoir (Abdullah et al., 2020; Tayie, 2017; Walsh & Sengupta, 2020). As a result, Egyptian leaders have appealed to the international community to help achieve an agreement on the conditions for operating the infrastructure. The story has international attention, especially from US-based newspapers, knowing that the Trump Administration was actively involved in the negotiations (Walsh & Sengupta, 2020). As this negotiation of the commons has

evolved, the conflict around GERD has moved from a local and regional dispute to a global issue, thanks in part to the media's amplifying role.

Drawing from the scholarship on “voice” (Couldry, 2013, 2020; Horton, Hall, Gilbertz & Peterson, 2017; Landrum, Hallman, & Hall Jamieson, 2019; Martin, 2007) and “the commons” (Dragos & Tarko, 2013; Ostrom, 1990, 2010), this paper examines the capacity of international news organization to cover “the problem of the commons.” Emphasis is placed on the press’s ability to present the complexity and range of competing interests by focusing on clashes between political, cultural, and ecological concerns. To do so, we ask the following questions: How does the US media’s coverage of GERD present the goals and objections of the nations involved? How are the needs of local populations covered (e.g., access, enclosures, infringements)? How is the region impacted by the GERD treated as an ecosystem? What actors are given voice in the coverage (e.g., government officials, local leadership, citizens, NGOs, environmentalists, celebrities), and how do these voices present different interests? These questions are explored from a US-centric perspective by documenting the coverage of GERD in the American print media.

Submission ID

627

International media coverage of the UN Conference of Parties: Constructing global climate change negotiations through local lenses of news organizations

Authors

Ms. Zheng Cui - Pennsylvania State University

Dr. Juliet Pinto - Pennsylvania State University

Dr. Paola Prado - Roger Williams University

Dr. Mercedes Vigón - Florida International University

Abstract

Global news coverage of climate change can vary widely, with important implications for audience awareness and understanding of issues related to a warming world (Boykoff & Boykoff, 2007; Schafer & Painter, 2021; Wilson, 2000). How and why news professionals choose to cover it, as well as the decision making processes that go into news construction, represent important points of discussion for the intersections of public opinion, policy outcome, and media agendas, particularly in an age of accelerating climate change impacts and fragmented global political will to address them. Events such as the United Nations Framework Convention on Climate Change’s Conference of the Parties (COP) negotiations provide temporary openings for international media coverage of climate issues (Ahchong & Dodds, 2012; Grundmann & Scott, 2012; Schmidt et al., 2013).

The goal of this study is to examine perspectives from journalists' working in media systems in China and Latin America, regions with diverse media systems, and influences impacting coverage of climate change. We use Shoemaker and Reese's (2016) hierarchy of influences framework in order to understand multilevel influences on climate change media coverage. Much research of climate change news has focused on U.S. and U.K. news coverage, with less analysis of other media systems (Zamith et al., 2013). By comparing the influences on journalists who cover COPs, particularly those in the Global South, this study fills a gap in comparative research of climate change news coverage. We wish to compare influences at macro levels of social systems and institutions in different countries and cultures, as well as at micro levels of media organizations, journalistic norms, routines and values, and individual experiences and perspectives across national borders and professional ecosystems.

Previous studies have examined the framing of COPs in media coverage through the perspective of divided worldviews (Johannessen, 2015); identifying dominating frames and difference in framing between US and non-US (India) media; the emphasis of imagery of celebrities and politicians at the COP meetings (Schafer, 2020); and examining media practice favored by professional groups (Wozniak, Wessler & Lück (2017). Using semi-structured interviews with journalists, PIOs from NGOs, and activists in China, and Latin America, we examine what the influences on coverage of the COP talks from the perspectives of those involved with producing the mediated meanings of climate change. This approach allows an important comparative perspective, including the structures, organizational imperatives, professional values, and individual perceptions of the importance and meanings associated with news of climate change. Preliminary findings indicate variables operating at various levels influence coverage and news construction; these results indicate important avenues for future research to explore.

Submission ID

643

Material/Discursive Mediations of a Cross-Border Ecosystem: The plight of the North Cascades “Donut Hole” and the future of the Skagit Headwaters

Authors

Dr. Derek Moscato - Western Washington University

Abstract

A gold mining proposal in the British Columbia Interior's Skagit Valley has provided a timely reminder of the international significance of the Skagit River watershed to North America's Cascadia transboundary region, and the outsized roles of environmental media and advocacy. The river and its tributaries represent critical habitat for wildlife--including salmon spawning grounds and a future venue for the reintroduction of grizzly bears--and remain a key facet of the North Cascades ecosystem on both sides of the British Columbia-Washington State border. At the same time, hydroelectricity is produced

by three dams on the river—making the Skagit a longstanding focal point for the metropolitan energy infrastructure of Seattle.

The gold mining proposal by B.C.-based Imperial Metals features prominently the contended “donut hole”—an area of 5,800 unprotected hectares situated between two B.C. provincial parks—located at the headwaters of the Skagit watershed. Opposition to the project, led by environmental advocates and tribal leaders on both sides of the border, has featured media coverage, digital communication, and live-time publicity events to facilitate a larger, regional dialogue about the importance of the international watershed. Indigenous and First Nations concerns also loom large in the Skagit watershed debate. Both the Upper and Lower Similkameen Indian Bands, along with the Sto:lo of Chilliwack, claim the area adjacent to Skagit Valley and Manning Park as their traditional territory (Castanet, 2019).

This case study is therefore interested in the transboundary dimensions of such ecological advocacy and how it informs larger narratives of cross-border and international environmental communication. Drawing from material/discursive renderings of the minerals sector (Akong, 2019), and the further-reaching material/discursive framework offered by Carpentier (2017), it analyzes a sprawling and dynamic network of traditional media outlets, community newspapers, specialty magazines, blogs, and activist media channels that rhetorically toggle between symbolic planetary crisis and hyperlocal ecological threat.

Meanwhile, the legacy of previous U.S.-Canada tensions at the Skagit headwaters looms large over the contemporary debate. In his 1974 study devoted to the High Ross Dam controversy, environmentalist and Greenpeace co-founder Terry Simmons (1974) argued prophetically that there could only be public debate around the issue of damming when there also existed a public forum facilitated by media: "Media coverage generally has been carefully orchestrated in order to achieve maximum impact for the mutual advantage of the media and the conservationists.... A public controversy is in large part a media campaign" (Simmons, 1974).

Building upon both Simmons' assessment and a dialectic of materiality and performativity in ecological advocacy, this study draws from in-depth interviews to understand the tactics and strategies used by traditional and digital environmental communicators, including journalists but also advocacy groups. Furthermore, it draws from historical sources and available media texts, including newspaper archives but also social media text and data sets, in order to map out this network of cross-border ecological communicators in the North Cascades transboundary region.

Submission ID

667

Working towards environmental change: The construction of sustainability in Facebook groups in Sweden

Authors

Dr. Vaia Doudaki - Charles University

Abstract

A key concept in the heated debates on environmental issues is that of sustainability. In the already complex issues of safeguarding the environment, and the discussion of the optimal means to achieve that aim, sustainability is an important signifier, as it captures both the need for intervention and an agenda for the future (Kopnina, 2013; Bartlett, 2019; Borgström Hansson, 2003). At the same time, the sustainability concept does not always help (in addressing problems, proposing solutions and organizing actions), as it has many, often diverging or even opposing, significations (Cooper et al., 2012; McManus, 1996; Peterson and Norton, 2007). What these diverse approaches to sustainability have in common, is that they, in one way or another, address issues of desired or undesired change, reflecting particular visions of the future.

This article will examine how Facebook groups in Sweden work with the concept of sustainability, contributing to its diverse construction. The research combines mapping analysis (Voniati et al., 2018), which has identified 152 Facebook groups that focus on the environment and are related to Sweden, over a period of one year (May 2019-April 2020), with qualitative content analysis (Saldaña, 2013; Titscher et al., 2000), examining how (a selection of) these groups address issues of sustainability.

As will be explored through the analysis, the Facebook groups' posts and discussions around sustainability reflect a diversity of competing interventionist and non-interventionist positions (around, e.g., conservation, preservation and (human) intervention) as means to achieve sustainability, which, in their turn, echo and intersect with either anthropocentric or ecocentric positions about humans' and nature's interconnected future.

Submission ID

788

Subjective Norms and Gamification: Online Pro-environmental Behaviors in Ant Forest

Authors

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Abstract

Social Networking Sites (SNSs) are playing increasingly important roles in environmental communication campaigns (Warren et al., 2015), which have been studied extensively in recent decades. However, much of the literature has focused on radical environmental movements such as online mobilization, while failing to explore the influence of daily pro-environmental behaviors (PEBs) (Stern, 2000).

Launched by Alipay in 2016, *Ant Forest* is a carbon mobile application aiming at raising people's ecological awareness and promoting their PEBs. As a green-behavior platform that has attracted more than 300 million users in the world, *Ant Forest* sets a good example for online environmental practices in the world. Its users can reduce personal carbon emissions, acquire so-called "carbon energy", and grow virtual trees through walking, mobile payment, and other online PEBs in their daily life. Corresponding, Alipay will also plant real trees and protect natural reserves through collaborations with non-profit organizations.

Based on the theory of planned behavior (TPB), the present study investigates the individuals' intentions of PEBs in *Ant Forest*. Through two rounds of semi-structured interviews ($N = 12$) and a questionnaire survey ($N = 298$), we have identified three types of users' intentions of online PEBs in *Ant Forest*: (a) intentions of game-oriented online PEBs, which are concerned with the game function (gamification) of *Ant Forest*, (b) intentions of socializing online PEBs, which are concerned with the socialization function of *Ant forest*, and (c) intentions of results-oriented online PEBs, which just take *Ant Forest* as a convenient approach for environmental protection during fragmented free time. Moreover, according to the classification of Li & Wu (2019), we have also divided users' intentions of offline PEBs into two types: (a) intentions of high-effort offline PEBs; (b) intentions of low-effort offline PEBs.

Counter to expectations, results indicate that individuals' environmental attitudes (including cognitive attitude and affective attitude) and perceived behavioral control are significantly related to neither online nor offline PEBs. However, subjective norms act as a persistent predictor for both respondents' online and offline PEBs.

In addition, we also investigate how different intentions of online PEBs will influence respondents' use of *Ant Forest*. In particular, intentions of socializing online PEBs are positively related to users' use history of *Ant Forest*, while intentions of game-oriented/results-oriented online PEBs' are positively associated with respondents' use frequency of *Ant Forest*. However, only the intentions of game-oriented online PEBs, which focus on the game function, have a significant influence on motivating users to plant virtual trees in *Ant Forest*.

To conclude, this study highlights the important role played by subjective norms in promoting people's PEBs, and points out the great potential of gamification in environmental communication campaigns.

Submission ID

907

Music festivals: new arenas for sustainable food discourse?

Authors

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Abstract

Current food practices are increasingly regarded as unable to handle the anticipated pressures on agricultural systems. This calls for a transition of gradually stimulating consumers to experiment with conventional diets and transform existing dishes. Large-scale music festivals, while currently 'on hold' due to COVID-19, may play an essential role in this societal transformation: not only by offering environmentally friendly dishes to a broad swathe of the population, but also through normalizing the questioning of conventional, more harmful diets. In this context, the 'greening' of the music festival industry has led to promising sustainability initiatives, where the provision of sustainable festival food has become a widespread practice. In addition, contemporary music festivals now take an active role in environmental communication and the promotion of more sustainable lifestyles and diets. However, concerns have been raised about festival organizers competing with each other in demonstrating their environmental concerns for the mere purpose of gaining a brand advantage, which calls for a close examination of these texts. This research explored how seventeen European music festivals produce meaning and knowledge about sustainable food choices, such as plant-based, organic, local and fairtrade. It sought to answer the question: what are the dominant discourses concerning sustainable diets encountered on music festival websites? Through a discourse analysis, elaborate insights were gained into the wide array of discursive resources that are employed by music festivals in their communication about sustainable diets. Two competing discourses emerged from the analysis: music festival organizations either 1) approached sustainable diets as a socio-political instrument in music festival activism, or 2) took advantage of sustainable diets as a convenient tool for legitimizing their green credentials. This discrepancy means that sustainable diets are at the same time being politicized and de-politicized. Plant-based, organic, local and fairtrade food is simultaneously placed in the context of 'saving the planet', yet kept separate from essential information regarding its actual, and sometimes differentiated, environmental, economic and social impact. Despite the fact that these discourses struggle for dominance, there is one commonality: sustainable diets were highly commended, and have been rendered an integral part of sustainable lifestyles. The rather unbalanced, entirely positive portrayal of sustainable diets is distinct to how they have generally been represented in certain media, primarily newspapers, and necessitates further research into the role of green music festivals as platforms for exchanging meaningful information and persuasive messages about sustainable food choices.

Keywords: Music festivals; Sustainability; Environmental communication; Sustainable food.

Submission ID

1006

NEVER ALONE: PLATFORMING ARCTIC VOICES THROUGH PLAY

Authors

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Abstract

IAMCR 2020 Climate Change award study

Despite growing concern about climate change, limited attention has been given to the concerns of Indigenous people whose traditional lands are at risk. Activists complain that Indigenous voices are silenced (Harvey, 2019), whilst researchers argue that Indigenous relational spiritual and bio-physical world views (Cochran et al., 2013) contribute as much to current debates as the Western emphasis upon scientific facts.

To help redress this situation, some Indigenous peoples have taken to entertainment media, like video games. *Never Alone/ Kisima Inŋitchuŋa* (E-Line Media, 2014) is credited as the first commercial video game based on a U.S. Indigenous culture to tackle climate change (Plantz, 2015). Players are challenged to discover the source of a ravaging blizzard and restore balance to nature.

Never Alone enjoyed both critical and commercial success. In this study I track the influence of this seminal and award-winning (BAFTA Debut Game, Games for Change game of the year, and most significant impact), by evaluating critical response and audience engagement with the game over time, supplemented by interviews with key creative and cultural commentators.

Given that *Never Alone* has been acclaimed because of its ability to create broader engagement with Indigenous voices, it provides an ideal and innovative focus for an in-depth study of audience engagement with playful Indigenous climate change media. This in depth, multi-pronged mixed methods study indicates some of the more nuanced aspects of climate change media production, such as the need to balance the appeal of a gentle and playful introduction to **Iñupiat** world-views, versus the value of direct attention to partner culture insights and climate considerations. Equally, it points to the sorts of translation challenges facing breakthrough cultural voices on popular culture media platforms. For example, *Never Alone* articulates an animist worldview, but omits reference to the **Iñupiat** people's struggles to maintain their traditional lifestyles. Ultimately however, this study of the influence of a ground-breaking role-model for traditional culture and nature connectedness expression adds to growing evidence about the power of play, and the value of sovereign digital voices within climate communication media.

Cochran, P., Huntington, O. H., Pungowiyi, C., Tom, S., Chapin, F. S., Huntington, H. P., . . . Trainor, S. F. (2013). Indigenous frameworks for observing and responding to climate change in Alaska. In *Climate Change and Indigenous Peoples in the United States* (pp. 49-59): Springer.

Harvey, F. (2019). Activists protest at 'sidelining of social justice' at UN climate talks. *The Guardian*. Retrieved from <https://www.theguardian.com/environment/2019/dec/12/activists-protest-un-climate-talks>

Plantz, K. (2015). Pressing play to learn how climate change can impact indigenous cultures. Retrieved from <https://www.reuters.com/article/us-climatechange-videogames-idUSKBN0MZ1TP20150408>

Submission ID

1022

Building and Audiencing Environmental Risks in the Global South: Glocal Engagement in Uruguay

Authors

Mrs. Victoria Gómez - University of Montevideo

Abstract

In the face of a global environmental crisis requiring urgent and effective action, it is critical to understand lay people' perspectives of environmental risks, while advancing situated knowledge on the potential role of pervasive new media like social network platforms. Young adults are key networked publics (Boyd, 2010) who need to be better understood beyond apocalyptic or celebratory interpretations of their relationship with media technologies. It is also necessary to consider the diversity of cultures in which they are inscribed at the local, national and international level of a globalised world (Roudometof, 2003; Beck, 2006).

If university cohorts of industrialised countries have been extensively analysed, the global diagnosis still lacks more voices from the Global South. These voices might be better listened to through qualitative approaches that enable the full expressions of their worldviews. As a response, this research engaged with young populations with different affiliations (university, work training programmes, other non-educational groups and voluntary organisations) and localisations (rural/urban) covering a diverse range of educational and socioeconomic backgrounds. Its qualitative approach provided dense descriptions enabling the emergence of environmental worldviews precisely as articulated by these audiences' discourses, and a complex understanding of contemporary media repertoires informing or reflecting the prior. It is the first study of its kind and thematic focus conducted in Uruguay.

Across eight focus groups discussions conducted in Uruguay with young adults, comprising 79 participants, the question of how young adults engage with online eco-video (Brereton, 2018; Parham, 2016) was explored. It was done through the reported and performed selective exposure to a wide variety of online video texts, alongside interpretations and assessment of the perceived (first person and third person)' influence of these contents. Engagement (Weintrobe, 2013) and distance (Stoknes, 2015) with environmental risks (Beck, 2009; Urry, 2013) were further analysed through participants' issue awareness, perceived responsibility and agency (Bourdieu, 1980; Agyeman, 2011).

Preliminary findings signal the coexistence of environmental concerns situated at the local and the global level, suggesting a glocal identity. According to Corbett' scale of environmental ideologies (2006), anthropocentric perspectives were the most frequent. However, participants' discourses covered for the three currents of global environmentalism empirically identified by Martínez Alier & Guha (1997): cult to the wilderness, ecological modernisation, and popular ecology/"ecology of the poor". In contrast with research conducted in other regions with the same age group of young adults, the overarching discourse of climate change appears less robustly than direct pollution of livelihoods among these Uruguayan residents.

These and other findings will contribute to identifying challenges and opportunities in the task of communicating the complexity of sustainability issues and the interdependence of its dimensions at different scales: individuals, communities, nations and the whole planet. From a cultural perspective with media at the centre, this study will help to identify opportunities for, and roadblocks to, leveraging and sustaining a cultural and social shift in human behaviour towards more sustainable production, consumption and coexistence in the planet, as well as for mitigation and regeneration actions required.

Submission ID

1088

Analysis of reward systems in COVID-19 tracking apps and its impact on voluntary participation

Authors

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Prof. Seldağ Güneş Peschke - Faculty of Law, Ankara Yıldırım Beyazıt University

Ms. Yasemin Gümüş-Ağca - Bilkent University

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Mr. Irmak Dünder - Bilkent University

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Abstract

The COVID-19 pandemic is the first pandemic after smartphones penetrated the society globally. Consequently, there are not sufficient experiences and understanding how to engage citizens in information and scientific processes which create public awareness and responsibilities according to scientific needs. For effective measures aiming to combat the pandemic crisis, efficient collaboration of academia, economy, culture-based and media-based public and politics are crucial. Carayannis, Barth and Campbell provided the Quintuple Helix innovation model to explain collaboration processes based on shared knowledge from five different systems (helices) as a pre-requisite for sustainable developments. This model was developed as a contribution to combat climate change, but can be adopted to control pandemic crisis as well. The academia contributes to the shared knowledge with the understanding of the coronavirus and COVID-19 and delivers recommendations to politics, rules of conduct for the public and know-how for the improvement of medical products. With its advanced knowledge, the economy develops pharmaceuticals against the disease and vaccines. The knowledge output of the coronavirus is followed by an input of new knowledge about the nature of the virus, its mutations etc. This knowledge has impact on the new more or less voluntary life-style of the media-based public including social distancing and the consideration of hygienic measures. Finally, the understanding of dynamic health situation leads to decisions of measures in the political system. The knowledge exchange inside the Quintuple Helix resumes the equal engagement of all systems. The

media-based public plays a key role which needs to be motivated to voluntary participation in both, receiving and providing knowledge. COVID-19 tracking apps (CTAs) are central tools for the knowledge circulation through all five systems during the pandemic.

In this paper, COVID-19 tracking apps of different countries are analysed according to their reward systems and its correlation to the voluntary participation. The protection of voluntariness is understood as the fundamental need for ethical use of CTAs. Accordingly, patterns of voluntariness are examined in the context of legal, ethical privacy and security policies of selected CTAs. In this context, this paper will provide categories and criteria for CTA usage and its impact on citizen engagement in the Quintuple Helix collaboration process. These research activities are proceeded within the scope of the Horizon 2020 research and innovation project “PandeVITA” which is funded by the European Commission aiming to develop feedback and information systems for a more efficient knowledge transfer between citizens, scientists, politics and economy in pandemic crises on a global level.

Submission ID

1165

Science Communication Research: Past Patterns and Future Perspectives

Authors

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Abstract

Like any other research field come of age, science communication should also ask itself which **patterns** have characterised its development over the decades, which **topics** were ‘trending’, and which **methodologies** used? What can we tell about the **strengths and weaknesses** of sci-comm research, about its **gaps** and degrees of **replication**, about research **needs in practice**, etc.?

For the first time, questions like these have been answered empirically in an in-depth **Field Analysis**. In a **bibliometric analysis**, the content of more than 3,000 scholarly publications was coded by nine researchers, and the extensive body of **grey literature** screened systematically. A **panel study** discussed these results in two waves with 18 renowned science communication researchers worldwide. Furthermore, the Field Analysis reviewed **previous research** and compared its findings [e.g. the collection of 79 “Major Works” by Bucchi & Trench (2016); the NASEM report on “Communicating Science Effectively” (2016); the scientometric analyses by Günther&Joubert (2017)].

Since the Research Field Analysis was published in spring 2020, the lead author has assembled groups of international scholars to **discuss the results and recommendations** at a number of public fora. The proposed IAMCR paper will reflect on these discussions and the challenges, including the implications for **further meta-research** about the research field such as long-tail phenomena, multi-lingual content analyses, and big data challenges to be addressed by means of **machine learning**.

Examples for findings from the study:

SciComm research has ‘matured’ as an **academic field**. Not only has the absolute number of journal papers increased significantly, particularly in the last 15 years, but this is especially the case for **research studies**.

Examples for ‘Grand Challenges’ identified in the study:

- Most research papers have reported ‘**one-off**’ studies compared to only **3%** having a longitudinal design (a proportion that has even **declined** in the past 5 years). The study recommends more longitudinal, comparative and systemic research to **understand how contents and channels, actors and audiences interrelate**.
- As multi-disciplinarily as the field of SCR is, its fragmentation also comes with the risk of being caught in **established disciplinary structures and habits**. Scientific communities often use different **jargon**, and present their results at different **conferences** and in different **journals**.
- In addition to these inner-academic challenges, the field is also affected by a second and potentially much more significant **disconnect**—between scholarship and practice, neither of which take sufficient notice of the other’s **priorities, challenges and solutions**. This potential for **transfer** and **collaboration** calls for more **application and implementation** of solutions, experimentation and action research.
- The original **Anglo-American leadership** in sci-comm research has given way to a **much more globally diverse** scholarship. Particularly the share of publications by authors from **Europe** has increased: figures for the past five years of this data analysis, show **Europe (51%)** well in front of **North America (29%)**.

The main research gaps identified by the study:

- Systemic changes in **digitalised media**
- **Dis- and reintermediation**
- **Policy impacts** of science communication
- **Methods to evaluate** scicomm in **funding calls, proposals and reports**

Submission ID

1191

Constructing “Rights” & “Wrongs” in Climate Media Discourse Through the Prism of American Exceptionalism

Authors

Ms. Hanna Morris - University of Pennsylvania

Abstract

Now for the first time, the climate crisis is a popular issue that major United States media outlets have taken note of and are covering more often. Concerningly, though, this paper shows how a discursive paradigm is taking root that heavily relies upon the notion of American exceptionalism and draws upon rhetorical mechanisms that distance rather than make visible the present and disparate threats of climate change. With clear “right” and “wrong” forms of climate politics delineated via the elevation of a (white and male) default subject position that either evacuates or erases positions deemed too “extreme” or “militant,” this paper argues that United States climate journalism risks endorsing responses that will make the crisis more as opposed to less severe. Through a critical discourse analysis of 54 “special issues” and “cover stories” dedicated specifically to the climate crisis between the years 2015-2020 across a selection of influential and politically diverse non-daily United States “politics and news” magazines (as indexed by ProQuest News & Newspapers and EBSCO Publications), this paper argues that the image of Manifest Destiny limits the ways in which climate change is represented and interpreted by United States media through, in part, the stark binaries of “morality” and “moderation.” Ultimately, this paper contends that as a result of this rigidity and through these binaries, there is a clear pattern in discourse with responses to climate change represented as either in or out of line with the “inevitable” Manifest Destiny of the United States. In turn, the climate crisis is decontextualized and depoliticized through grand narratives of “History” and “Humanity” while exploitative modes of governance remain solidly in place.

Submission ID

1232

Visual and multimodal metaphors in climate change communication: a study of the construction of senses in NGOs posters and Instagram publications

Authors

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Dr. Isaltina Gomes - Universidade Federal de Pernambuco

Abstract

Different scholars have been exploring the metaphorical character of environmental discourse. Through its ability of conceptualizing one mental domain in terms of another, metaphors function as essential elements of persuasion. As much as language, images play a role in representing the world and the different ideas and thoughts about it. Therefore, we can say images have a semantic value and do disseminate discourses. In what concerns visual and multimodal metaphors in climate change communication, they can be elements used to face the challenges of turning the climate changes visible. Sean Cubitt (2013) drew attention to the difficulty of the filmic representation of global

warming. According to the author, the evidences of climatic changes are mainly statistic, not visual, and numbers are not intrinsically photogenic, in his own words.

The main concern of our research was to map the most frequent elements inside environmental visual and multimodal metaphors used by NGOs in its poster advertisements and by Instagram users in general. Such choice allowed us to understand the differences between the preferred representations of environmental organizations when compared to the choices of the public in general (all Instagram users). After mapping the elements, we also tried to understand which discursive senses are created by such representations and to evaluate the effects such discourses can have in environmental advocacy.

Our methodological choice was to search for NGOs posters in Pinterest publications using six different keywords: Climate Change, Global Warming, Changement Climatique (French), Réchauffement Climatique (French), Mudanças Climáticas (Portuguese) and Aquecimento Global (Portuguese). After that, we collected all the material with the presence of visual metaphors. The same keywords were used to find visual metaphors in Instagram publications. The search was made between November and December 2018. After excluding repeated results, we reached a total of 16 posters and 22 Instagram images.

A first result was that the most frequent elements in NGOs posters were polar animals (9 out of 16 images), while it was a lot less used in Instagram posts (4 out of 22 images). On the other side, Instagram users preferred visual metaphors that used the image of the globe as one of its elements (15 out of 22 images), while the image of the globe was neglected by NGOs posters (2 out of 16 images). We can assume that the nature of most NGOs, connected to wildlife protection, had influence over the result. Meanwhile, for people in general, polar animals can be seen as too far from their realities.

We also verified that, in both groups of images (posters and Instagram posts), the great majority of the visual elements were connected to the consequences of climate change (polar animals, ice melting, etc.), while images concerning the causes (factory smoke and elements connected to the idea of consumption) were a lot less frequent. In our paper we argue that, by underrepresenting the causes of climate change, environmental communication may be less effective in its aims of social and environmental changes.

Submission ID

1255

Media Framing Analysis of AI, Robotics & Technology in Explanatory Journalism

Authors

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Ms. Charlotte Crawford - Ryerson University

Dr. Frauke Zeller - Ryerson University

Abstract

Our study examines trends in media framing of technology - specifically robotics and artificial intelligence (AI) - regarding dominant ideologies and relations of power in a pre and post-COVID-19 context. Representation in media discourse impacts how future technologies are designed, created, marketed to, and accepted by, the public (Buolamwini & Gebru, 2018; Druckman & Bolsen, 2011). In science and risk communication, dominant ideologies of technology as objective, free of bias and political affiliation, and economically and socially beneficial, have permeated how Western society considers scientific and technological developments such as robotics and AI (Cave et al., 2018; Einsidel, 1992; Noble, 2018). As AI-powered and robotic technologies increasingly make critical decisions in instrumental bodies of society from "helping determine who is hired, granted a loan, or how long an individual spends in prison," further study of how they are publicly represented is crucial (Buolamwini & Gebru, 2018). Media frames of technology, robotics and AI are a primary site of meaning and knowledge production that directly shape how we understand and interact with technology and the populations impacted by its development and application (Einsidel, 1992).

This study employs quantitative content analysis, including media frames and critical discourse analyses, to investigate how news media reporting upholds or challenges hegemonic narratives in explanatory journalism. Explanatory journalism explains the news rather than simply informing and is "a long-standing genre of news reporting" (p. 206; Fink & Schudson, 2014; Ryfe, 2019). Whereas framing studies have been applied to conventional journalistic news media, studies on explanatory journalism are lacking. Our research expands upon traditional media framing studies, focusing on explanatory journalism medium, The Conversation: an explanatory journalism platform that provides independent information to 22,000 sites worldwide with a global reach of 42 million readers a month (The Conversation, 2020).

Our research asks what dominant media frames can be found in articles about technology-related topics like robotics and AI. We also ask whether media frames used in the reporting on these topics challenge or support dominant hegemonic narratives. Given the increase of media reporting regarding technological and scientific topics, we ask whether media frames related to robotics and AI changed since the COVID-19 pandemic started in January 2020.

The content analysis covers 430 articles published between January 1, 2017 and August 14, 2020. Our sample is derived from The Conversation's English-language platforms published in Canada, Australia, UK, South Africa and the U.S. Results indicate post-COVID articles more than doubled in frequency of framing technology companies as avoiding responsibility. Technology was more likely to be framed as objective post-COVID with an increase in frequency of 14%. Economic and political frames increased, as did the framing of positive attitudes toward technology. Articles were coded for the presence of explicit support, implicit support, or challenging of hegemonic narratives. Only 25 articles directly challenged hegemonic narratives. Implicit support for hegemonic narratives ranged from 97.7% to 100% in the following categories: Black, racialized, Queer, disabled, immigrant, Indigenous, gender minority and religious minority communities.

Submission ID

1269

Which Nature and What Culture? Thinking Critically about Environmental Communication

Authors

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Dr. Annika Egan Sjölander - Umeå University

Dr. Maitreyee Mishra - Manipal Institute of Communication, MAHE

Dr. Joana Díaz-Pont - Universitat Autònoma de Barcelona

Dr. Pieter Maesele - University of Antwerp

Abstract

Daily, we are witness to the devastating ecological impacts and forecast, if not arrived, unfathomable risks driven by industrial capitalism and its motherlode conclusion, climate change. In these times, environmental communication (EC) as a research field within communication studies commands centre stage, especially in the Anthropocene era (Lewis and Maslin, 2015). On many and varied fronts, EC scholarship offers useful insight into how citizens, groups and communities understand and communicate relations to their environment – their local place - between each other and in the digital networks that challenge the notion of being ‘here’ (Lester, 2019). We position these relations as informed by, and possible because of, shared meanings and assumptions about relations between cultures – in the William’s sense of a ‘way of life’ (1958) - and nature/s. EC scholars are at once spectators and participants in these relations between cultures and nature: our research explores how these relations are expressed in context, including and far beyond media networks; and through our scholarship, we are active participants in the re/production of these relations between culture and nature. That the culture/nature binary is relevant to EC scholarship is indubitable - but what does this mean for our work, and the entire social field (Bourdieu, 1984) which constitutes EC today?

In this conceptual paper, we explore EC scholarship through what we identify as five critical provocations: Science; Gender; Indigenous peoples; Technology; and Political Economy. In each of these provocations, we begin a critical examination of how the culture/nature binary has, is, or can be, articulated in pursuit of critically engaged scholarship (Joose et al, 2020). The culture/nature relationship implicit in our work is pivotal, though the implications largely hidden. This task necessarily entails positioning EC as a cultural artefact, a creation of a peculiar set of circumstances and influences that have, and will continue to enable and limit its work. We draw inspiration from Hansen’s social construction of the environment (2015), but with the lens turned inwards, to ourselves as EC scholars. Our provocations are intended to raise questions, to challenge EC scholars to examine their own assumptions and practice in an effort to deepen our impact and engagement - and affiliation (Freedman, 2017) with the ecological and climate crises that brings the sense of urgency to our field.

Bourdieu, P. (1984). *Distinction: a social critique of the judgement of taste*. London: Routledge.

Freedman, D. (2017) Put a Ring on it! Why We Need More Commitment in Media Scholarship, *Javnost - The Public*, 24:2, 186-197

Hansen, A. (2015). Communication, media and the social construction of the environment. In A. Hansen & R. Cox (Eds.), *The Routledge Handbook of Environment and Communication* pp. 26-38. London: Routledge.

Joose, S. et al. (2020) Critical, Engaged and Change-oriented Scholarship in Environmental Communication. Six Methodological Dilemmas to Think With, *Environmental Communication*, 14:6, pp.758-771.

Lester, E. (2019) *Global Trade and Mediatized Environmental Protest: The View From Here*, Palgrave Macmillan, Cham, Switzerland.

Lewis, S L & Maslin, M A, (2015) Defining the Anthropocene. *Nature*, 519 (7542), p 171.

Submission ID

1277

Media representation of disaster: The content analysis of images in Japanese newspapers

Authors

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Abstract

The purpose of this study is to examine how images of disaster in Japanese newspapers have been represented. In the past, Japan has experienced not only big earthquakes, but also countless typhoons, landslides, floods, volcano eruptions and other disasters. According to Maebayashi (2016), numerous natural disasters throughout the history influenced Japanese view of nature. In 18th century, one of the popular topics in Kawaraban, woodblock printed flyer of news, was disasters happened in some region in the country. The images of damage by those disasters are repeatedly represented also in current news media. Such images may have affected the construction of the reality of the audience as well as their view of nature, the risk perception about disaster, and their self-efficacy to deal with disasters. Furthermore, images can generate a stronger emotional appeal and may give audience more impact than texted contents (Rodriguez & Dimitrova,2016).

To discuss representation of disaster, it is important to consider that people's view of disaster is closely related to their view of nature. According to Kawakami et al. (2009), with the survey result, they found three factors which construct the image of nature that Japanese students conceive. Those factors were "nature beyond human intelligence", "healing nature" and "nature in need of protection". Image of

disaster in the news media may have affected their image of nature which is beyond human intelligence.

In this study, with the content analysis of newspaper data bases, the author tried to analyze the images of disasters in newspapers in Japan. The sampled data from data bases were analyzed by time-series comparison, and coded by the amount, the context, how they described the damage, how they framed the scene, presence of human, and so on. With the result, the author discussed how images of disaster in Japanese newspapers have been presented for each era, and how they might influence the view of disaster of Japanese people.

Submission ID

1440

Creative SDG communication for children – exploring interactive theatre

Authors

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Dr. Ola Uhrqvist - Department of Behavioural Sciences and Learning – Division of Education, Teaching and Learning, Linköping University

Abstract

Introduction

The need for new stories has been a recurring argument in the social debate on sustainability transformations. As it is becoming increasingly clear that incremental change will not suffice to address global challenges such as climate change, rapid urbanization, increasing energy demands, and the pressing need for poverty reduction, societal stakeholders call for new stories based on another way of talking about and engaging with our planet - stories that helps us to achieve goals for a fossil-free society (e.g Rockström, 2015; Boykoff, 2019). This study departs from the great interest, trust, and hopes in the role of narratives and stories to create engagement for sustainability transformations by focusing on interactive theatre with children and young people.

Aim and Research Questions

The purpose of the paper is to explore theatre for Early Years (TEY), and in particular, interactive performance installations with an audience of under-5's. This paper presentation asks:

- How do performers and young children jointly create, shape and circulate various sustainability narratives?

- In what ways do performers and children bridge the gap between local practices and global goals for sustainable development?

Methodology and Analytical starting points

The paper benefits from collaborations with nine pre-schools in Norrköping Municipality and Långsjö Theatre, a theater company with the vision to merge sustainability research and performing arts, for a sustainable society. During late spring, we will conduct a series of story-telling events. The theatre play "Esmeralda and the Dragon" departs from the UN Global Sustainability Goals, while also targeting climate-related objectives, ie the target on Reduced Climate Impacts, including the goal of zero net emissions of greenhouse gases by 2045, in order to engage pre-school children in the Paris Agreement's goal of limiting global warming to 1.5 degrees compared with pre-industrialism. With the starting point in dialogical theories on sense-making (Linell, 2009), the project will study how performers and children jointly create, shape and circulate various sustainability narratives with a particular focus on the IAMCR 2021 conference theme of bridging the gap between local practices and global goals for sustainable development.

The authors wish to initiate a discussion at the conference on possibilities and limitations of narratives and stories as a way of engaging children in the efforts of transforming our world (UN, 2015).

References

Boykoff, M. 2019. Creative (Climate) Communications. Productive pathways for science, policy and society. Cambridge University Press

Linell P. 2009. Rethinking language, mind, and world dialogically: interactional and contextual theories of human sense-making. Charlotte, NC : Information Age Publ

Rockström J. 2015. Big world, small planet: abundance within planetary boundaries. Stockholm: Max Ström

United Nations. (2015) General Assembly Resolution A/RES/70/1. Transforming Our World, the 2030 Agenda for Sustainable Development.

Submission ID

1458

Advocacy for the 'Right to Water' Law: An Analysis of the Water-People Alliance Campaign in India

Authors

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Abstract

In the last four to five decades, the fresh water resources like rivers that were once revered have turned into the carriers of garbage and sewage. Today, according to the Central Pollution Control Board

(CPCB) of India, the water of the holiest river of India, Ganga, is not fit even for bathing, let alone drinking. Hundreds of rivers have died due to the pollution, deforestation, urbanization and other actions like mining, encroachment etc. As a result of this, many other water resources like wells, hand-pumps, ponds, lakes etc. which were fed by such rivers ensuring availability of water for people in rural and urban areas have dried up.

In a country like India, where the mainstay for a large part of population continues to be agriculture, the scarcity of water has caused extreme distress especially in the rural areas. Recently, looking at the thousands of farmers' suicides in the country, a senior advisor to the Ministry of Agriculture had warned that India may soon be called the 'farmer suicide capital of the world'. Besides, the lack of water has led to large-scale forced migration from rural to urban centres. Looking at the aggravating problem of water crisis in many parts of India, many civil society organisations have come together to push for a water security law in India on the lines of Food Security Act so that the supply of a minimum amount of water could be ensured for every household in the country.

The paper studies the advocacy efforts by the civil society organisations through a nation-wide campaign called *Jal Jan Jodo Abhiyan* (water-people alliance campaign). Using frameworks like 'campaign communication theories' especially the theories in message design to identify and understand the audience and create messages to improve their impacts, the paper will discuss the strategies used by the leaders of the campaigns. Through the data gathered from participant-observations of their events of national and regional level to engage with the government representatives and political parties, the paper examines how the campaign is trying to build pressure on the government and political parties for promulgating the law. The activists also resort to the modes of activism like fast unto death, foot marches, *Jal Satyagrah* etc. to compel the government to listen to their demands. The paper underlines how these activities serve as Habermas's idea of 'communicative actions' in terms of achieving the campaign objectives of mobilising people's support and having a dialogue with the governments at both national and state level.

Keywords: Water-people alliance, right to water, campaign, advocacy, India.

Submission ID

1492

Who do the Portuguese trust? Government communication management in the Covid-19 pandemic

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Abstract

In a public health emergency, the degree of public compliance with orders from health authorities and governments can greatly affect the course of the pandemic. Based on the assumption that (un)compliance with the authorities' recommendations is directly linked to trust in the sources of information, in this article we discuss the concrete case of the Portuguese government communication during the beginning of the 2nd wave of the disease. In the context of an international investigation of the EUPRERA Com-Covid network, an online survey was applied to $n = 460$ Portuguese citizens between October 7 and November 11 2020. For this paper we analyzed a section of the survey with questions regarding the sources of information that inspire greater confidence among the Portuguese population and the opinion of the Portuguese on the management of government communication. The surveys were coded and inserted in the SPSS statistical software. The study concluded that there is a positive perception of government communication among respondents, but that the Portuguese consider health care personnel to be more reliable sources of information than the media or government authorities. Regarding the gender issue, it was concluded that women trust the government more and also have a better opinion about the authorities' communication. With regard to age, it was found that young people are the ones who trust more the authorities and the media, while at the same time being the most critical of the government's performance in managing the crisis. In general, respondents showed little confidence in digital social networks and digital influencers as a source of information about Covid-19, and the higher the academic degree, the less confidence respondents have in influencers and social networks.

Submission ID

1604

Psychosocial Mechanism of Online Scientific Rumor Correction in the Post-COVID-19 Era: An Extended Model Based on the Theory of Reasoned Action

Authors

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Abstract

In 2020, an outbreak of pneumonia caused by a novel coronavirus known as COVID-19 broke out around the world, which has been having serious consequences on economy, politics and society. During the epidemic, a large number of scientific rumors, especially false rumors, have been spreading on the Internet. Like the data of infections and information on the prevention and treatment, these rumors have also been affecting the public sentiment and perception all the time.

The mature development of the Internet and social media has not only encouraged the spread of rumors, but also provided convenient conditions and opportunities for refuting them. Rumor correction is a strategy for clarifying, blocking and refuting rumors, of which the fundamental purpose is to curb

rumor spreading. Based on comprehensive observation and analysis of existing studies on rumor correction, it can be broadly classified into two categories. One is to collect information data on social media platforms such as Weibo and Twitter, taking refutation information as the research object, and summarize the propagation cycle model and find what affects it at the information attribute level (Chen, Liu & Deng, 2018; Chua, Tee, Pang & Lim, 2017; Tang & Wang, 2015; Zong & Huang, 2017), or use computational methods to simulate and analyze the macro social consequences of refutation information, such as the extent to which it affects the spread of false rumors on social networks (Friggeri, Adamic, Eckles & Cheng, 2014; Shin, Driscoll & Bar, 2016). The other category focuses on the change of individual cognition, attitude and belief, taking social media users as the research object (Bordia, DiFonzo, Haines & Chaseling, 2005; Liu & Xu, 2016; Zeng & Zhu, 2019). As social media users play an important role in online rumor spreading, the effect of online rumor refutation largely depends on the impact of refutation information on individual users. Thus, this study further focuses on the rumor correction behavior of social media users, specifically, deleting rumor information and sharing refutation information.

Human culture strongly depends on people to transmit information, while psychological science has many inspirations on the cognitive process of individual processing, acquiring and updating information, and many studies have proved the influence of psychology on individual behavior. As a consequence, this study aims at the psychological process at the individual level of social media users related to online scientific rumor correction. On the premise that human beings are rational and have the potential of empirical selection, this study is going to take the classical Theory of Reasoned Action as the basic framework and expand it by adding extra variables like personal norm, emotional change and impression management, in order to explore multi-causal pathways and clarify the theoretical psychosocial mechanism of scientific rumor correction. This study will use the method of questionnaire survey and be conducted in Mainland China, which is one of the countries most affected by COVID-19.

Submission ID

1659

EXPLORING THE PATH FOR NATURE CITIZENSHIP IN THE DIGITAL ERA

Authors

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Abstract

We are living in outstanding times. Science keeps presenting proofs that human action on the planet has been so striking that some scholars have proposed the establishment of a new geological era: the Anthropocene.

Most of the debate, activism and initiatives worldwide are focused on climate change and environmental sustainability. Organizations and some governments work intensively to minimize the errors that were and continue to be made by human beings, in order to reverse the trend of degradation that the planet has suffered, due to the brutal impact of human activity on nature and ecosystems. It is a global emergency for which the whole of society needs to work together - which is not happening.

Countless initiatives have been created and implemented, specially, since the last decades of the 20th century, with the purpose of protecting the planet, the nature, combating climate change, etc., among them the climate summits (called CoP - Conference of Parties) that led to the signing of several historic agreements, out of which the Paris Agreement in 2016 - the most recent example and the one with greatest media visibility.

Some countries have pioneered the inclusion in their Constitution of articles related to the rights of nature, such as Bolivia and Ecuador.

Other societies are inextricably linked to nature, as in Bhutan or New Zealand. From our point of view, this is the key factor and the basis for the effective protection of the different natural ecosystems and for the sustainability of the planet. It is an inclusive vision that assumes nature as a system with rights.

However, the discussion around the rights of nature is generally focused on legal issues, opening the path to discuss other essential elements for a true nature citizenship.

In parallel, the world, especially since the end of the 20th century, observed an impressive technological advance, in such a way that this enormous transformation came to be called the Fourth Industrial Revolution (I4.0) or Digital Age. One of the most visible aspects of this revolution, with regard to communication, is that it is now taking place in network, in real time and at the planetary level. In the so-called digital world, to which a very significant part of humanity already belongs, digital citizenship is increasingly becoming a reality. Moreover, according to some authors, the generation of digital natives has already been born.

Therefore, in our opinion, it is important to think about how to interconnect these two worlds: the digital and the creation of an identity for nature, in general, and for natural ecosystems, in particular.

This paper is of an exploratory nature and will present a preliminary literature review of the more relevant concepts about this problematic, using qualitative methodology. The main goal is to set the theoretical framework that will lead to the presentation of a definition of nature citizenship.

Keywords: Anthropocene, Biomimicry, Citizenship, Development, Nature, I4.0, Digital Networks, Sustainability.

Submission ID

1822

Visible damages, silent voices: Mariana's and Brumadinho's Brazilian disasters in the news

Authors

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Abstract

The use of dams for energy production, irrigation, or mining causes profound changes in the landscape, which are rarely questioned. Socioenvironmental activists repeatedly failed to include this issue on the public agenda, even though the rupture of a dam can cause environmental impacts more profound than those of its construction and affect the lives of people in disastrous proportions (Valencio, 2005).

The collapse of two mining dams in Brazil, one in Mariana, in 2015, and the other in Brumadinho, in 2019, is a clear example of environmental disasters with far-reaching impacts and doubtful repair. Their result is the death of almost 300 people, as well as severe environmental and material damages, but not all the citizens directly affected have received their compensation (Canofre, 2020). Besides, the total number of people affected remains uncertain as well as the amount of waste released and the overall impact on the environment.

As essential arenas of social construction and problem definition, journalism plays a crucial role in leverage critical issues for public debate and awareness. That is why authors argue for a clear-cut position between environmental journalism and traditional journalism (Girardi et al., 2012), while others question the way journalistic norms and values influence environmental issues coverage (Boykoff & Boykoff, 2004; 2007; Bødker & Neverla, 2012). For some (Girardi et al., 2012), the sacred value of objectivity is a significant obstacle in the way. It represents impartiality, but, what it does is align journalism with the dominant social powers frequently in tension with the environmental concerns. Also, journalism democratic potential to give voice to the voiceless demands consideration. While mainstream news media can often be far from that ideal, disaster news coverage calls for recognition of the “disproportionate burdens imposed on poor and minority communities by environmentally harmful conditions” (Cox, 2010, p. 264).

Mariana and Brumadinho disasters were undoubtedly an opportunity for journalism to acknowledge the dangers, risks, and uncertainties at play more accurately. It certainly brings to the spotlight the images of the wickedness of collapses. What is yet to be acknowledged is the extent to which the news coverage put those affected to speak, raising public concern about the broader impacts of these events on poor people and vulnerable communities.

This chapter departs from the role of the mainstream news media in the social construction of environmental problems to answer the above question. It analyses the Brazilian news coverage of the Brumadinho and Mariana disasters in the 30 days following the two events. The sample comprises the news published in the online versions of *Folha de São Paulo*, a ‘quality’ newspaper, and *O Tempo*, a popular one. The patterns of the news are examined using qualitative content analysis. The interplay between formal and content elements is explored to acknowledge the disaster's representation. Both are

methodological relevant (Krippendorff, 2004). This research also uses critical discourse analysis (Fairclough, 2003; van Leeuwen, 1997) to identify in greater depth the inclusion and exclusion of social actors and the issues concerned with their situation.

Submission ID

1830

Of Kami and Shishigami: Personifying Nature and Nonhuman Agency in Hayao Miyazaki's *Princess Mononoke* and *Spirited Away*

Authors

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Ms. Manisha Mishra - University of Agder

Abstract

Hayao Miyazaki, co-founder of the hugely successful Japanese anime production company Studio Ghibli, is widely considered to be one of the greatest anime directors. Miyazaki's *Spirited Away* (2001) bagged an Oscar for Best Animated Feature in 2002, cementing his popularity as a great auteur. His *Princess Mononoke/ Mononoke-hime* (1997) was "the highest grossing Japanese film of all time" (Napier, 2001) and has remained thus. Known for his strong environmental themes, Miyazaki's films incorporate Shinto elements (see Carbullido, 2013) woven together with personification and anthropomorphism.

In this paper, we examine two of Hayao Miyazaki's films, *Princess Mononoke/Mononoke-Hime* (1997), and *Spirited Away/Sen to Chihiro no Kamikakushi* (2001), while drawing from cinematic ecocriticism (see Garrad, 2004; Willoquet-Maricondi, 2010) and ecofeminism (Merchant, 1989). Miyazaki's themes are deeply rooted in the essence of Shinto - "an animistic religion that sees gods and spirits in everything, resulting in a respect for human harmony with the natural environment" (Odell and Le Blanc, 2009). As the natural world inhabits much of Miyazaki's cinematic vision (Loy and Goodhew, 2004), his use of personification and anthropomorphic representations of nature strengthens the connection viewers feel with the natural environment in his films. Although anthropomorphism and personification are not uncommon in animation (for example, Disney's animated films), Miyazaki uses these tools to further highlight his environmental messages. In *Princess Mononoke*, the protagonist Ashitaka tries to restore harmony between the Gods, animals and humans, but to no avail. It is with the beheading of Shishigami, the embodiment of Nature itself - who is represented as a luminous, humanoid/zoomorphic creature - that the world descends into complete chaos. As viewers we are left in horror as Nature is beheaded and murdered. However, this horrible act brings the warring sides to the realisation of what they have done and how they must now rebuild the world. In *Spirited Away*, the protagonist Chihiro meets several kami (or spirits) during her employment at the bathhouse. It is when

she has a particularly filthy customer from whom she cleans all kinds of waste, that she realises he is a polluted river. As viewers, we sympathise deeply with the river's plight and its desire to be free of all the toxins in it. In Miyazaki's films, the natural world is not only highlighted through beautifully animated frames of rolling hills and valleys but also through anthropomorphism and personification. In doing so, viewers of Miyazaki's films find themselves attached to "characters" that are corporeal manifestations of nature and the natural world. We argue that in Miyazaki's animated worlds, nature not only exists independently, but can walk, die, smile and be reborn, thus giving it an agency and power beyond its usefulness to humans.

Submission ID

1928

EMERGING DIGITAL OPPORTUNITIES FOR GLOCALIZING CLIMATE CHANGE INFORMATION BY EAST AFRICAN JOURNALISTS

Authors

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Abstract

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Climate change is one of the most consequential environmental challenges of modern times. Efforts to mitigate its causes and adapt to its impacts continue to preoccupy global, national as well as local stakeholders. Developing countries contribute, on the whole, only a negligible, albeit growing, proportion of global carbon emissions but they are amongst the hardest hit by the impacts of climate change (World Economic and Social Survey, 2016). Africa's Agenda 2063 recognizes climate change as a major challenge for the continent's development (UNFCCC, 2020). In East Africa, economies are largely dependent on climate-sensitive sectors, such as agriculture, water, energy and tourism and their vulnerability has greatly been increased by adverse climatic change events. As such, the East Africa Community (EAC) has developed a Climate Change Policy, Climate Change Strategy and Climate Change Master Plan with the overall aim of the Policy being to contribute to sustainable development in the region through harmonised and coordinated Climate Change adaptation and mitigation strategies, programmes and actions (EAC Website). The need for improved capacity building through increased public awareness that comes with enhanced information dissemination in the region, cannot, therefore, be overemphasised. Emerging global communication trends suggest that audiences are increasingly more interested in hyperlocal content yet climate change by its very nature, is a global phenomenon, even if its impacts are experienced at a local level. Digital platforms have made it easier for communities to connect their realities with global trends and benchmark with the best practices around

the world in crafting local solutions. The crisis of climate change and communication around its impacts, thus provide a nexus between the global and the local and present both opportunities as well as challenges. The purpose of this qualitatively researched paper, therefore, is to discuss, in line with the new media theory, how science and environmental journalists can optimally utilize popular new media to increase dissemination and therefore access to localized climate change information so as to enhance climate resilience and economic sustainability in East Africa. This is in cognisance of the fact that climate change information has largely been inaccessible owing to the mode and language of dissemination. There is therefore an urgent need to repackage and disseminate the globally shared information in newer accessible and locally-relevant formats.

Submission ID

1963

News Media Re/presentations of the Political Economy of Climate Change and Energy in South Africa

Authors

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Abstract

Climate change remains a threat to planetary existence, and as negative climate changes continue, action to reduce emissions and foster increased adaptation capacities has become more necessary. Through the Paris Agreement, countries pledged to reduce emissions. Historically, global North industrialised countries are responsible for climate change-causing emissions and expected to lead action towards mitigation. While the global North is historically responsible for the climate crisis, countries with economies in transition in the global South have seen their present emissions rising. Countries in the BRICS (Brazil, Russia, India, China and South Africa) have become the centres for increased emissions. These countries have often argued for a ‘developmental space’ in order to catch-up. South Africa is Africa’s highest emitter and at the same time, has the highest emissions per capita globally. Climate change mitigation and energy discourses in South Africa have played out in the news media. This paper examines how four mainstream weekly newspapers in South Africa have cover(ed) and re/presented South Africa’s climate change efforts and energy transition through articulation and discourse analysis. South Africa’s climate action plans cannot be isolated from the country’s energy policies, both present and future. As the paper shows, energy discourses and actors from the minerals-energy complex have considerable discursive and policy influence on climate change. The South African energy ‘futures’ (energy mix) terrain is a key feature of the news media representations of climate change and global warming. Future energy choices have a bearing on whether the country will meet its obligations on emissions reductions and decarbonise its industry. The climate and energy discourses intersect, at some moments, as allies and at some as adversaries. Climate mitigation requires a reduction in emissions, mostly from the energy industry and thus, discursive and policy conflicts are inevitable. This paper discusses climate change mitigation debates as they permeated the South African

news media between 2011 and 2018, identifying the critical discourses on mitigation and energy and linking discourses to the actors' vested interests that promoted them. Discourses on coal indispensability, nuclear optimism and shale gas optimism are sponsored by actors from the minerals-energy complex, the Department of Energy (DoE), and the Department of Mineral Resources. The actors from these sectors and institutions used the discursive strategies of moralisation and economisation to moralise the 'need' for South Africa to use coal because the country was still 'developing'. Thus, coal was necessary for economic growth and international trade competitiveness. These actors also promoted the oxymoron of 'clean coal'. Oppositional discourses (coal, nuclear and shale gas diffidence) competed for discursive signification in the news media representations of the South African energy futures. Actors from environmental non-governmental organisations and academics mainly sponsored the oppositional discourses. At some moments, their discourses converged with the government's discourses, especially the Department of Environmental Affairs, which sought to steer South Africa towards 'renewable-energy' green growth. The Promethean discourses re/constructed climate change as a problem that could be fixed through technology and market-led initiatives.

Submission ID

2133

Homeowner or squatter? The discursive nature of nature and residential spaces in postcolonial Kenya

Authors

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Abstract

Whereas dispossession of indigenous people of their land is the most pronounced human right abuse in settler colonies, equivalent violations remain obscured in the postcolony where the end of colonisation paved the way for nonracist but unfettered capitalist accumulation. The postcolony has several continuities of settler economies, although the cruelty is by the elite natives questioning the very humanity of other natives. It is a case of abuses by the privileged Africans, who, as Fanon anticipated, have become whiter than Whites (1966). Taking an explicitly oppositional stance, this presentation utilises the Discourse Theory method to describe elite narratives in the construction of 'illegal' settlements in Kenya's land use plans. While the application of post-structuralist methodologies in the field of planning has matured in established capitalism, the research tradition has not been deployed in Kenya and Africa at large. Using the concepts of 'floating signifiers' and 'nodal points' (Laclau and Mouffe, 2014), I explain how land use control measures acquire meanings that are temporarily stabilised but cannot be ultimately fixed. I argue that development planning is not concerned with the environment phenomenon in itself, but how the elites make sense of nature. I assert that although land is a 'natural' object, it is at the same time a product of power relations that socially construct space to create sense out of the regime's discourses. Thus land administration in the postcolony fuses 'power

and knowledge' to support or contradict the essentialist science of nature. It means physical planning policies are not about nature, but redistribution in the name of nature. These arguments are elaborated through a macro-textual Discourse Analysis of the differences in newspaper coverage of two empirical cases of 'illegal' forest dwellers: the eviction of residents the mainstream media christened homeowners and investors versus those denounced as squatters. I conclude by discussing the political implications of the social construction of nature as a way of reinvigorating debate about the media representation of the ongoing systems of erasure and native-native domination in Africa. I propose the concept of agonistic planning as a response to the exclusive deliberative strategies that are inappropriate in nations with wide disparities in land ownership.

What Should an English 131 Opening Paragraph Look Like

Keywords: Domination, postcolony, nature, post-structuralism, human rights, planning, illegal settlement.

Submission ID

2153

Ecocinema and/as Environmental Communication

Authors

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Abstract

Ecocinema, being heavily dependent on ecocriticism, has mostly existed outside the realm of environmental communication. Although both ecocriticism and environmental communication seek to analyze how mediated domains, such as literature and journalism, portray nature, they have existed as parallel disciplines for decades without many intersections or interdisciplinary dialogue (Slovic et al., 2019). Recently, scholars such as Slovic, Rangarajan, and Sarveswaran (2019), who tried to bridge the gap argue that ecocriticism has emphasized popular culture and high art, specifically focusing on the activist, ethical and aesthetic dimensions; environmental communication, on the other hand, has been more pragmatic. But the fascination with human interactions and discourses and the belief that improving communication sways societies towards more mindful ecological practices remained the core of both fields.

One of the earliest attempts to integrate both fields was made by Killingsworth and Palmer (1991). The scholars aimed to bring the academics and practitioners together to analyze the models of discourse practices and improve them. Their call resonated with scholars in the environmental humanities during the first wave of ecocriticism. Unfortunately, despite the early attempts to consilience, environmental communication and ecocriticism have operated in separate realms during the past two decades, perhaps because of increasing professionalism and precision in both fields (Moitra, 2019). Scholars such as Keitaro Morita have attempted to bring ecocinema studies to the canvas of environmental

communication by arguing that ecomedia (including environmental writing, environmental TV, films, and ecocinema) has the capacity to inspire political and personal actions (Moitra, 2019). However, Moitra's ecocinema is circumscribed by ecocritical readings, hence limiting the scope of participation. By building on his argument, this paper presents "*Musical Mangrove*," a case-study based ecocinema, as an applied and pragmatic way of studying environmental communication.

This paper builds on the scantily existing interdisciplinary conversations and establishes ecocinema as a form of environmental communication. By defining the field of environmental communication, its urgency, and need in an era of Anthropocene, this research notes the lack of attention to cinema in environmental communication. It uses a production-oriented, case study based ecocinema to demonstrate how it could contribute to the field and presents *Musical Mangrove*, an environmental documentary film, to illustrate the values of participatory media in the study of environmental communication. In doing so, the study highlights the lack of ecocinematic intervention in environmental communication, the limitation of mainstream media in bringing native stories, and elaborates on how case study-based ecocinema informs the field.

Submission ID

2219