"Unless someone like you cares a whole awful lot, nothing is going to get better":

An environmental discourse analysis of animated films *The Lorax* (2012) and *Tomorrow*

(2019)

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Abstract

Fostering understanding and support for environmental and climate issues requires a foundational understanding of how environmental discourse interacts with the public. Animated films exist as a medium in which environmental messaging is distributed to the public with the goal of inducing behavioural change in an audience. The goal of this paper is to link the messaging of such films with audience feedback. This will be accomplished by analyzing the impact of two environmentally focused animated films, *The Lorax* and *Tomorrow*, produced in Hollywood (United States) and Dhallywood (Bangladesh), respectively, and by using environmental humanities discourse analysis to examine how people responded to these films on social media websites. The first part of the article is the analysis of selected social media pages to understand the impact of these two films on contemporary environmental discourse, and the second part comprises an analysis of the environmental narrative of the films. I selected these two films for four reasons: i) they are both environmental educational and pedagogical tools; ii) they use environmental storytelling; iii) they both address sustainability; and iv) they may have influenced some discourse on environmental issues on social media. The study demonstrates that environmentally driven animated films can affect and shape the discourse of their audiences. This study also demonstrates how narratives from films such as *The Lorax* and *Tomorrow* can lead an audience to consider large-scale environmental issues.

Keywords

environmental storytelling; environmental discourse analysis; environmental education; environmental communication; sustainability; sense of place; films; social media

Introduction

Using environmental discourse analysis as a narrative inquiry, I investigated two animated eco-blockbusters, selected for the rich social media feedback available for

37   them: *The Lorax* (Chris Renaud, 2012) and *Tomorrow* (Mohammad Shihab Uddin, 2019).

38   The 2012 rendition of *The Lorax* was selected over the 1972 version, as while the 1972

39   version is closer to *Tomorrow* in terms of time format, the release date makes the 2012

40   version more suited for social media analysis, avoiding nostalgia as a confounding factor.

41   The films were produced in Hollywood (United States) and Dhallywood (Bangladesh,

42   Bangladeshi production house Cycore Studios), respectively. *Tomorrow* specifically was

43   selected as standout film produced recently within the global South that has received good

44   reception both domestically and internationally, having won the Cannes World Film Festival

45   (Not to be confused with the *Festival de Cannes*) award in August 2021 and having received

46   praise from western environmental journalist Bill McKibben. Another major factor in the

47   selection of *Tomorrow* was that it came out at a time in which there was a relatively large

48   population of Bangladesh had internet access, going from 5% of the population having access

49   in 2012 to 23.8% in 2019, providing an early look into how a key population within the

50   global South reacts to environmental messaging targeted specifically at them (ITU, 2022).

51   The 2012 incarnation of *The Lorax*, while deviating from the source material, was selected as

52   a contemporary western environmental blockbuster due in part to its similarities in art style to

53   *Tomorrow*, and due to sharing a message that promotes a world where sustainability is not

54   prioritized over economic development. While more popular and award winning films closer

55   in format and style to *Tomorrow* would have been valuable sources, no such films appear to

56   exist. For example, *WALL-E* was also considered for analysis, but was not selected due to not

57   showing the world prior to environmental collapse, lacking the same direct cause and effect

58   of before and after environmental collapse shown in *Tomorrow* and *The Lorax*.

59   Animated films may be a powerful medium of environmental education and shape the

60   public discourse, as discussed below. That said, both stories take different approaches to this

61   end - while *The Lorax* describes the severity of waste and environmental collapse caused by

62 deforestation (and implicitly climate change, given the media environment and promotional

63 material around the release of the film), *Tomorrow* describes how such events result in

64 climate change. *The Lorax* uses a fictional world to deliver a general message while

65 *Tomorrow* highlights the reality of severe climate injustices in the global South such as

66 Bangladesh. I undertake a meticulous analysis of social media commentary to gain valuable

67 insights into the perception and response of the general public in both Bangladesh and the

68 United States, specifically in relation to the climate-change themes depicted in the animated

69 films. By carefully examining the discussions and reactions of individuals from diverse

70 backgrounds and demographics on various social media platforms, I aim to unravel the

71 profound impact these films have on the broader population and their role in shaping the

72 discourse surrounding climate change and environmental concerns.

73   Humanities scholars such as Alexander Elliott and James Cullis (2017) argue that

74 research on climate change has shifted to a global scale from a previous focus on the Euro-

75 American perspective. The film *Tomorrow* reflects this trend in the realm of popular culture.

76 *Tomorrow* came out in 2019 after being in development for two years, notably about the

77 same period as Bangladesh had experienced several environmental disasters, including flash

78 floods attributed to climate change. This is further substantiated by two supporting sources.

79 The Business Standard (2021) news highlights this correlation, while Hossain et al. (2020)

80 explore the implications of these extreme flood disasters, emphasizing their impact on the

81 livelihoods and comping mechanism of the Char Village. 2012's *The Lorax* is similar, despite

82 not being set in a specific place, in that it was released at a time when environmental

83 catastrophes including earthquakes, wildfires, and hurricanes were major stories in media

84 across the globe, including the previous year's Fukushima nuclear disaster stroking fears of

85 nuclear contamination across the Pacific Ocean, and the remnants of Hurricane Irene causing

86 atypical damage in parts of New England. While Hurricane Irene was in many cases not as

87   bad as it was predicted to be in regards to the effects on New York City, it did cause a media

88   frenzy prior to landfall, and actual catastrophic flooding in many places, especially parts of

89   Vermont and New Hampshire. Both films therefore addressed the global nature of

90   environmental crisis in a timely manner. Through the joint analysis of the films and their

91   reception by viewers on social media, this study finds evidence that these two films gave their

92   viewers thematic narratives and talking points that they then incorporate into personal

93   discussion and in general promotion of environmental causes.

94   **Methodology**

95   Using environmental humanities discourse analysis as a tool, the principal question of

96   this study is: *How do* The Lorax *and* Tomorrow *instruct viewers about key environmental*

97   *messages?* To answer this overarching question, I consolidated the public comments and the

98   narrative analysis of the films into three main categories: *environmental catastrophe,*

99   *environmental storytelling,* and *environmental education* in order to address three questions

100   related to these three environmental discourses. First, *how are these two films situated within*

101   *the discourses of environmental catastrophe*? Second, *how do these two films perform*

102   *environmental storytelling while emphasizing a sense of place, i.e., spatiality*? Third, *what*

103   *sorts of educational messages do these two films spread regarding sustainability*?

104   The environmental discourse analysis in the paper is structured as follows. First, this

105   paper provides a brief synopsis of the films. Second, this study considers the literature on

106   how public comments online pertain to broader environmental media. Continuing the

107   discourse analysis, a select sampling of activity on social media pages related to each film is

108   analyzed to understand the discourse surrounding each. Third, the paper provides an

109   environmental discourse analysis to extract the themes and narratives from both films with

110   the most impact. By using both an analysis of social media posts about the films and a direct

111 analysis of the films themselves, this study demonstrates how aspects of each film influenced

112 public discourse.

113   I use an environmental discourse analysis model drawn mainly from anthropologists

114 Peter Mühlhäusler's and Adrian Peace's scholarship. My narrative analysis also incorporates

115 spatiality as it shows how discourse may vary in different local, regional, and global contexts

116 even when they address the same environmental concerns. Furthermore, the narratives and

117 target audiences of both works incorporate some spatiality, with *Tomorrow* being squarely set

118 in the real world and particularly focused on Bangladesh, while *The Lorax* was a Hollywood

119 blockbuster aimed at the developed world with a fictional setting reminiscent at first glance

120 of global North suburbia. While discussing the methods of environmental discourse analysis,

121 Peace states that emphasis on keywords and select terminologies is vital to the

122 anthropological contribution to environmental discourse analysis (p. 415). As a part of the

123 environmental discourse analysis, I chose the selected words and phrases from the content

124 and comments of the two films. The study also deals with spatiality as both comments and

125 contents highlight local and global concerns about the environment.

126   I use social media as a platform to measure and understand public reactions. To

127 extract public comments about *The Lorax* on social media, I used the search term: "lorax" on

128 Twitter (currently in the process of being rebranded as X) using the Netlytic social networks

129 analyzer, which yielded exactly 1000 comments. This number of comments was chosen as it

130 is the default used by Netlytic and represents a reasonable sample for manual coding of

131 sentiments. Based on the research objectives and available resources, it was determined that a

132 sample size of 1000 comments would provide a sufficiently representative sample for manual

133 coding of sentiments. It is also worth noting that the ability to conduct an updated analysis

134 using Netlytic may have been affected by recent changes made by Elon Musk to the Twitter

135 API, which can impact the availability of data. I confined the study to Twitter because

Netlytic does not extract comments from Facebook, and because *The Lorax* Facebook page

has very few public comments from which to glean data. Furthermore, *The Lorax* does not

have a YouTube page. For *Tomorrow,* I extracted comments from *Tomorrow's* YouTube

page, as *Tomorrow* does not have either Facebook or Twitter pages. I extracted comments by

using a web scraping method written in the Python programming language, using the search

term: "tomorrow animated movie"; which yielded 1510 comments (Bengali and English) out

of 4974 total, based on which comments received more "likes" (the remainder of comments

were omitted for falling below a threshold of likes). For *The Lorax*, the Twitter comments

spanned a decade, as the film was released in 2012. As *Tomorrow* is a relatively recent

release, so are all its comments. After transferring the data to a Microsoft Excel spreadsheet, I

manually examined it, developing codes to analyze public reactions pertaining to different

environmental discourses. I began with a total of twenty-five codes, re-examined the data,

and condensed them to seven major codes. Using the statistical programming language R, I

present a graphical text categorization algorithm that generates skip-gram phrases selectively,

by extracting and using phrases. Commenter names and online handles have been excluded

for anonymity.

Film synopses

The animated film *The Lorax* (2012) is loosely based on Dr. Seuss's children's book,

The Lorax (1971), although the plot of the film diverges from the source material. This

divergence primarily takes the form of additional plot points and characterization, such as the

focus on the history of the Once-ler, or newly invented characters such as Aloysious O'Hare.

Visual communication studies scholar Dylan Wolfe (2008) notes that environmentalism is a

key feature of the work.

Produced by Illumination Entertainment and released by Universal Pictures in 2012,

The Lorax had a budget of $70 million and grossed $348.8 million worldwide (Box Office

161 Mojo, n.d.). *The Lorax* showcases the process of industrialization, portraying the cause and

162 effect of the hypocritical nature of "human progress" when externalities are not addressed,

163 and the environment is not thought of as worth protecting. It must be noted that

164 environmental messaging in media adjacent to the film was compromised, as noted by

165 Caraway and Caraway (2020) in their article, while the film railed against greenwashing,

166 cross promotion in advertising with the film was used to showcase gas-powered automobiles.

167 In her article, communication scholar Ellen Moore (2016) also notes this as a flaw as it

168 changes the focus from reducing consumption to encouraging a nebulous "green"

169 consumption.

170 Ted, the protagonist, wants a real tree, which is now so rare as to be mythical. The

171 tree is intended to impress a girl he likes named Audrey. Audrey personifies trees and is

172 described using words such as "softer than silk" and "smelled like butterfly." Because of

173 Audrey's love of nature, somewhat uncharacteristic of a Thneedville resident, her character

174 invokes a sense of conservation. Audrey shows Ted a painting of trees with a sense of loss

175 and lamentation. Unlike how the general population and especially the industrialists of their

176 town of Thneedville approach trees, Audrey's approach produces a renewal in environmental

177 consciousness. To investigate the disappearance of the real trees, Ted visits a hermit known

178 as the Once-ler and the Lorax who "speaks for the trees." Speaking for the trees (Earth) is

179 portrayed in a positive light.

180 The Once-ler represents industrialist society, which profited from development, but at

181 the cost of pollution and deforestation. The Once-ler employs subterfuge in his

182 industrialization, including "greenwashing." The Lorax's warnings were ignored by the

183 Once-ler when he became an industrialist, and the sky was filled up with smoke, the water

184 polluted with sludge, and the land was left barren. Greed and the illusion of progress

185 deafened the Once-ler to the words of the Lorax until one day the last Truffula tree was

chopped down, and the Once-ler discovers that he is condemned to grow old and waste away in the wretched badlands of his own making. This very clear cause and effect is a cautionary tale to viewers, showing how unethical profiteering can one day leave them worse off, with gains that were fleeting. Because the Lorax disappeared when the last Truffula tree was chopped down, the Once-ler relays to Ted the Lorax's cryptic last message, "Unless someone like you cares a whole awful lot, nothing is going to get better, it's not" (1:02:09). This is a clear call to action to the audience, as Ted is the archetype of the everyman, a person who the audience can relate to. Indeed, the Once-ler charges Ted, and by extension the audience, with repairing the devastated environment. However, other industrialists in the movie, chief among them a clean air tycoon named O'Hare, fight to keep the status quo by tricking the populace, subconsciously warning the audience that pushback from people they know may in fact be misdirection from real-life industrialists.

The 2019 film *Tomorrow* (budget: 10 million BDT, converted roughly to ~119,000 USD; a reliable figure for gross income could not be found) similarly portrays a dire future in the hopes that the present generation will find a way to avoid it (*The Daily Star*). *Tomorrow* begins when Ratul and his father, a nature lover, learn that sea levels are rising, which will make them and their fellow villagers ecological refugees. Despite this knowledge, they and the villagers are reluctant to take any actions to prevent the hazard. One of the villagers' comments, "why would we ruin today thinking about tomorrow?" (4:10) is a refrain viewers may be familiar with, a carelessness about their own future.

In a dream, Ratul learns that Bangladesh is going to face a disastrous fate because of rising sea levels combined with the melting ice caps in the Himalayas. To answer Ratul's questions, Batasher Buro, a shamanic figure known as "the Old Man of the Winds," takes him to the future, in which most of southern Bangladesh is submerged, with almost 30 million homeless and destitute people taking shelter in the north. This reflects real life—for

211 some time now, residents of southern Bangladesh have been migrating to the capital city,

212 Dhaka, and other comparatively highland parts of the country. But there is still hope: the Old

213 Man of the Winds takes Ratul to another possible future, where solar panels and windmills

214 are commonplace and there is no usage of fossil fuels. This alternate future implies that

215 mankind has a choice. Ratul wants to know how to build a future like this, but the Old Man

216 of the Winds leaves, saying this is Ratul's planet and he himself needs to seek an answer.

217 Similar to *The Lorax*, Ratul is an everyman, with the audience implicitly being told to

218 personally care about the environment themselves.

219   Ratul awakens concerned about the welfare of Earth. Inspired by his father's

220 motivational speech about saving the environment, Ratul starts a campaign on social media

221 focused on taxing fossil fuels, inspiring protests, which start taking place all over the world.

222 (Posting on social media and protesting are actions that viewers may be able to take on their

223 own; these easier actions are shown first, lowering the barrier for meaningful action by the

224 audience.) The film then leaps 25 years in the future to show a grownup Ratul delivering a

225 speech at the United Nations. By then, many parts of the world, including southern

226 Bangladesh, are submerged. But there is optimism that Bangladesh can rehabilitate its people

227 with money from a tax on fossil fuels; the other countries of the United Nations begin helping

228 to address the climate crisis, following in the footsteps of Bangladesh. Ratul hears the voice

229 of the Old Man of the Winds, who tells him that he has been successful in saving the world.

230 This is more than a narrative statement; it is a clear statement to the audience that their

231 actions have the potential to make a real impact.

232 **Environmental discourse analysis**

233   How film characters deal with environmentally catastrophic issues is part of what

234 viewers imitate and can be influenced by in a film. These two films exhibit several major

235   environmental themes, including the concept of unspoiled nature, the sense of place,

236   pollution, deforestation, and land erosion.

237   Environmental discourse analysis has been adapted and developed from several

238   branches of social sciences, primarily anthropology, and is therefore inherently multifaceted.

239   Adrian Peace (2018) explains that "academic disciplines go about their interrogation of

240   discourse in different ways" (p. 415), but in general describes discourse as "specific ways of

241   talking about particular environments and their futures" (Mühlhäusler and Peace, 2006, p.

242   458). A social anthropologist, for example, "become[s] familiar with the natural discourses

243   local people draw upon to describe environments of greatest significance to them" and in this

244   way contributes to environmental discourse analysis by highlighting environmental discourse

245   on a local level (Peace, 2018, p. 415). Peace (2018) is a social anthropologist, but there are

246   many historians, political scientists, or communication studies researchers who examine

247   power abuse, inequality, and other significant concerns within the social and political

248   environment. The many discourse analysis techniques cannot be summarized in this brief

249   space, but all approaches, at least to an extent, view language as a social practice and

250   discourse as pertinent to the broader social order. This research aims to complement the

251   broader discourse by providing valuable empirical insights. By examining the empirical

252   findings alongside the existing discourse, it contributes to a comprehensive understanding of

253   the reception and impact of climate-change media. Thus, this study recognizes the relevance

254   of the ideological debate while highlighting the unique perspective offered by the empirical

255   analysis.

256   Mühlhäusler and Peace (2006) underscore that "[m]uch environmental discourse

257   elaborates the theme that human actions are detrimental to the survival of humanity" (p 461).

258   My analysis correspondingly highlights the irreparable damage that humanity is contributing

259   to the environment which viewers witness within the selected films. Mühlhäusler and Peace

260 (2006) speculate that it is yet unknown how much the environmental discourses and

261 metadiscourses improve the condition of the environment (p. 457). Environmental discourse

262 analysis can show which narratives instil feelings of hopelessness, apathy, and inaction in

263 viewers. Conversely, environmental discourse analysis may highlight narratives about

264 environmental issues and matters of environmental justice that give the viewer a manageable

265 sense of alarm, spurring them to act before it is too late. In "Envisioning A Sustainable

266 World," sustainability scholar Donella Meadows (1994) regrets, "Whatever the reason,

267 hardly anyone envisions a sustainable world as one that would be wonderful to live in" (p 2).

268 She is hopeful nevertheless, "I have noticed, going around the world, that in different

269 disciplines, languages, nations, and cultures, our information may differ, our models disagree,

270 our preferred modes of implementation are widely diverse, but our visions, when we are

271 willing to admit them, are astonishingly alike" (1994, p. 4). Two different movies from two

272 different parts of the world with two different senses of place both demonstrate a singular

273 desire to save the world from environmental catastrophes.

274 **Analysis of public reactions to the films on Twitter and YouTube**

275 The films *The Lorax* and *Tomorrow* engendered the formation of publics, aligning with

276 Michael Warner's (2002) conceptualization. These publics emerged through self-organization

277 as individuals voluntarily congregated around a shared interest in the films' environmental

278 themes. Online discussions and interactions epitomized relations among strangers within the

279 public sphere, where personal and impersonal address intertwined. The collective attention

280 devoted to these films and the reflexive circulation of discourse on social media platforms

281 fostered a dynamic social space for the shaping of public opinion and reception. Valuable

282 insights into the dynamics of these publics and their role in the discourse surrounding *The*

283 *Lorax* and *Tomorrow* are possible by integrating Warner's conceptual framework.

284   In the context of the public who commented on social media platforms, Michael

285 Warner's (2002; p. 50) concept of a public as "a space of discourse organized by nothing

286 other than discourse itself" holds significant relevance. The individuals who engaged in

287 discussions and expressed their opinions on platforms such as YouTube and Twitter can be

288 seen as actively participating in the creation of a public space through their discourse. Their

289 comments, reactions, and interactions constitute the very fabric of this discursive space,

290 where ideas, perspectives, and sentiments are exchanged and circulated.

291   Warner's (2002) notion of a public being "autotelic," existing as the purpose and

292 outcome of the discursive activities it encompasses, aligns with the understanding of social

293 media platforms as spaces where public discourse takes place. The act of addressing and

294 responding to one another's comments on these platforms contributes to the formation and

295 sustenance of the public sphere. The comments made by individuals reflect their engagement

296 with the films and the issues they address, shaping the broader discourse surrounding climate

297 change and environmental themes. Public comments are not just isolated individual

298 expressions but collectively contribute to the discursive space of public reception.

299 Understanding and analyzing these comments provide insights into the perceptions,

300 interpretations, and responses of the public, shedding light on the dynamic nature of public

301 engagement with climate-change media.

302   The audience is a key part of the environmental discourse equation, and these two

303 films generated many positive reviews on the social media pages related to the films.

304 Audiences' reactions to media are important to understand so that artists, activists, and

305 academics may even more effectively contribute to environmental awareness. Despite this

306 clear need, some scholars caution that we lack sufficient knowledge regarding how audiences

307 react to environmental communication, calling for more such studies (Kluwick, 2014;

308 Garrard, 2014, p. 20). Solitary public comments on social media may be inconsequential on

309 their own, but together, they are important to understand public reception. Unlike formal

310 media, informal social media is often free from the traditional trappings of media criticism;

311 the opinions on social media are often that of laypeople who are concerned with different

312 aspects of the film than a professional critic would be. Furthermore, the opinion of a friend or

313 family member on social media may have more impact on someone than that of a distant

314 critic whom the reader does not know. Social media comments are not a perfect stand in for

315 an "average" opinion of the film, as social media posts come with their own biases, and there

316 are economic and geopolitical factors that affect who is able to access the internet, and by

317 extension social media platforms.

318   I manually examined each of the selected 1510 public comments about *Tomorrow*

319 (beginning with the comment with the most "likes" (1.4K), ending with those with just one).

320 The most-liked comment states that *Tomorrow* is a locally made film with a global

321 international standard that carries an environmental narrative. The most-liked comments after

322 that are about the quality of the film and that it deserves international accolades. The major

323 seven environmental discourses derived from such public comments are presented in Table 1.

324   **Table 1: Example of YouTube Comments from *Tomorrow***

325   *(Arranged by total number of likes in sample)*

Discourse	Total number of likes of the combined comments	Total number of comments	Example of comments (These comments have been selected as fairly typical of the topic. Except for my translations, grammatical and spelling errors in comments have been left as is.)
Environmental education	1541	131	"It should be premiere in every School in Bangladesh … It's the most Realistic animated short movie I ever seen!"
Climate change	1239	95	"This film … [shows] examples of how climate change can affect us environmentally and as a community"
Sense of place	142	116	"Local places are getting destroyed because of global places" (my translation)
Environmental activism	191	88	"It's our duty to save our world, to save our people to save the wildlife # stand Against fossil fuel 🛡"

			# Raise awareness among all the people ✋”
Environmental storytelling	189	309	"Story is beautiful…I love this story…"
Sustainability	152	158	"If we plants tree more, one day we get a beautiful Bangladesh. Let's go we plants tree for a beautiful future"
Plastic/waste	110	29	"We should not destroy the environment by producing plastic" (my translation)

Public reactions juxtapose positive reviews of the content of the film with negative statements about the current local and global environmental conditions. Online commenters urge showing *Tomorrow* in all primary and secondary schools across Bangladesh while encouraging elected officials to watch and screen it as well. This commentary connects with the film narrative as the protagonist of *Tomorrow* is a schoolchild, who goes on an abridged hero's journey to affect global politics regarding environmental laws and policies.

The comments for *Tomorrow* demonstrate the power of locally produced media, an aspect of the film which may prove valuable to other environmental communicators and educators. Climate communication scholars Candice Howarth and Alison Anderson (2019) highlighted that stronger collaborative bonds between local media and scientific research helps form a more trusted relationship between local media and other local stakeholders and increases engagement with climate change. Many comments express an emotional response to seeing environmental destruction in their own localized area, for example, "Alas! My home is in Hatia, the southern part of Bangladesh" (my translation). Since *Tomorrow* was made in Bangladesh, it may create a greater local impact than if it had been produced in Hollywood, or even Bollywood. Relatedly, Howarth and Anderson (2019) have noted that climate change is often understood as "abstract and distant" (p. 718). *Tomorrow*, by contrast, shows how climate change is an issue requiring both local and global action.

Earth's restoration is possible only if we can imagine it clearly. Stories occupy an important role in that ability. For all of us, stories matter; if we know our local story, That is

to say, how our local environment came to be, and how our actions alter it, especially through local media, we can participate in a range of actions to restore our local landscapes. However, the public of Bangladesh often do not believe that their elected officials will reduce the use of fossil fuels on their own. Yet the movie instills civic hope in some viewers—comments like "should the Prime Minister watch this movie, the country would benefit greatly" (my translation) reinforce the position in the public discourse that the ordinary people of Bangladesh do not trust the government to take adequate action. Intriguingly, this mirrors the events of the film, where the government increases taxes on fossil fuels following public outcry—showing that such a strategy is viable in the real world.

Public comments carry a sense of responsibility and an ethic of care. Commenters use words and phrases such as "I cannot control my emotions," "my eyes were moistened while watching the movies," "the Earth needs to be protected," "save Earth, save Bangladesh" and many more, to explain their sense of empathy and responsibility with local and global places. These are virtual comments, yet this sense of awareness is exhibited, nonetheless. This is again demonstrated when commenters give attention to the occasional hypocrisy or at least inconsistencies in the story. They appreciate the protest against fossil fuels, and critique Ratul's flight on a fossil fuel–powered airplane; they appreciate the message about the environment.

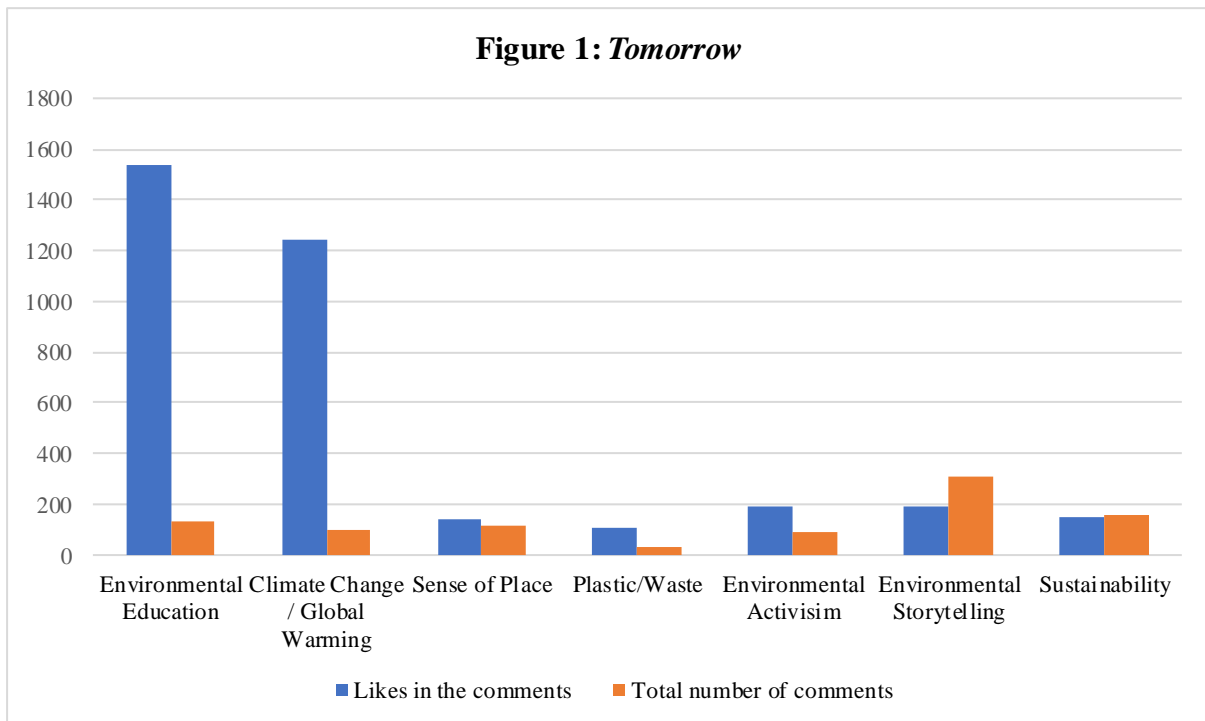
Regarding environmental activism, there were many comments such as "we each have a responsibility to save the world," and "all mass media ought to disseminate this film massively to create public awareness regarding climate change… the UN must force a new policy plan over the globe for building green planet again as soon as possible, avoiding further environmental degradation. Let's reduce fossil fuel usage, stop cutting trees by planting more, ban the Rampal project, together heal the world, make it a better place." Comments emphasized the need to act locally, for instance, stopping the Rampal coal-based

372 power plant, located near the Sundarbans, a UNESCO World Heritage Site, which is causing

373 an adverse impact on the Sundarbans' biodiversity and ecological conditions. The current

374 administration built the power plant, ignoring feedback from both environmental experts and

375 the masses. There was a collective effort to stop the project, but it went forward anyway.

376

377

378   Figure 1 shows the relationship between the total number of comments by topic in the

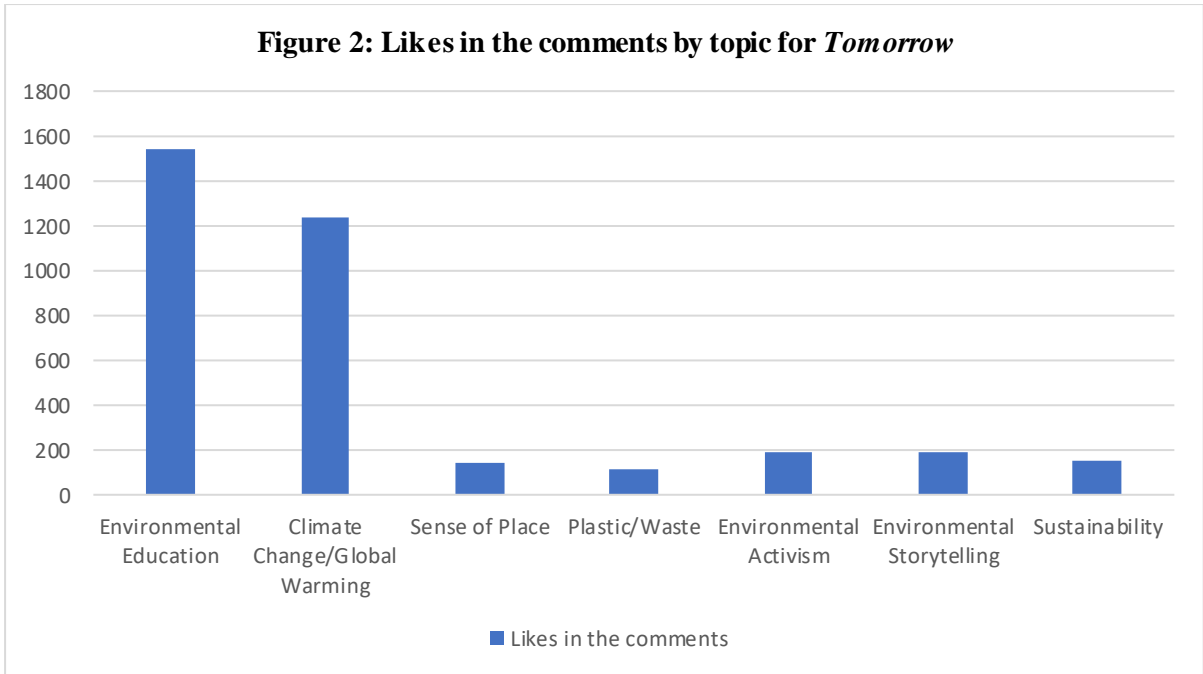
379 sample alongside the total number of likes for that topic. A high like bar indicates many likes,

380 the easier of the two participatory actions. Total comment bars tend to be lower as

381 commenting is harder; the higher an orange bar, the greater the desire to perform deeper

382 participation. The ratio between the two shows how well comments are received.

Figure 2: Likes in the comments by topic for *Tomorrow*

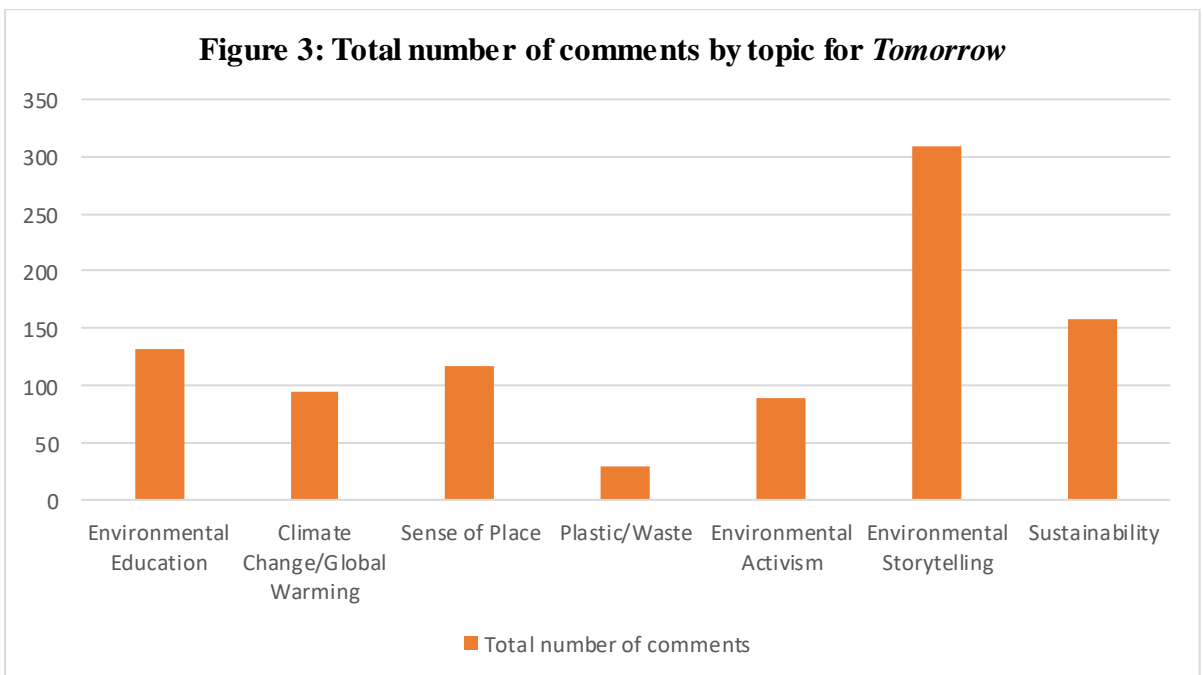
383

By focusing on the individual aspects covered in the above chart, we can better see

what engages online commenters. Of special significance is the generation of likes for

Environmental Education topics in comments, which is over 14 times higher than the lowest

topic measured, that being plastic/waste. Similarly, Climate Change / Global Warming

performed well as a topic for this movie in the comment topics.

Figure 3: Total number of comments by topic for *Tomorrow*

389

390   Figure 3 however shows that the comments that receive the most engagement with

391   likes is a minority, with the majority of comments focusing on topics related to

392   environmental storytelling. This provides some insight as to which topics are most likely to

393   incite a user to act, if we assume that writing and posting a comment is more effort than

394   liking a comment. It also potentially highlights a worrying disconnect between those who are

395   the most likely to get involves, and the broader online public.

396   Public comments demonstrate two major demands. First, this film should be

397   disseminated more widely, including being translated into English and other languages. (The

398   film was indeed later translated into other languages.) People from outside Bangladesh

399   should know that the Bangladeshi film industry can make a film that meets international

400   standards, and people from everywhere should be aware of climate change and become active

401   in civic discourse to hold their leaders to accountable. Second, common people should

402   engage in environmental activism and take peaceful civic action. The film suggests imposing

403   taxes on fossil fuels and investing in renewable energy, solutions echoed in the comments:

404   the public—individually and collectively, locally and globally—want to create and contribute

405   to a broad environmental movement.

406   The commenters exhibit a sense of urgency to create a sustainable planet Earth, as

407   well as their local environment. The tax solution to climate found in *Tomorrow* is also found

408   in comment analysis: online commenters want to create a movement to combat climate

409   change and plastic production. This shows that the calls to action given by the film in both its

410   visual and narrative storytelling were effective in at least inspiring viewers to comment on

411   their desire to act.

412   The public reactions to *The Lorax*, based on 1000 tweets, are similar to, yet distinct

413   from, those to *Tomorrow*. For example, "The Lorax is a cinematic masterpiece" and similar

414   comments show the widely shared opinion that the film had a high production value and was

415 enjoyable. As was the case with *Tomorrow*, the public reaction was also emotional for *The*

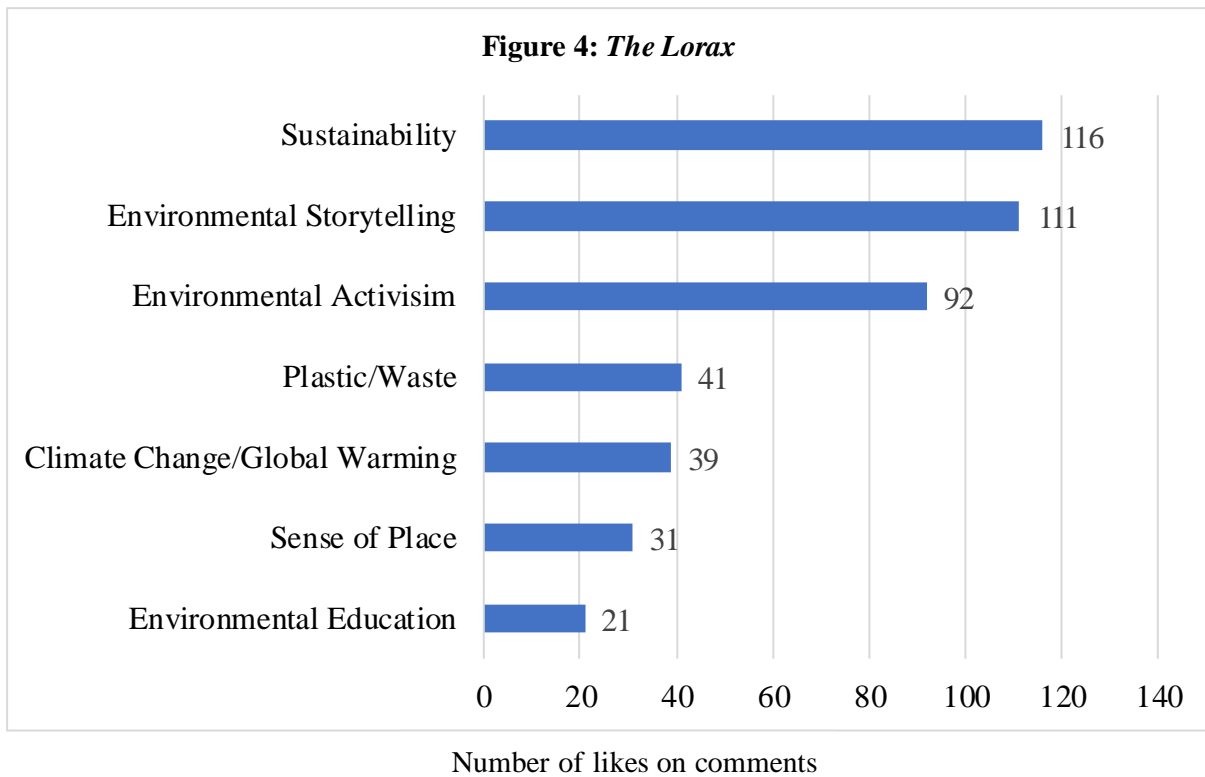
416 *Lorax*—the public cannot tolerate injustices and environmental destruction, even in fiction.

417 Table 2 and Figure 4 demonstrate the major environmental discourses coded from the public

418 comments, and the counts of these comments. Note that Netlytic derived Twitter comments

419 excluded "likes," thus the exclusion compared to Table 1.

420
421

Number of likes on comments

422 Figure 4 illustrates that that *The Lorax* commentors responded with likes mostly to

423 sustainability and environmental storytelling, with environmental activism also performing

424 well. Notably, environmental education exhibited the lowest performance here, whereas in

425 *Tomorrow* it performed the best. Climate change/global warming also performed much worse

426 for *The Lorax*, although this may be more easily explained by *The Lorax* only showing

427 ecological collapse, and not the explicit threat of real-life climate change.

428

Table 2: Examples of Twitter Comments from *The Lorax*

(Arranged by total number of comments)

Discourse	Total number of comments	Examples of comments
Environmental education	21	"y'all are getting literal degrees and careers still not believing in climate change. my 2 year old sister understands climate change and all she did was watch the Lorax."
Sense of place	31	"I am the Lorax and I speak for the trees Save the Amazon, or I'll break your knees."
Climate change	39	"#Earth #water The biggest issue of our time #climatechange #unless 'Unless someone like you cares a whole awful lot, Nothing is going to get better. It's not.'
Plastic/waste	41	"i am the lorax and i speak for the trees litter again and i'll break your fucking knees 😬"
Environmental activism	92	"@JohnBrennan @tedcruz He read Green Eggs and Ham on the Senate floor. I read the book to my 3 children countless times. Can I be a Senator from Texas now? The Lorax is the finest Dr. Seuss book and when Senator I will read that on the Senate floor."
Environmental storytelling	111	"It is a very deep and inspirational movie … I truly think it should have won movie of the year in 2012. It has changed my life for the better. This post is not satire."
Sustainability	116	"The Lorax are we planting more trees — In sha Allah, many more ✨ ❤️ https://t.co/evJu2P0iIb."

431

The most frequent subject of public comments relates to the multifaceted issue of

sustainability. The audience knows that online activism can be an effective tool for creating

political pressure and social action. An example of a commenter calling for social action is as

follows:

> "As the wise Lorax once said "Unless someone like you cares a whole awful lot,
>
> nothing is going to get better. It's not." On Saturdays, join us for a Self-Guided Beach
>
> Cleanup. Make a difference in as little as two minutes. https://t.co/lUpXKlmoy3
>
> #volunteer"

Perhaps the environmental storytelling used by the films is why commenters actively ask for

initiatives aimed at reducing the plastic impact.

442

443

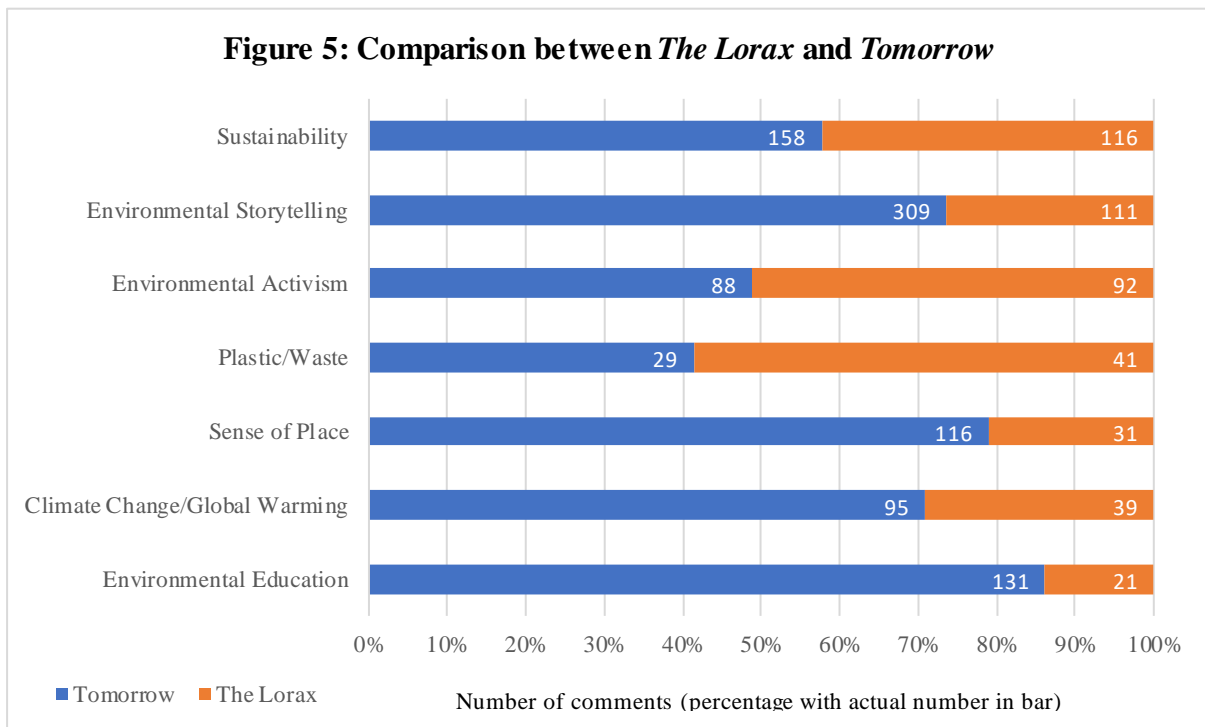
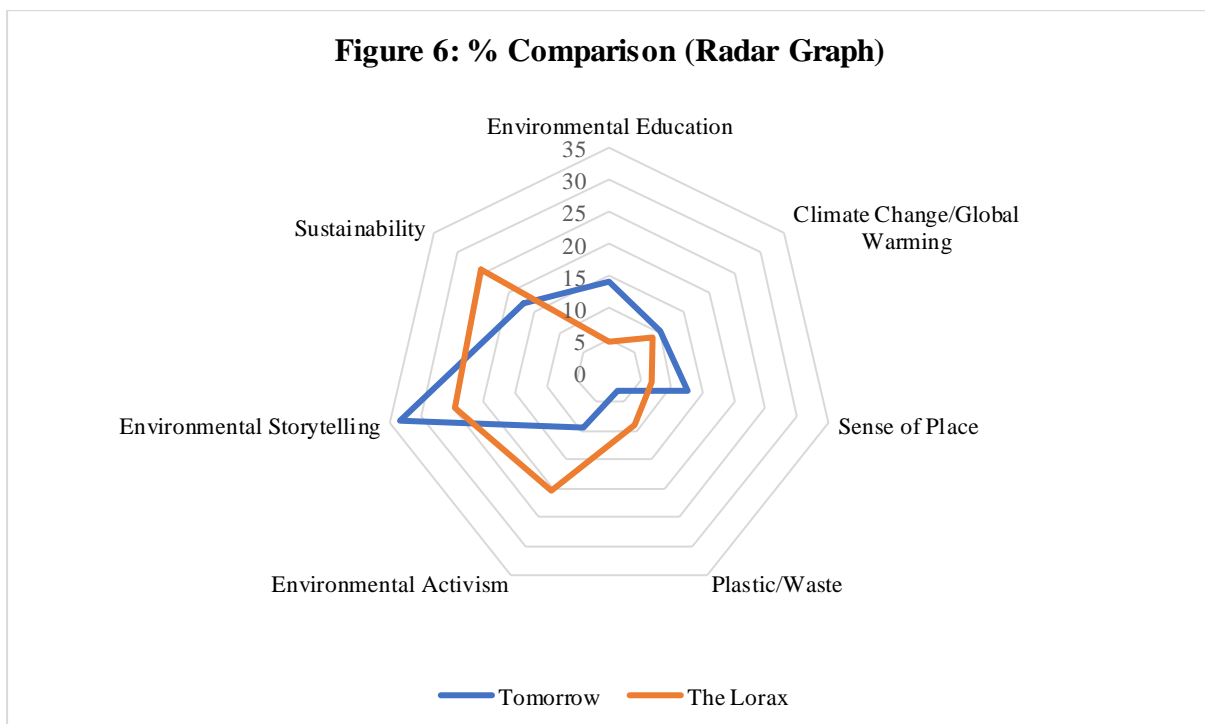



Figure 5 compares the terms found in the environmental discourse seen within the public comments. Since *Tomorrow* has more analyzed comments (1510), it appears higher than *The Lorax* (1000) in all discourses when directly comparing raw data. Figure 6 therefore compares the percentage of comments by coded subject.

448

449   Today's academic environmental activism draws inspiration from Thoreau, Muir,

450   Leopold, and Carson, among others, with this academic discourse indirectly influencing ideas

451   found in public activism through the broader environmental movement. *Walden* (1854) laid

452   the foundation of modern-day activism because Thoreau coexists with nature. Muir's

453   establishment of the Sierra Club and encouraging ordinary people to explore Yosemite

454   Mountain shows activism. Leopold (1986) considers the land as a teacher and emphasizes the

455   restoration of land is an enduring example of environmental activism. Leopold (1986)

456   remarks, "A thing is right when it tends to preserve the integrity, stability, and beauty of the

457   biotic community. It is wrong when it tends otherwise." Carson's (1962) *Silent Spring* is

458   enduring because it shows women's activism contrary to men's, and it demonstrates her bold

459   statement against the patriarchy, which is responsible for pesticides and insecticides. In

460   addition, like *Silent Spring*, Wolfe (2008) argues that *The Lorax* warns of a present danger

461   and a rapidly approaching future. Comment activity demonstrates that the public also relates

462   race, ethnicity, and gender with environmental activism. Some comments contend that *The*

463   *Lorax* is racist and sexist because the Lorax speaks for only for certain trees, as exemplified

464   by the comment "Quick question: is the Lorax racist against certain trees? He just seems like

465   the type" (Username Expunged) and some believe Audrey should have been the protagonist

466   instead of Ted. Despite the fact that online commenters presumably do not often have

467   backgrounds in academia, it is notable that a casual informal understanding of

468   intersectionality is sometimes seen within the comments. In the United States, campaigns

469   about environmental justice have been historically intertwined with race, class, and gender.

470   For instance, environmental historian Nancy Unger (2012) has written about how women

471   often interact more closely with their local environment than men do. Similar to the work of

472   Unger, African American cultural geographer Carolyn Finney (2015) addresses

473   environmental justice in *Black Faces White Spaces*. Finney reviews the history of African

474 American engagement with the mainstream environmental movement from the early 1900s to

475 the present. Finney focuses on how African Americans are excluded from the environmental

476 justice movement, but she espouses the human experience of the story. Public comments tend

477 to deconstruct the hegemonic racist elements, if informally.

478   When analyzing the discourse of any text, through skip-grams, bigrams, or n-grams, a

479 word association network prioritizes word-by-word analysis. Methodologically speaking, a

480 single analysis of just one of these graphs could be highly misleading – they must be

481 interpreted together, and with context of the films, to avoid making inferences which are not

482 based in reality. For example, methodologically, the value of "Lorax" appearing in a word

483 frequency table so much should be discounted, because the use of the word could plausibly

484 refer to the film, the book, the old television episode, or the character himself. However, by

485 viewing the other graphs, enough context can be gleaned to provide cautious insight.

486   For *The Lorax*, the word-frequency table demonstrates the top word counts of the

487 selected tweets, in which the word "Lorax" appears in nearly 800 tweets while "Once-ler,"

488 the least common term on the list, is in many fewer tweets. However, the count for the word

489 "Lorax" is included below to provide greater context for a later skip gram analysis. Because

490 of the discounting of the word "Lorax," the most significant term here is perhaps "like"

491 which while not a perfect indicator, generally indicates positive sentiment in conjunction with

492 the relatively high-ranking word "good." This is especially noteworthy when compared to the

493 lower ranked word "bad" (which may also be affected by its heavy use in the fan favorite

494 song "How bad can I be?"). The word "trees" appears to be relatively highly ranked,

495 indicating strong environmental sentiment in viewers. While the use of the Truffula tree as a

496 movie plot point could contribute to this word being highly ranked, however since the

497 Truffula Tree is a fictional proxy for the overall environment, this inference is appropriate.

498 Finally, the pair of words "watch" and "watching", while individually ranked lower on the

499   graph, would jointly rank higher, and are often used in comments to indicate personal

500   interaction with the film itself. One example comment illustrating this as follows:

501   "@(Username Expunged) Hey lol, wanna watch the lorax together ☞☜"

502

503

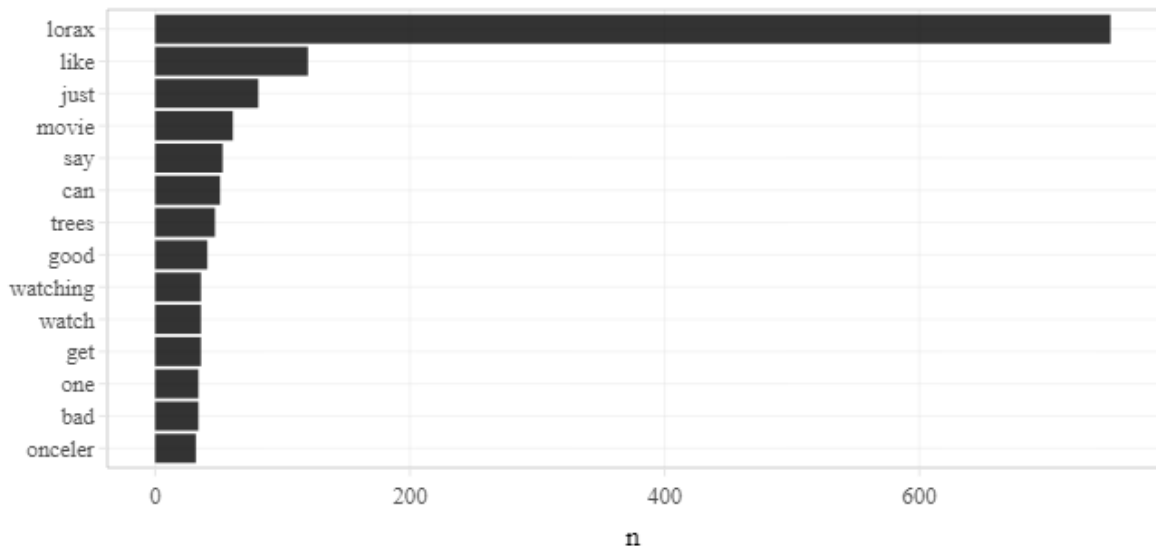
Figure 7: Top word count for *The Lorax*

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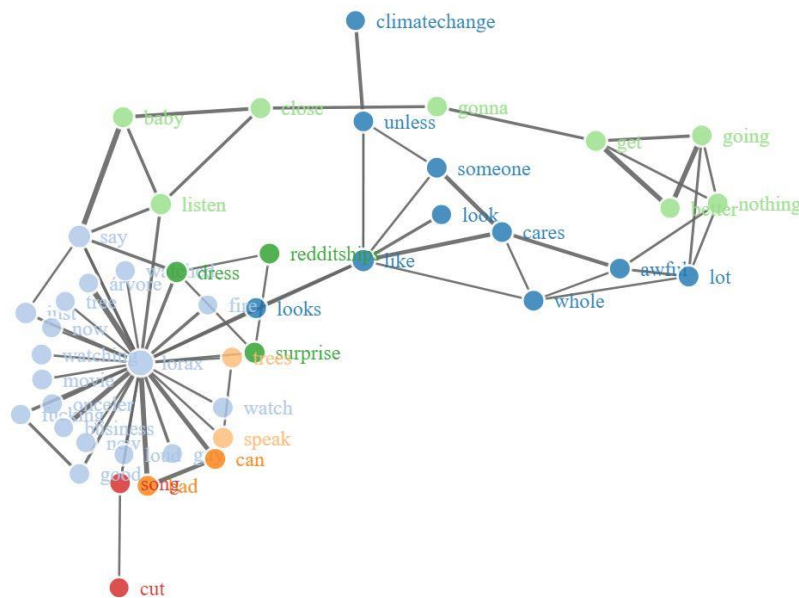
Figure 8: Skip-gram for *The Lorax*

511

512   For *The Lorax*, the skip-gram count network exhibits the following word chunks. This

513 skip gram is centralized around "the Lorax" with a cluster influenced by the phrase "unless

514 someone cares a whole awful lot." While in the previous example, the term "Lorax" should

515 be discounted, here the related words show a roughly even split between discussion of the

516 movie itself or the character to these ideas, making it more useful within this context

517 compared to the previous figure. For the roughly half of instances which emphasize the

518 narrative of the film over the movie itself, this is linked with the environmental discourse

519 regarding climate change. Other notable words are revealed by the skip-gram word count,

520 including "redditships," referring to offsite discussion of non-canonical romantic relations

521 between characters, and "dress," which can perhaps be explained by the distinctive clothing

522 worn by the characters. In the skip-gram, the word "dress" is directly connected to the word

523 "redditships", indicating a close and significant attachment to characters within the narrative,

524 and is also located (albeit indirectly) in close proximity to the word "looks", which indicates

525 an emphasis on aesthetic value judgements. Perhaps factors such as fashion and the aspect of

526 potential romance between characters are also something to be considered when designing

527 new environmental media in order to improve audience engagement.

528 **Figure 9: Top Word Count for *Tomorrow***

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530

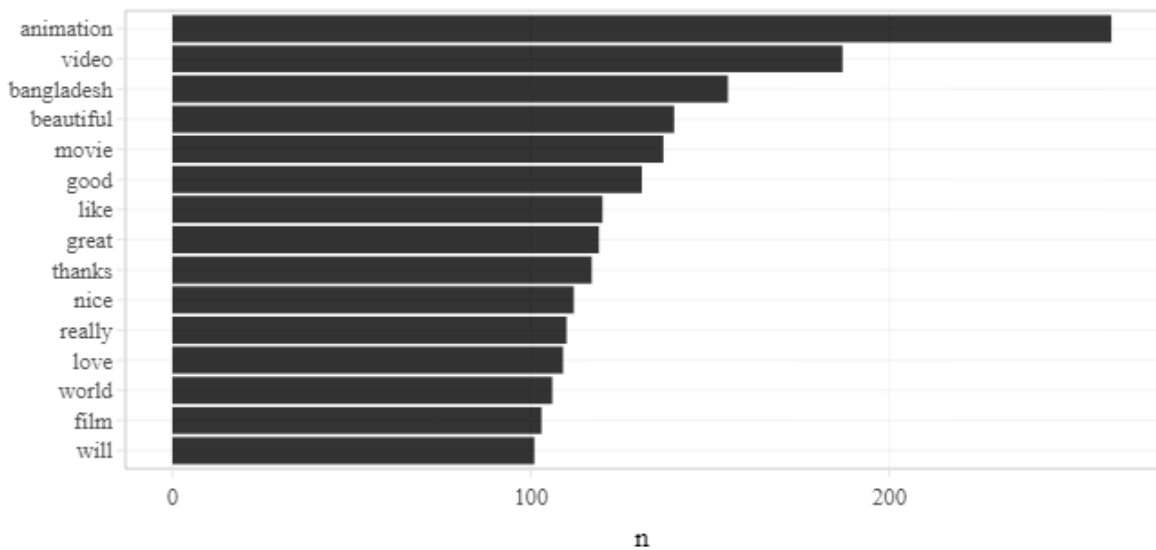
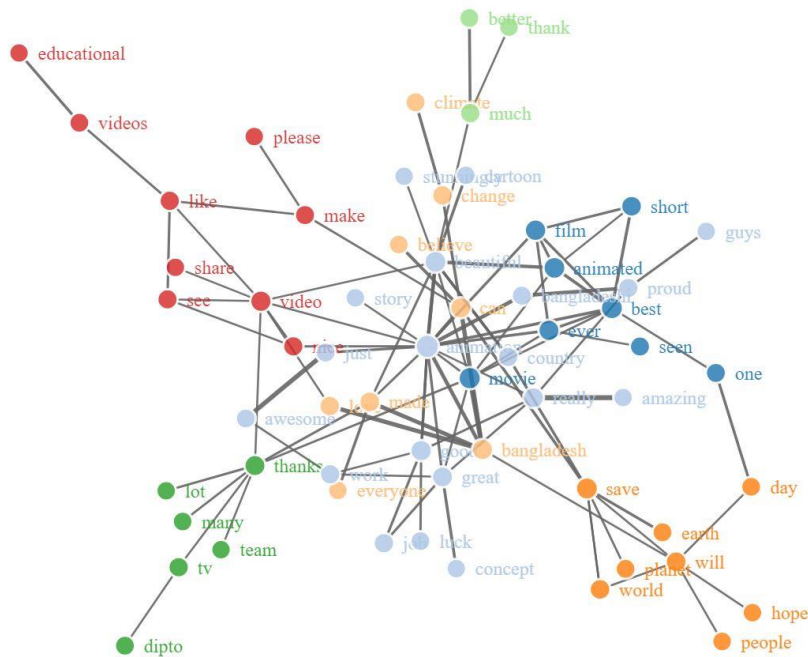



Figure 10: Skip-gram for *Tomorrow*

534   For *Tomorrow*, the word-frequency table shows that "animation" is the most frequent

535   word that appeared, though this is perhaps affected by the discussion of the film industry in

536   Bangladesh. A number of online comments take nationalistic pride in a progressing film

537   industry in Bangladesh, using *Tomorrow* to exemplify advancing standards in domestically

538   produced computer animated films. Many of the highly linked words in the skip-gram

539   demonstrate the positive sentiment of the film and its content generally, such as "awesome",

540   good, "great", etc. It is notable that even though the word "Bangladesh" is ranked so high in

541   the top word count, the word "world," while relatively low ranked among the top words, still

542   demonstrates a global consciousness among the online commenters. This is especially

543   illustrated by the skip-gram, where the word "world" is closely associated with the words

544   "hope," "save," and "planet." Further analysis of the skip-gram count network for *Tomorrow*

545   reveals a more decentralized network when compared to *The Lorax*. This is potentially

546   influenced by the lack of a specific, unifying catchphrase in *Tomorrow*, whereas the central

547   "unless" catchphrase of *The Lorax* comprises a significant wordchunk.

Environmental catastrophe

The Lorax takes a social constructionist view of nature as the film explains that the trees, the forests, have agency, but must act within a framework established by mankind—an anthropocentric view. The Lorax, the guardian of the forest, thus establishes a space to advocate for the rights of nature. The Lorax's proclamation in the opening scene, "I am the Lorax, I speak for the trees," (0:00:56) establishes the role of the Lorax in representing nature more broadly. The tone of the film is set by the deceptively bright city of Thneedville, set against a foreboding sickly purple dawn. This city is one of artificiality, in which every entity is made of artificial products: "a town without Nature, not one living tree" (0:01:24). In this city, trees are made of plastic and their colors can be changed by clicking remote buttons. Environmental pollution in the film is often implied through use of plastic, and the exclusive use of synthetic materials instead of those found in nature. The artificiality of Thneedville constitutes a major crisis in the film. Thneedville society takes capitalist pride in commodifying nature: O'Hare informs Ted, "I make a living selling fresh air to people" (00:31:19). Ted's search for an original tree is a business threat to O'Hare's company. Moore (2016) explains the intimate relationship that exists between children, consumer culture, and commercial media in the United States. Moore (2016) shows that both "the news and entertainment industries reveal that the way Hollywood treats a subject like the environment is not an exception to the rule; instead, the consistent subjugation of environmental concerns is part of a broader capitalist logic in a concentrated market" (p. 5). This also connects to real-life industrialists, as in when Frankfurt School critics Max Horkheimer and Theodor Adorno (2007) discuss capitalist social structures, arguing that material identities are assigned to nonmaterial cultures (perhaps also natural resources), commodifying them into the products from which capitalists could profit. These natural resources are manufactured, bought, and sold like a commodity. Environmental historian William Cronon (1996) has also

573   described the impact of nature as commodity not just in American culture and landscape but

574   in the entire planet Earth for centuries.

575   The excessive use of plastic and artificiality are symbols of late-stage capitalism. In

576   that regard, the opening song's lyrics stress the phrase "brand new" that references that we

577   live now in an advanced capitalist society which fetishizes consumerism: "If you put

578   something in a plastic bottle, people will buy it" (11:24). Commodification increases when

579   natural entities are treated without respect with some exceptions. The film implies that

580   Truffula trees are valuable and a positive, desirable asset, because by providing food, shelter,

581   and oxygen, Truffula trees help reduce environmental threats.

582   *Tomorrow* also presents the idea of nature, but it is not a socially constructed nature,

583   nor a nature that is soothing and tranquil. Rather, it emphasizes that reckless behavior from

584   humanity not only damages the environment, but also makes nature uninhabitable for

585   humans. Irresponsible human actions make the environment more vulnerable to future

586   damage. The village in *Tomorrow*, unlike Thneedville, is not artificial, yet its people lack a

587   sense of environmental consciousness just as in *The Lorax*, until Ratul's father joins the

588   conversation about the land erosion with the people. Their conversation and the conversation

589   between Ratul and the Old Man of the Winds change their attitude—they gain an

590   understanding of nature which make them proactive in slowing down the unfolding disaster

591   and envisioning—literally showing the audience—a future full of hope. Such a positive

592   narrative work against the idea that it is too late to act to prevent catastrophes.

593   Plastic waste is another environmental catastrophe on its own, which additionally is a

594   contributing factor to global warming, as plastic production and transportation require fossil

595   fuels. *The Lorax* shows the audience the impact of waste and wanton consumption on the

596   environment. The Lorax demonstrates that the process of wanton cutting down trees and

597   making clothes (fantastical knitting) out of it as a wasteful practice. But the Once-ler,

598 considers the result of this tree-cutting and knitting process "revolutionary." The product has

599 a multitude of uses, and the audience may be inclined to agree at first, enhancing the impact

600 of this cautionary tale. "Whoa," is Ted's reaction when he steps out of the walled Thneedville

601 and sees the industrial waste. Thneedville produces a lot of waste but has no policy regarding

602 waste management beyond hiding it from public view; this is a reminder that the whole world

603 suffers from waste management policies that are effectively wishful thinking and likely

604 encourages the viewer to consider the impact of the industrial society fuelled by their own

605 wanton consumption. Industrial waste is also a critical theme in *Tomorrow*. In the dream,

606 when the Old Man of the Winds takes Ratul on a tour of the world, Ratul notices chimneys

607 spewing greenhouse gases in the atmosphere. The Old Man of the Winds instructs Ratul that

608 coal needs to be replaced as a source of energy.

609   Both *The Lorax* and *Tomorrow* encourage the viewer to foster a desire to protect

610 nature, albeit in different ways. *The Lorax* fosters a protective desire through Audrey's and

611 Ted's quest for Truffula trees, Grammy's Indigenous sense of conservation, and the Lorax's

612 mission to speak for trees. Although Wolfe (2008) focuses on Dr. Seuss's book, Wolfe's

613 observation that, "[. . .] nature is elevated from inferiority to a form of divinity" is germane in

614 the context of film (p. 14). *Tomorrow* fosters love for nature by creating an awareness about

615 climate change and biodiversity.

616 **Environmental storytelling: sense of place**

617   These films deal with both place and displacement, important concepts in

618 environmental education. "The integration of place into education is important," writes

619 sustainability scholar David Orr, as "knowledge of place where you are and where come from

620 is intertwined with knowledge of who you are. Landscape, in other words, shape mindscape"

621 (2013, p. 93). These films use storytelling show how human beings and animals are

622 displaced.

623   Storytelling is an important element in combatting large-scale problems such as

624   climate change. Stories lead to greater emotional attachment than raw data does. In looking at

625   the impact of stories, I return to Jonathan Gottschall's (2012) statement, "we are, as a species,

626   addicted to story. Even when the body goes to sleep, the mind stays up all night telling itself

627   stories" (12). Cherokee author Thomas King's (2003) statement, "The truth about stories is

628   that that's all we are" (2) or environmental historian William Cronon's (1992) statement

629   inspired by Graham Swift that human beings are "storytelling creatures" underscore the

630   importance of storytelling. But humans are not the only storytelling creatures; other animals,

631   plants, spirit beings are the storytelling creatures too. The tree, the land, the other non-human

632   entities have agency, and they are storytelling creatures too, as demonstrated in the films. In

633   *The Lorax,* although of course somebody else has to speak for those trees, they nonetheless

634   have agency, and in *Tomorrow*, the Old Man of the Wind is not human but rather a spiritual

635   entity. By incorporating non-humans into storytelling, these movies help combat human

636   supremacist attitudes, by showing that man cannot stand alone against environmental

637   collapse.

638   Movies cover important environmental features in the form of storytelling discourse,

639   which also encompasses the field of storytelling discourse aimed at children. Dolores Subia

640   BigFoot and Megan Dunlap (2006) note that "[s]tories give reason to the overall scheme of

641   things" (p. 134). *The Lorax* and *Tomorrow* carry an environmental storytelling tradition to

642   teach children a sense of place through stories (animated films are often aimed at children,

643   and teach both children and the parents; if children miss out anything, the parents can pick it

644   up). BigFoot and Dunlap (2006) suggest that "Parents, grandparents, and other relatives used

645   stories to help children understand their place in the world and how they could show their

646   gratitude for their existence" (p. 135). This is evidenced in the social media analysis, where

647   one commenter stated "my 2 year old sister understands climate change and all she did was

648   watch the Lorax"

649   Both films have a simple environmental storytelling trajectory, but that simplicity is

650   grounded within the place of each respective culture. *Tomorrow* focuses on a specific place

651   along the coastline of Bangladesh; *The Lorax* is a fantasy place that could be anywhere and

652   nowhere. If places are ecological and cultural, I would argue that the sense of place is linked

653   to the art of storytelling, ultimately linked to education and pedagogy. Orr (2013), for

654   instance, demonstrates the nexus between place and pedagogy. Orr's understanding of place

655   as an educational tool emerges from Thoreau's *Walden* (1854) (to be exact, "*Walden* is a

656   model of the possible unity between personhood, pedagogy, and place") and conservationist

657   Leopold's (1986) philosophy of "man as a biotic citizen." Although non-human entities are

658   appropriated for our use, *Walden* (1854) emphasizes natural entities in a way that could help

659   contemporary culture be more sustainable, such as in issues like bottled water compared to

660   tap water. A similar perspective can be seen from Leopold, who draws us across time and

661   space by introducing ideas like the "land ethic" and asking human beings to think "like a

662   mountain." These philosophies should be highlighted with a greater emphasis in popular

663   culture. By and large, these philosophies demonstrate how place plays a role in our moral and

664   psychic transformation. In *Tomorrow*, although commoners lack an academic or formal

665   understanding of place consciousness, they eventually show the unity and a sense of

666   belongingness needed to protect and preserve their local place. In *The Lorax*, the not-real

667   place still demonstrates influences from its Californian creators of 2012, such as general

668   heightened concern over environmental catastrophes like the 2011 Fukushima disaster in

669   areas on the Pacific. In the film, a child begins glowing a radioactive green as he sings "I just

670   went swimming, and now I glow!" (0:03:03). Stories with connections to place are important

671   as "[s]tories can give children a sense of belonging to their family, community, and tribe, and

this can instil a sense of purpose, identity, and hope. Stories could be an extremely positive force in the life of children" (BigFoot and Dunlap, 2006, p. 5).

The Lorax and *Tomorrow* share the spectrum of life stories: as evidenced by online comments such as "local places are getting destroyed because of global places," these stories can create a compelling connection between the storyteller and listener/spectators. These two films are similar in that common people within the films are engaged to love their local places. Initially, the Once-ler's family is not respectful of the local place and environment, but when the Once-ler gives Ted a seed to make the local place abundant with trees, the local place matters. People rally around Ted for planting the seed, although they had almost been convinced otherwise by O'Hare's deceptive speech. In the same way, the common people start a movement to save their village from climate crisis in *Tomorrow*. These are both ways of showing place and action. In this way the audience learns from example how they may avert their own climate catastrophes.

Storytellers can create a sense of connectedness with the stories. The Once-ler and Ted's grandmother serve as the role of storyteller. Granny initiates the storytelling session, but she sends Ted to the Once-ler for firsthand experience. The Once-ler starts sharing the story with "it all started a long time ago" (00:16:45). The Once-ler's starting cue gives us a sense of hearing a "once upon a time" story. He later uses the phrase "a long time ago," at least three times, hinting that the environmental destruction on Earth started a long time before. As a storyteller, the Old Man of the Winds, in *Tomorrow*, appears in Ratul's dream and blames him for the deplorable condition of the planet. He takes Ratul away with him to show the cruelty of people on nature: factories are emitting fumes and the use of fossil fuels are resulting in air pollution, the greenhouse effect, and related human eco-sicknesses.

Environmental education: sustainability

Today, many animated films are incorporated into educational curricula because of the impact they can have. *The Lorax* and *Tomorrow* are ideal candidates to be educational tools for children as these films visually show (rather than just tell) fundamental environmental problems and potential solutions. Both films can also be a platform to teach children about preserving nature.

The Lorax and *Tomorrow* promote a world where sustainability and environmental consciousness are prioritized over reckless economic and technological development. Both films critique capitalism for setting society down a path of self-destruction. When Ted leaves the town in search of the Once-ler, Ted is being watched on his way out by the corporate enforcers of O'Hare, who report on anything that threatens their industrial progress. Progress is the main goal for Thneedville's people. The Once-ler's mother rebukes him for not being "successful." The Once-ler thus starts changing the world, but the spell of capitalism does not fool the Once-ler forever, as he eventually recognizes the monstrous effects of unchecked capitalism. In *Tomorrow*, Ratul learns about the impact of capitalism when he travels with the Old Man of the Winds who shows him the advanced capitalist societies which are least sustainable (even though some pretend to be). Ratul becomes conscious of the negative aspects of the socio-political-economic nexus of capitalism, but he cannot remain free from it. The films show the audience through visual storytelling what the consequences of life in a capitalist society that reveres progress and success, and, later, how the lives of the people within that society improve when environmental consciousness triumphs over the commodities market.

The films both suggest that the destruction caused by unrestrained capitalism may be averted through action. In *The Lorax*, Ted brings meaningful change by helping begin to restore the environment. *Tomorrow* also offers solutions, such as imposing taxes on fossil

722 fuels and implementing green energy around the world. *Tomorrow* asks its audience "Are you

723 with us?" (20:55) and tries to create a sense of urgency to get its audience to act.

724   These films can help instill the idea that sustainability is more about actions rather

725 than just caring about nature. *Tomorrow* suggests an alternative to the present world by

726 showing a world occupied with environmentally responsible inhabitants; *The Lorax* suggests

727 a return to a more natural environment as an alternative to an artificially lavish life. These

728 alternatives are designed to preserve nature. It is important to note that these films do not

729 reject societal progress outright, but they oppose development rooted in industrial toxic

730 consumerism which can cause the displacement of millions of people and the extinction of

731 species.

732   Perhaps the most important characteristic for any educational tool is to leave a

733 discursive space. These films question their surroundings, the human interference with our

734 environment, the inevitable consequences of such interference, and they provide examples of

735 a remedy. *The Lorax* suggests it is "not too late"; that is, if people give up their

736 anthropocentric attitudes and seek harmony between nature and human, their doom can be

737 prevented. *Tomorrow* shows the need to be prepared for a calamity that cannot be evaded, but

738 also shows a glimmer of hope. It endows the audience with agency, when it tells Ratul, the

739 audience surrogate, "This is your planet, you have to find out the answer" (21:54). These

740 films leave unfinished tasks to be comprehended and finished by the audience.

741   These films also offer pedagogical opportunities because they convey their messages

742 through non-traditional formats such as social media, humor, song/rhyme, satire, etc. For

743 example, the song "How Bad Can I Be?" in *The Lorax* provides insight into the greed-driven

744 soul who avoids caring for a few trees in the desire to make money. In *Tomorrow*, there is the

745 presence of social media. Ratul starts campaigning on Facebook about fossil fuels from a

746 local place, and he receives global responses, as people from around the entire world protest.

Conclusion

Using environmental discourse analysis to understand how discourses about climate change and sustainability, to list a few, are changing, is an important task. This is acknowledged in the literature—Elliott and Cullis (2017) have written, "the humanities should be more confident and vocal in addressing climate change" (p. 15). Although the number of creative works on climate change is increasing, their growth is not as substantial as the increase in risks we are encountering. Heise (2008) argues that "climate change poses a challenge for narrative and lyrical forms that have conventionally focused above all on individuals, families, or nations, since [climate change] requires the articulation of connections between events at vastly different scales" (p. 205). Although it is challenging, the most powerful environmentally driven artwork and films focus on local, regional, and global riskscapes. The combination of these different scales described by Heise can be tricky, but these films show it can be done. In *Tomorrow*, local action leads to global change, and in *The Lorax,* action within Thneedville leads to improvements in the lands outside the city.

In *The Lorax*, as time passes, new trees begin sprouting, animals return, and the repentant Once-ler joins the Lorax, everything in its proper place. The film ends with the note that unless someone comprehends the awful consequences that awaits us and takes prompt action, "nothing is going to get better." *The Lorax* seeks to promote ecological awareness among people showing the repercussions of their deeds "unless" they start taking care of the environment. Film critics say that *The Lorax* is too political or scares children from the environment by giving them "ecophobia" (Potts, 2019). Yet some are more hopeful, such as critic Deidre Pike (2012), who deems *The Lorax* a "'dialogic enviro-toon' not presenting a subject merely for entertainment but creating a safe zone for exploration of environmental facts, ideas, images, and perspectives" (p. 13). Public commenters generally seem to agree with Pike, and do not seem hindered by the message of *The Lorax*. Rather than them being

772 too political and ecophobia-inducing, I would argue *The Lorax* and *Tomorrow* have the

773 power to inspire the next Greta Thunberg in households around the world.

774   The uncertainty with which *Tomorrow* starts is a recurring theme throughout its entire

775 runtime. The film ends with a note of hope which environmentalist McKibben (2019) praises

776 in his tweet saying, "it never blinks at the horrors in store, but refuses to give up hope."

777 Human beings are driving the great sixth mass extinction, but there is still time to take

778 initiative—a sentiment demonstrated in both the environmental discourses in the content of

779 these films and the public reactions. We need creativity, imagination and hope to face the

780 environmental crisis. The environmental discourse analysis of these films and the public

781 comments symmetrically convey the message: nature is on the brink of disaster in both films,

782 nevertheless both give the audience hope for the future.

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