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

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

3   **(2019)**

5   **Abstract**

6   Fostering understanding and support for environmental and climate issues requires a

7   foundational understanding of how environmental discourse interacts with the public.

8   Animated films exist as a medium in which environmental messaging is distributed to the

9   public with the goal of inducing behavioural change in an audience. The goal of this paper is

10   to link the messaging of such films with audience feedback. This will be accomplished by

11   analyzing the impact of two environmentally focused animated films, *The Lorax* and

12   *Tomorrow*, produced in Hollywood (United States) and Dhallywood (Bangladesh),

13   respectively, and by using environmental humanities discourse analysis to examine how

14   people responded to these films on social media websites. The first part of the article is the

15   analysis of selected social media pages to understand the impact of these two films on

16   contemporary environmental discourse, and the second part comprises an analysis of the

17   environmental narrative of the films. I selected these two films for four reasons: i) they are

18   both environmental educational and pedagogical tools; ii) they use environmental

19   storytelling; iii) they both address sustainability; and iv) they may have influenced some

20   discourse on environmental issues on social media. The study demonstrates that

21   environmentally driven animated films can affect and shape the discourse of their audiences.

22   This study also demonstrates how narratives from films such as *The Lorax* and *Tomorrow* can

23   lead an audience to consider large-scale environmental issues.

24   **Keywords**

25   environmental storytelling; environmental discourse analysis; environmental education;

26   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 them: *The Lorax* (Chris Renaud, 2012) and *Tomorrow* (Mohammad Shihab Uddin, 2019).[1] The films were produced in Hollywood (United States) and Dhallywood (Bangladesh, Bangladeshi production house Cycore Studios), respectively. *Tomorrow* specifically was selected as standout film produced recently within the global South that has received good reception both domestically and internationally, having won the Cannes World Film Festival[2] award in August 2021 and having received praise from western environmental journalist Bill McKibben. Another major factor in the selection of *Tomorrow* was that it came out at a time in which there was a relatively large population of Bangladesh had internet access, going from 5% of the population having access in 2012 to 23.8% in 2019,[3] providing an early look into how a key population within the global South reacts to environmental messaging targeted specifically at them. The 2012 incarnation of *The Lorax*[4] was selected as a contemporary western environmental blockbuster due in part to its similarities in art style to *Tomorrow*, and due to sharing a message that promotes a world where sustainability is not prioritized over economic development.[5] Animated films may be a powerful medium of environmental education and shape the public discourse, as discussed below. That said, both

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[1] Although the television version of *The Lorax* produced by DePatie-Freleng Enterprises is closer to *Tomorrow* in terms of time format, the 1972 TV version is not suitable for a social media analysis due to the time of its release risking viewer nostalgia being a factor in the discourse, potentially compromising the analysis.

[2] Not to be confused with the *Festival de Cannes*.

[3] ITU. (February 14, 2022). Internet penetration rate in Bangladesh from 2011 to 2020 [Graph]. In *Statista*. Retrieved August 30, 2023, from https://www.statista.com/statistics/764102/internet-penetration-rate-bangladesh/.

[4] It is important to note that the 2012 film version of *The Lorax* has many deviations from prior material labeled as *The Lorax*, particularly the book version, or the 1972 TV special.

[5] *WALL-E* was also considered as a film, but *The Lorax* was selected as it shares a more direct display of cause and effect with Tomorrow, where *WALL-E* mostly does not show the world prior to environmental collapse, with the closest scene focusing on the fictional Directive A113, occurring well after the planet has become uninhabitable. This helps reduce variables that may affect sentiment. While another award-winning film closer to *Tomorrow* would have been better for the comparison, no such film appears to exist.

stories take different approaches to this end - while *The Lorax* describes the severity of waste

and environmental collapse caused by deforestation (and implicitly climate change, given the

media environment and promotional material around the release of the film),

Tomorrow describes how such events result in climate change. *The Lorax* uses a fictional

world to deliver a general message while *Tomorrow* highlights the reality of severe climate

injustices in the global South such as Bangladesh. I undertake a meticulous analysis of social

media commentary to gain valuable insights into the perception and response of the general

public in both Bangladesh and the United States, specifically in relation to the climate-change

themes depicted in the animated films. By carefully examining the discussions and reactions

of individuals from diverse backgrounds and demographics on various social media

platforms, I aim to unravel the profound impact these films have on the broader population

and their role in shaping the discourse surrounding climate change and environmental

concerns.

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

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

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

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

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

floods attributed to climate change.[6] 2012's *The Lorax* is similar, despite not being set in a

specific place, in that it was released at a time when environmental catastrophes including

earthquakes, wildfires, and hurricanes were major stories in media across the globe, including

the previous year's Fukushima nuclear disaster stroking fears of nuclear contamination across

the Pacific ocean, and the remnants of Hurricane Irene causing atypical damage in parts of

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[6] This is further substantiated by two supporting sources. *The Business Standard* (2021) news highlights this correlation, while Hossain et al. (2020) explore the implications of these extreme flood disasters, emphasizing their impact on the livelihoods and coping mechanisms of the Char Village.

68   New England.[7] Both films therefore addressed the global nature of environmental crisis in a

69   timely manner. Through the joint analysis of the films and their reception by viewers on

70   social media, this study finds evidence that these two films gave their viewers thematic

71   narratives and talking points that they then incorporate into personal discussion and in

72   general promotion of environmental causes.

73   **Methodology**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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[7] Though Hurricane Irene was in many cases not as bad as it was predicted to be in regards to the effects on New York City, it did cause a media frenzy prior to landfall, and actual catastrophic flooding in many places, especially parts of Vermont and New Hampshire.

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

91 public discourse.

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

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

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

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

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

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

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

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

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

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

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

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

104 contents highlight local and global concerns about the environment.

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

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

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

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

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

110 sentiments.[8] I confined the study to Twitter because Netlytic does not extract comments from

111 Facebook, and because *The Lorax* Facebook page has very few public comments from which

112 to glean data. Furthermore, *The Lorax* does not have a YouTube page. For *Tomorrow,* I

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[8] Based on the research objectives and available resources, it was determined that a sample size of 1000 comments would provide a sufficiently representative sample for manual coding of sentiments. It is also worth noting that the ability to conduct an updated analysis using Netlytic may have been affected by recent changes made by Elon Musk to the Twitter API, which can impact the availability of data.

113   extracted comments from *Tomorrow's* YouTube page, as *Tomorrow* does not have either

114   Facebook or Twitter pages. I extracted comments by using a web scraping method written in

115   the Python programming language, using the search term: "tomorrow animated movie";

116   which yielded 1510 comments (Bengali and English) out of 4974 total, based on which

117   comments received more "likes" (the remainder of comments were omitted for falling below

118   a threshold of likes). For *The Lorax*, the Twitter comments spanned a decade, as the film was

119   released in 2012. As *Tomorrow* is a relatively recent release, so are all its comments. After

120   transferring the data to a Microsoft Excel spreadsheet, I manually examined it, developing

121   codes to analyze public reactions pertaining to different environmental discourses. I began

122   with a total of twenty-five codes, re-examined the data, and condensed them to seven major

123   codes. Using the statistical programming language R, I present a graphical text categorization

124   algorithm that generates skip-gram phrases selectively, by extracting and using phrases.

125   Commenter names and online handles have been excluded for anonymity.

126   **Film synopses**

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

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

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

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

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

132   key feature of the work.

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

134   *The Lorax* had a budget of $70 million and grossed $348.8 million worldwide.[9] It showcases

135   the process of industrialization, portraying the cause and effect of the hypocritical nature of

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[9] For comprehensive insights into the financial aspects of *The Lorax*, including budget and income details, please refer to Box Office Mojo's webpage dedicated to the film, accessible at https://www.boxofficemojo.com/title/tt1482459/.

136 "human progress" when externalities are not addressed, and the environment is not thought of

137 as worth protecting. It must be noted that environmental messaging in media adjacent to the

138 film was compromised, as noted by Caraway and Caraway (2020) in their article, while the

139 film railed against greenwashing, cross promotion in advertising with the film was used to

140 showcase gas-powered automobiles. In her article, communication scholar Ellen Moore

141 (2016) also notes this as a flaw as it changes the focus from reducing consumption to

142 encouraging a nebulous "green" consumption.

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

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

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

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

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

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

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

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

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

152 portrayed in a positive light.

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

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

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

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

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

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

159 chopped down, and the Once-ler discovers that he is condemned to grow old and waste away

160 in the wretched badlands of his own making. This very clear cause and effect is a cautionary

161   tale to viewers, showing how unethical profiteering can one day leave them worse off, with

162   gains that were fleeting. Because the Lorax disappeared when the last Truffula tree was

163   chopped down, the Once-ler relays to Ted the Lorax's cryptic last message, "Unless someone

164   like you cares a whole awful lot, nothing is going to get better, it's not" (1:02:09). This is a

165   clear call to action to the audience, as Ted is the archetype of the everyman, a person who the

166   audience can relate to. Indeed, the Once-ler charges Ted, and by extension the audience, with

167   repairing the devastated environment. However, other industrialists in the movie, chief

168   among them a clean air tycoon named O'Hare, fight to keep the status quo by tricking the

169   populace, subconsciously warning the audience that pushback from people they know may in

170   fact be misdirection from real-life industrialists.

171   The 2019 film *Tomorrow* (budget: 10 million BDT,[10] converted roughly to ~119,000

172   USD; a reliable figure for gross income could not be found) similarly portrays a dire future in

173   the hopes that the present generation will find a way to avoid it. *Tomorrow* begins when

174   Ratul and his father, a nature lover, learn that sea levels are rising, which will make them and

175   their fellow villagers ecological refugees. Despite this knowledge, they and the villagers are

176   reluctant to take any actions to prevent the hazard. One of the villagers' comments, "why

177   would we ruin today thinking about tomorrow?" (4:10) is a refrain viewers may be familiar

178   with, a carelessness about their own future.

179   In a dream, Ratul learns that Bangladesh is going to face a disastrous fate because of

180   rising sea levels combined with the melting ice caps in the Himalayas. To answer Ratul's

181   questions, Batasher Buro, a shamanic figure known as "the Old Man of the Winds," takes

182   him to the future, in which most of southern Bangladesh is submerged, with almost 30

183   million homeless and destitute people taking shelter in the north. This reflects real life—for

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[10] *The Daily Star*, a daily newspaper, provides insightful information about the budget of *Tomorrow*. Accessible at https://www.thedailystar.net/lifestyle/news/tomorrow-3d-film-bangladeshi-animators-2111009

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

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

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

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

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

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

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

191   personally care about the environment themselves.

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

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

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

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

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

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

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

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

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

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

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

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

204   actions have the potential to make a real impact.

205   **Environmental discourse analysis**

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

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

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

209 pollution, deforestation, and land erosion.

210   Environmental discourse analysis has been adapted and developed from several

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

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

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

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

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

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

217 way contributes to environmental discourse analysis by highlighting environmental discourse

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

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

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

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

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

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

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

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

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

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

228 analysis.

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

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

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

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

233 (2006) speculate that it is yet unknown how much the environmental discourses and

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

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

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

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

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

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

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

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

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

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

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

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

246 desire to save the world from environmental catastrophes.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

274 engagement with climate-change media.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

290   extension social media platforms.

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

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

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

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

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

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

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

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

Discourse	Total number of likes of the combined comments	Total number of comments	Example of comments[11]
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)

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[11] 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 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)

299

300   Public reactions juxtapose positive reviews of the content of the film with negative

301 statements about the current local and global environmental conditions. Online commenters

302 urge showing *Tomorrow* in all primary and secondary schools across Bangladesh while

303 encouraging elected officials to watch and screen it as well. This commentary connects with

304 the film narrative as the protagonist of *Tomorrow* is a schoolchild, who goes on an abridged

305 hero's journey to affect global politics regarding environmental laws and policies.

306   The comments for *Tomorrow* demonstrate the power of locally produced media, an

307 aspect of the film which may prove valuable to other environmental communicators and

308 educators. Climate communication scholars Candice Howarth and Alison Anderson (2019)

309 highlighted that stronger collaborative bonds between local media and scientific research

310 helps form a more trusted relationship between local media and other local stakeholders and

311 increases engagement with climate change. Many comments express an emotional response

312 to seeing environmental destruction in their own localized area, for example, "Alas! My

313 home is in Hatia, the southern part of Bangladesh" (my translation). Since *Tomorrow* was

314 made in Bangladesh, it may create a greater local impact than if it had been produced in

315 Hollywood, or even Bollywood. Relatedly, Howarth and Anderson (2019) have noted that

316 climate change is often understood as "abstract and distant" (p. 718). *Tomorrow*, by contrast,

317 shows how climate change is an issue requiring both local and global action.

318   Earth's restoration is possible only if we can imagine it clearly. Stories occupy an

319   important role in that ability. For all of us, stories matter; if we know our local story,[12]

320   especially through local media, we can participate in a range of actions to restore our local

321   landscapes. However, the public of Bangladesh often do not believe that their elected

322   officials will reduce the use of fossil fuels on their own. Yet the movie instills civic hope in

323   some viewers—comments like "should the Prime Minister watch this movie, the country

324   would benefit greatly" (my translation) reinforce the position in the public discourse that the

325   ordinary people of Bangladesh do not trust the government to take adequate action.

326   Intriguingly, this mirrors the events of the film, where the government increases taxes on

327   fossil fuels following public outcry—showing that such a strategy is viable in the real world.

328   Public comments carry a sense of responsibility and an ethic of care. Commenters use

329   words and phrases such as "I cannot control my emotions," "my eyes were moistened while

330   watching the movies," "the Earth needs to be protected," "save Earth, save Bangladesh" and

331   many more, to explain their sense of empathy and responsibility with local and global places.

332   These are virtual comments, yet this sense of awareness is exhibited, nonetheless. This is

333   again demonstrated when commenters give attention to the occasional hypocrisy or at least

334   inconsistencies in the story. They appreciate the protest against fossil fuels, and critique

335   Ratul's flight on a fossil fuel–powered airplane; they appreciate the message about the

336   environment.

337   Regarding environmental activism, there were many comments such as "we each have

338   a responsibility to save the world," and "all mass media ought to disseminate this film

339   massively to create public awareness regarding climate change… the UN must force a new

340   policy plan over the globe for building green planet again as soon as possible, avoiding

341   further environmental degradation. Let's reduce fossil fuel usage, stop cutting trees by

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[12] That is to say, how our local environment came to be, and how our actions alter it.

342 planting more, ban the Rampal project, together heal the world, make it a better place."

343 Comments emphasized the need to act locally, for instance, stopping the Rampal coal-based

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

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

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

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

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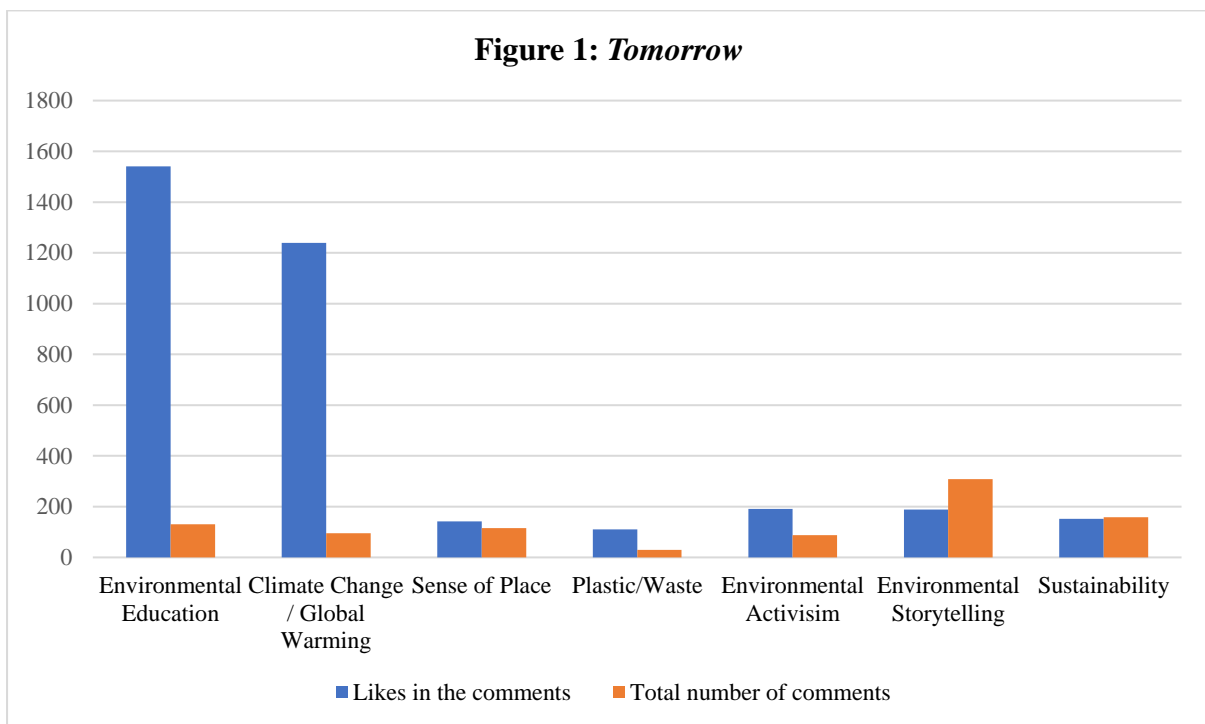
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350 Figure 1 shows the relationship between the total number of comments by topic in the

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

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

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

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

Figure 1.1 Likes in the comments by topic for *Tomorrow*

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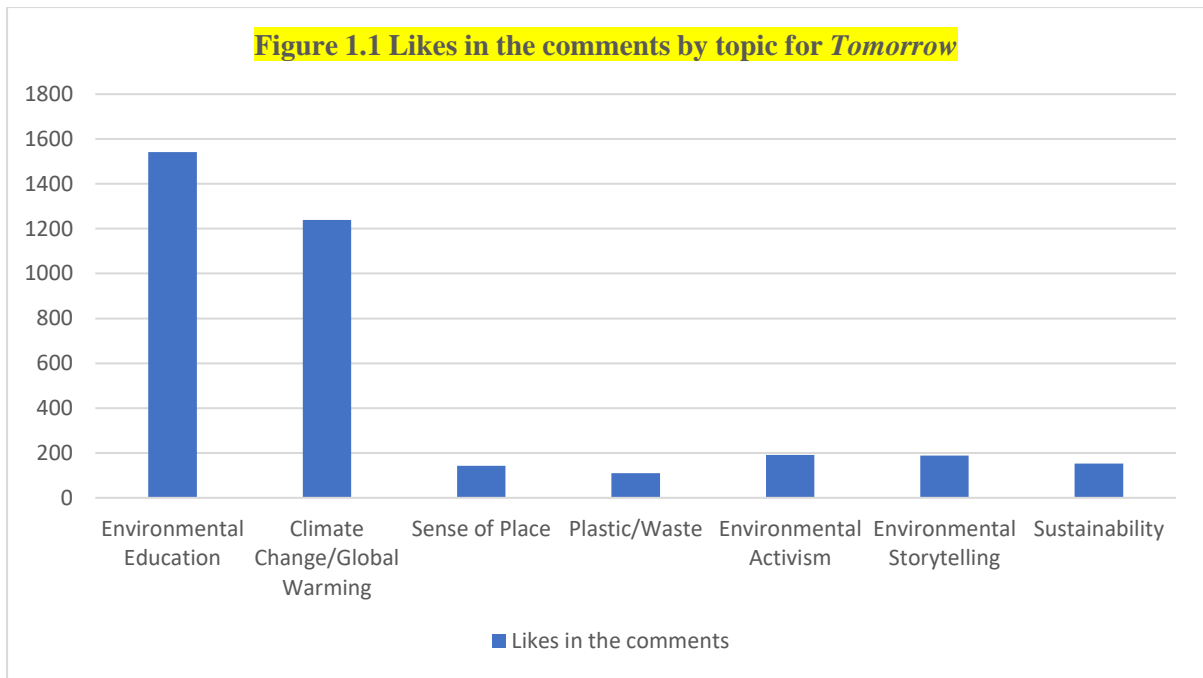
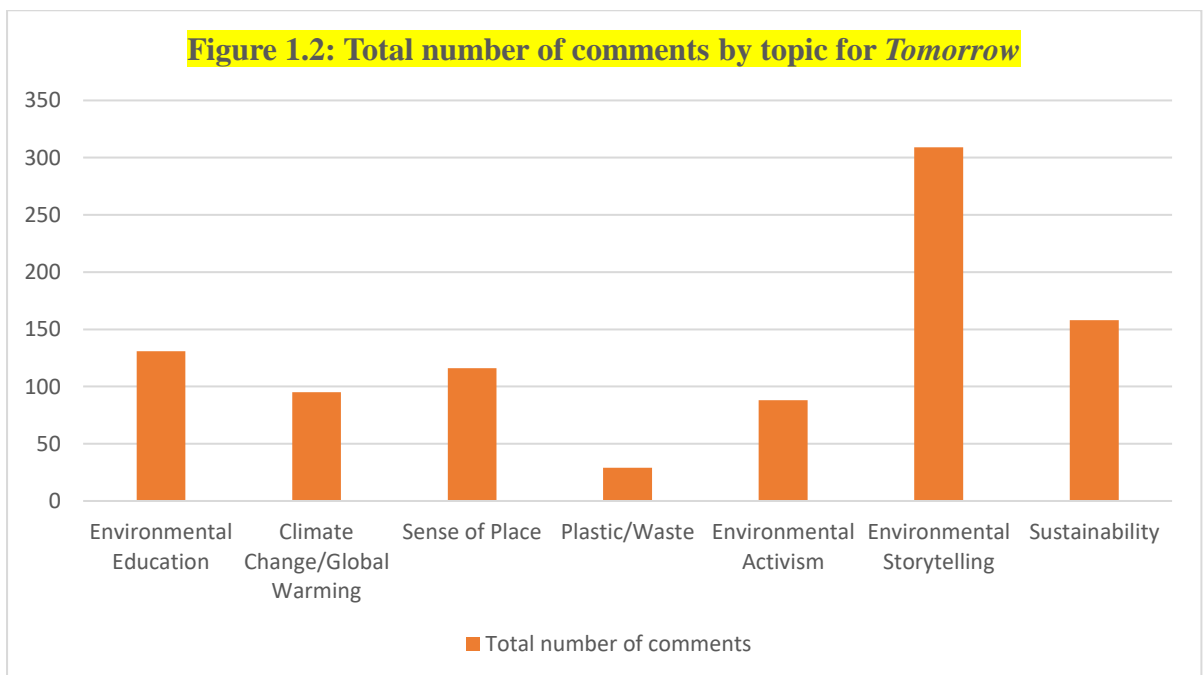

356   By focusing on the individual aspects covered in the above chart, we can better see

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

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

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

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

Figure 1.2: Total number of comments by topic for *Tomorrow*

361

362   Figure 1.2 however shows that the comments that receive the most engagement with

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

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

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

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

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

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

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

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

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

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

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

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

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

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

377   to a broad environmental movement.

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

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

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

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

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

383   their desire to act.

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

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

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

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

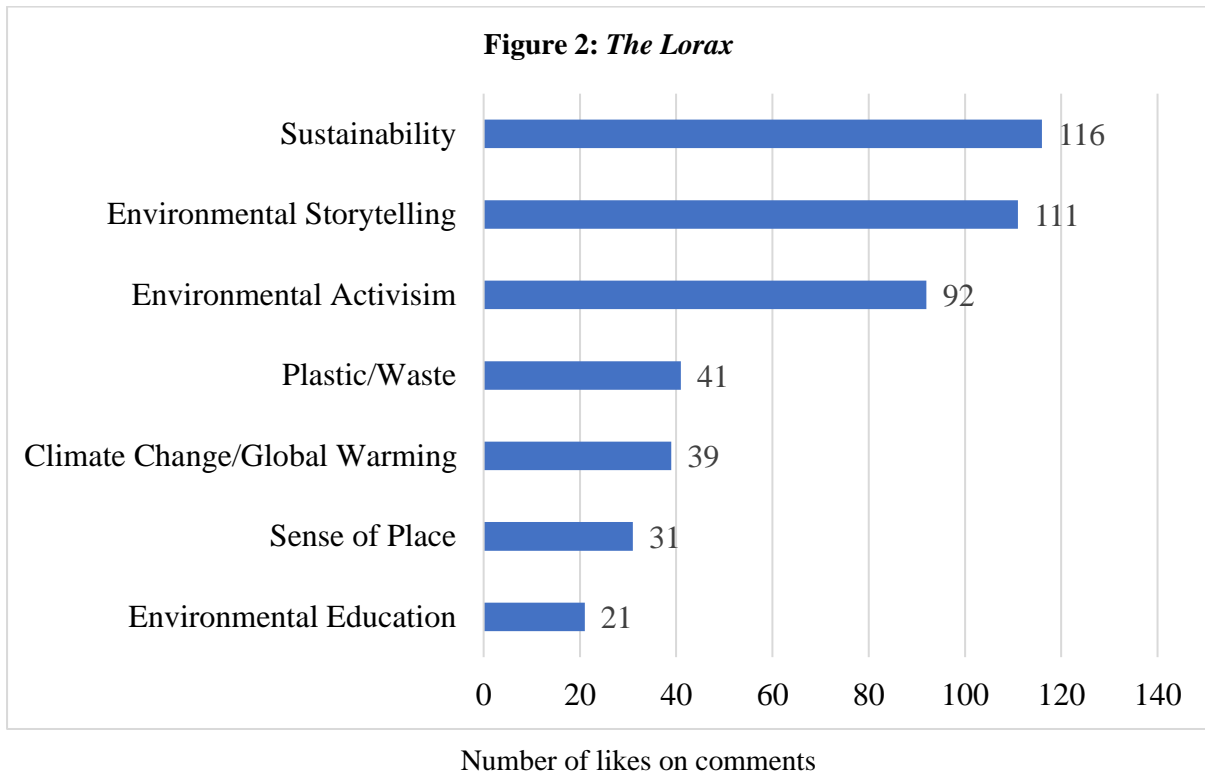
388 *Lorax*—the public cannot tolerate injustices and environmental destruction, even in fiction.

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

390 comments, and the counts of these comments.[13]

Figure 2: *The Lorax*

391

Number of likes on comments

392

393 Figure 2 illustrates that that *The Lorax* commentors responded with likes mostly to

394 sustainability and environmental storytelling, with environmental activism also performing

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

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

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

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

399

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[13] Netlytic derived Twitter comments excluded "likes," thus the exclusion compared to Table 1.

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."

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.

413

414
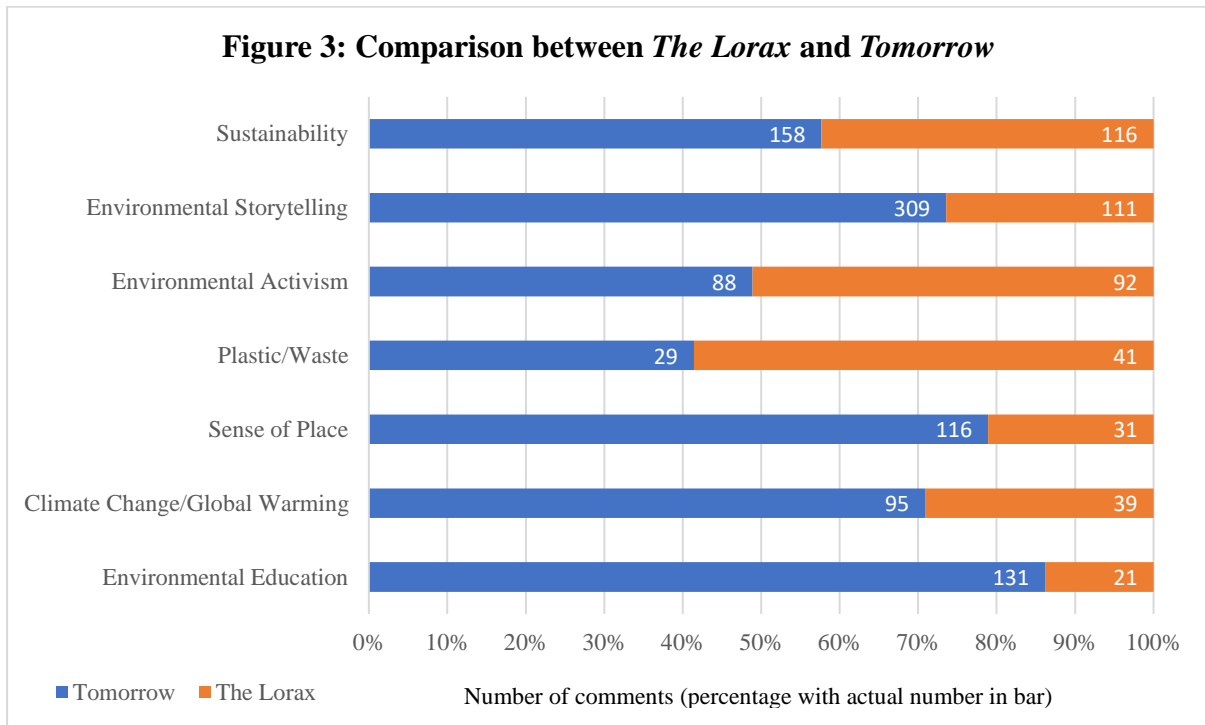
Figure 3 compares the terms found in the environmental discourse seen within the public comments. Since *Tomorrow* has more analyzed comments (1510), it appears higher than *The Lorax* (1000) in all discourses when directly comparing raw data. Figure 4 therefore compares the percentage of comments by coded subject.

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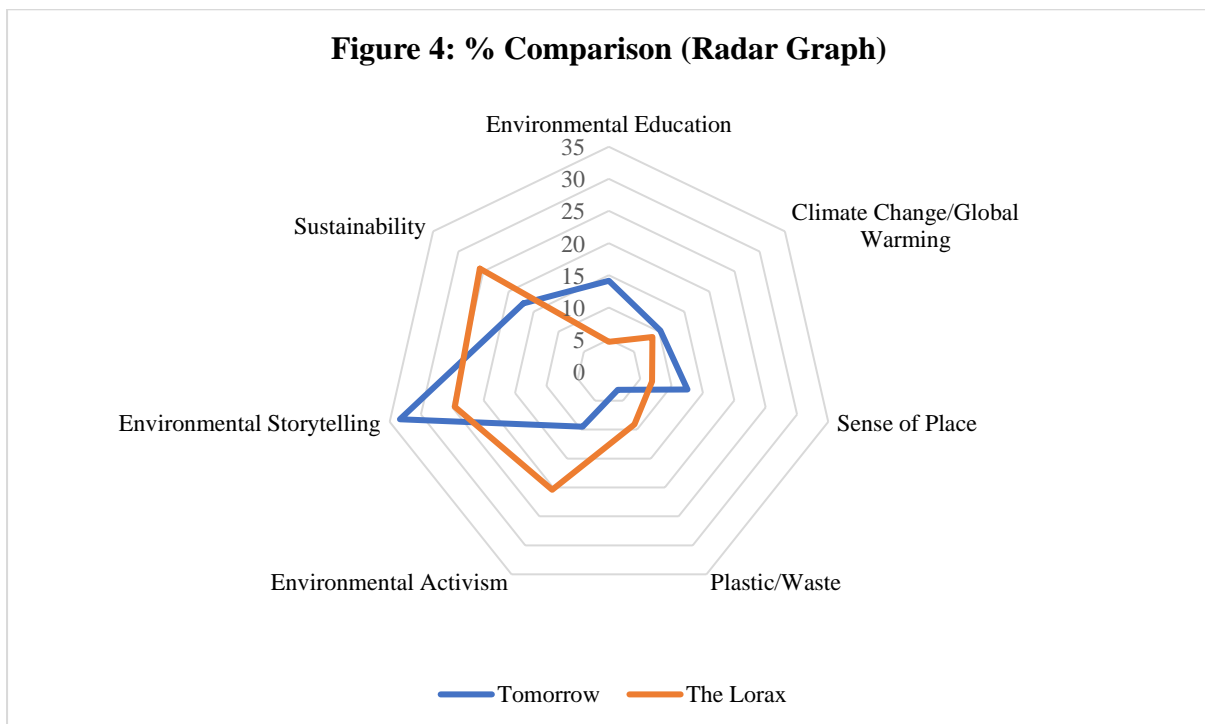
419

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

436   the type"[14] and some believe Audrey should have been the protagonist instead of Ted.

437   Despite the fact that online commenters presumably do not often have backgrounds in

438   academia, it is notable that a casual informal understanding of intersectionality is sometimes

439   seen within the comments. In the United States, campaigns about environmental justice have

440   been historically intertwined with race, class, and gender. For instance, environmental

441   historian Nancy Unger (2012) has written about how women often interact more closely with

442   their local environment than men do. Similar to the work of Unger, African American

443   cultural geographer Carolyn Finney (2015) addresses environmental justice in *Black Faces*

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[14] Username expunged.

444   *White Spaces*. Finney reviews the history of African American engagement with the

445   mainstream environmental movement from the early 1900s to the present. Finney focuses on

446   how African Americans are excluded from the environmental justice movement, but she

447   espouses the human experience of the story. Public comments tend to deconstruct the

448   hegemonic racist elements, if informally.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

466   indicating strong environmental sentiment in viewers.[15] Finally, the pair of words "watch"

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[15] The use of the Truffula tree as a movie plot point could contribute to this word being highly ranked, however since the Truffula Tree is a fictional proxy for the overall environment, this inference is appropriate.

467 and "watching", while individually ranked lower on the graph, would jointly rank higher, and

468 are often used in comments to indicate personal interaction with the film itself. One example

469 comment illustrating this as follows: "@[16] Hey lol, wanna watch the lorax together 👉👈"

470

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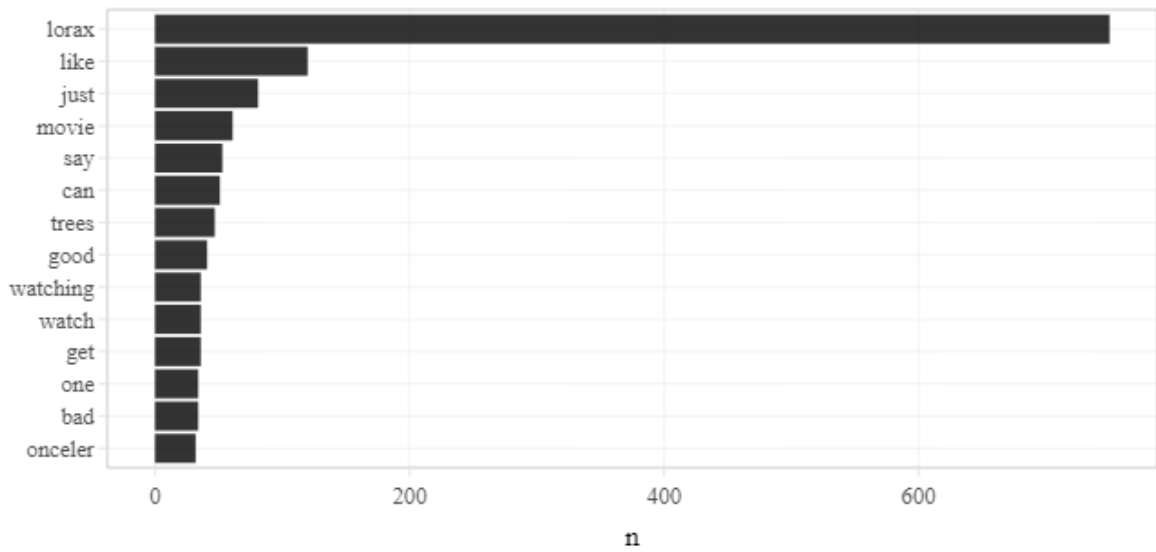
[16] Username expunged.

471 **Figure 5: Top word count for *The Lorax***

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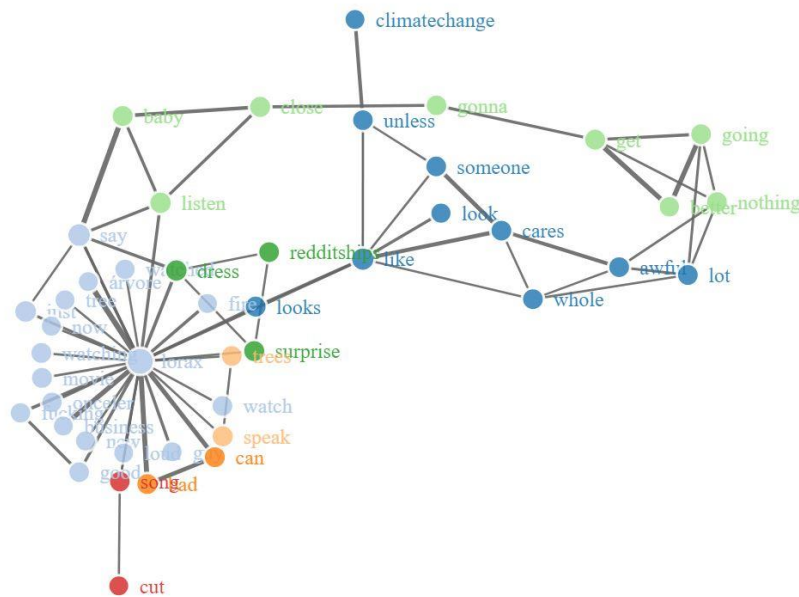
478 **Figure 6: Skip-gram for *The Lorax***

479

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

495 new environmental media in order to improve audience engagement.

496 **Figure 7: Top Word Count for *Tomorrow***

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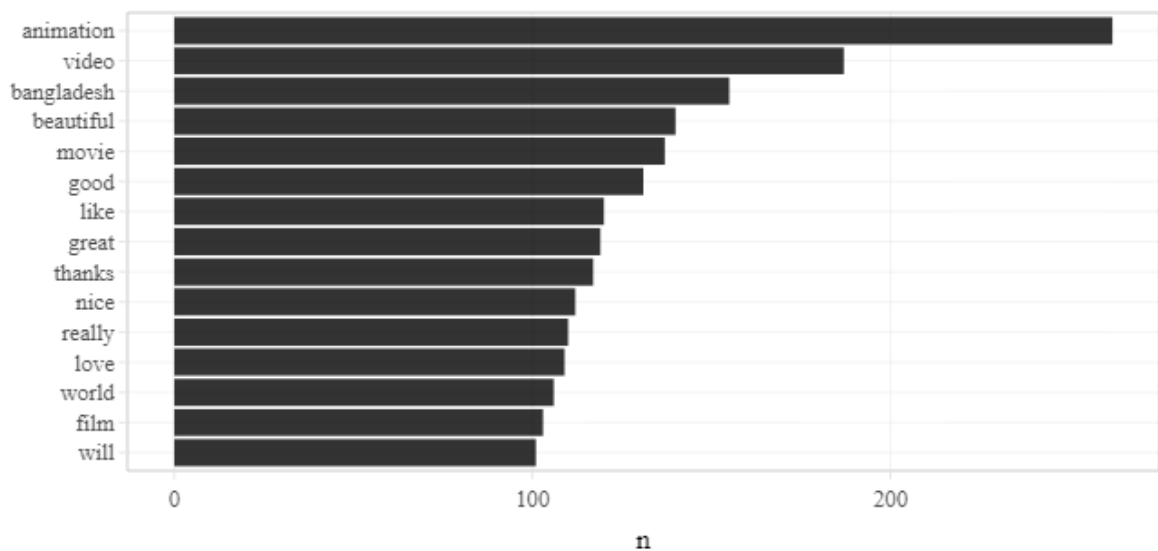
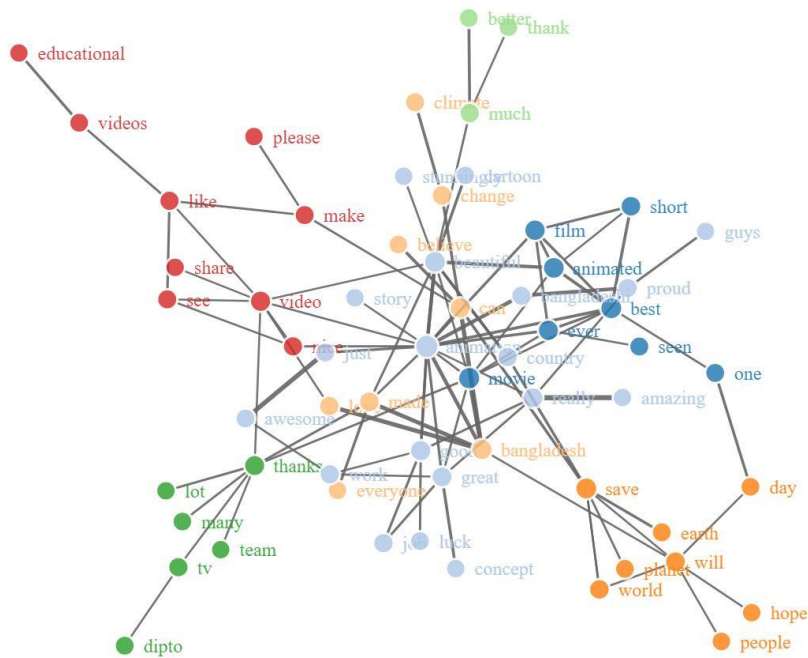

499 **Figure 8: Skip-gram for *Tomorrow***

500
501
502   For *Tomorrow*, the word-frequency table shows that "animation" is the most frequent

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

504 Bangladesh.[17] Many of the highly linked words in the skip-gram demonstrate the positive

505 sentiment of the film and its content generally, such as "awesome", good, "great", etc. It is

506 notable that even though the word "Bangladesh" is ranked so high in the top word count, the

507 word "world," while relatively low ranked among the top words, still demonstrates a global

508 consciousness among the online commenters. This is especially illustrated by the skip-gram,

509 where the word "world" is closely associated with the words "hope," "save," and "planet."

510 Further analysis of the skip-gram count network for *Tomorrow* reveals a more decentralized

511 network when compared to *The Lorax*. This is potentially influenced by the lack of a specific,

512 unifying catchphrase in *Tomorrow*, whereas the central "unless" catchphrase of *The Lorax*

513 comprises a significant wordchunk.

514

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[17] A number of online comments take nationalistic pride in a progressing film industry in Bangladesh, using *Tomorrow* to exemplify advancing standards in domestically produced computer animated films.

Environmental catastrophe

515

516   *The Lorax* takes a social constructionist view of nature as the film explains that the

517   trees, the forests, have agency, but must act within a framework established by mankind—an

518   anthropocentric view. The Lorax, the guardian of the forest, thus establishes a space to

519   advocate for the rights of nature. The Lorax's proclamation in the opening scene, "I am the

520   Lorax, I speak for the trees," (0:00:56) establishes the role of the Lorax in representing nature

521   more broadly. The tone of the film is set by the deceptively bright city of Thneedville, set

522   against a foreboding sickly purple dawn. This city is one of artificiality, in which every entity

523   is made of artificial products: "a town without Nature, not one living tree" (0:01:24). In this

524   city, trees are made of plastic and their colors can be changed by clicking remote buttons.

525   Environmental pollution in the film is often implied through use of plastic, and the exclusive

526   use of synthetic materials instead of those found in nature. The artificiality of Thneedville

527   constitutes a major crisis in the film. Thneedville society takes capitalist pride in

528   commodifying nature: O'Hare informs Ted, "I make a living selling fresh air to people"

529   (00:31:19). Ted's search for an original tree is a business threat to O'Hare's company. Moore

530   (2016) explains the intimate relationship that exists between children, consumer culture, and

531   commercial media in the United States. Moore (2016) shows that both "the news and

532   entertainment industries reveal that the way Hollywood treats a subject like the environment

533   is not an exception to the rule; instead, the consistent subjugation of environmental concerns

534   is part of a broader capitalist logic in a concentrated market" (p. 5). This also connects to

535   real-life industrialists, as in when Frankfurt School critics Max Horkheimer and Theodor

536   Adorno (2007) discuss capitalist social structures, arguing that material identities are assigned

537   to nonmaterial cultures (perhaps also natural resources), commodifying them into the

538   products from which capitalists could profit. These natural resources are manufactured,

539   bought, and sold like a commodity. Environmental historian William Cronon (1996) has also

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

541   in the entire planet Earth for centuries.

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

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

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

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

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

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

548   and oxygen, Truffula trees help reduce environmental threats.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

582 climate change and biodiversity.

583

584 **Environmental storytelling: sense of place**

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

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

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

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

589   (2013, p. 93). These films use storytelling show how human beings and animals are

590   displaced.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

605   collapse.

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

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

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

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

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

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

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

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

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

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

616   watch the Lorax"

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

698 species.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Conclusion

714

715 Using environmental discourse analysis to understand how discourses about climate

716 change and sustainability, to list a few, are changing, is an important task. This is

717 acknowledged in the literature—Elliott and Cullis (2017) have written, "the humanities

718 should be more confident and vocal in addressing climate change" (p. 15). Although the

719 number of creative works on climate change is increasing, their growth is not as substantial as

720 the increase in risks we are encountering. Heise (2008) argues that "climate change poses a

721 challenge for narrative and lyrical forms that have conventionally focused above all on

722 individuals, families, or nations, since [climate change] requires the articulation of

723 connections between events at vastly different scales" (p. 205). Although it is challenging, the

724 most powerful environmentally driven artwork and films focus on local, regional, and global

725 riskscapes. The combination of these different scales described by Heise can be tricky, but

726 these films show it can be done. In *Tomorrow*, local action leads to global change, and in *The*

727 *Lorax,* action within Thneedville leads to improvements in the lands outside the city.

728 In *The Lorax*, as time passes, new trees begin sprouting, animals return, and the

729 repentant Once-ler joins the Lorax, everything in its proper place. The film ends with the note

730 that unless someone comprehends the awful consequences that awaits us and takes prompt

731 action, "nothing is going to get better." *The Lorax* seeks to promote ecological awareness

732 among people showing the repercussions of their deeds "unless" they start taking care of the

733 environment. Film critics say that *The Lorax* is too political or scares children from the

734 environment by giving them "ecophobia" (Potts, 2019). Yet some are more hopeful, such as

735 critic Deidre Pike (2012), who deems *The Lorax* a "'dialogic enviro-toon' not presenting a

736 subject merely for entertainment but creating a safe zone for exploration of environmental

737 facts, ideas, images, and perspectives" (p. 13). Public commenters generally seem to agree

738 with Pike, and do not seem hindered by the message of *The Lorax*. Rather than them being

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

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

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

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

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

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

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

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

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

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

749   nevertheless both give the audience hope for the future.

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Works cited and consulted

Bangladesh: internet penetration rate. (n.d.). Statista. Retrieved September 6, 2023, from

http://www.statista.com/statistics/764102/internet-penetration-rate-bangladesh/

BigFoot, D. S., & Dunlap, M. (2006). Storytelling as a Healing Tool for American Indians. In

T. M. Witko (Ed.), *Mental health care for urban Indians: Clinical insights from*

Native practitioners (pp. 133–153). American Psychological Association.

https://doi.org/10.1037/11422-007

Caraway, K., & Caraway, B. R. (2020). Representing Ecological Crises in Children's Media:

An Analysis of The Lorax and Wall-E. *Environmental Communications*, 14(5), 686-

697. https://doi.org/10.1080/17524032.2019.1710226

Clark, T. (2011). The Inherent Violence of Western Thought? *The Cambridge Introduction*

to Literature and the Environment. Cambridge: Cambridge University Press.

Cronon, W. (1996). Introduction: In Search of Nature. *Uncommon Ground: Rethinking*

Human Place in Nature. New York: W.W. Norton & Co.

Desk, A. & E. (2021, September 27). *Bangladeshi animation film "Tomorrow" Bags Cannes*

World Film Festival Award for Best Animation film. The Daily Star.

https://www.thedailystar.net/entertainment/tv-film/news/bangladeshi-animation-film-

tomorrow-bags-cannes-world-film-festival-award-best-animation-film-2185166

Elliott, A., Cullis, J. (2017). The Importance of the Humanities to the Climate Change

Debate. In: Elliott, A., Cullis, J., Damodaran, V. (Eds.) *Climate Change and the*

Humanities. Palgrave Macmillan, London. https://doi.org/10.1057/978-1-137-55124-

5_2

Finney, C. (2015). *Black Faces, White Spaces: Reimagining the Relationship of African*

Americans to the Great Outdoors. The University of North Carolina Press: Chapel

Hill.

777   Garrard, G. (2014). *The Oxford Handbook of Ecocriticism*. Oxford University Press.

778   Gottschall, J. (2012). *The Storytelling Animal: How Stories Make Us Human.* Boston/New

779   York: Houghton Mifflin Harcourt.

780   Gruzd, A. (2020). Netlytic: Software for Automated Text and Social Network Analysis.

781   Available at https://Netlytic.org/index.php. *Nostalgia Critic Commentary: The Lorax.*

782   https://channelawesome.com/nostalgia-critic-commentary-the-lorax/

783   Heise, U.K. (2008). *Sense of Place, Sense of Planet: The Environmental Imagination of the*

784   *Global.* New York: Oxford University Press.

785   Horkheimer, M. & Adorno, T. (2007). "The Culture Industry: Enlightenment as Mass

786   Deception." In S. During (Ed.), *Dialectic of Enlightenment*. *The Cultural Studies*

787   *Reader*. London and New York: Routledge.

788   Hossain, B., Sohel, M. S., et al. (2020). Climate Change Induced Extreme Flood Disaster in

789   Bangladesh: Implications on People's Livelihoods in the Char Village and Their

790   Coping Mechanisms. Progress in Disaster Science, 6, 100079.

791   https://doi.org/10.1016/j.pdisas.2020.100079.

792   Howarth, C & Anderson, A. (2019). Increasing Local Salience of Climate Change: The Un-

793   tapped Impact of the Media-science Interface. *Environmental Communication*, (13)6,

794   713-722. DOI: 10.1080/17524032.2019.1611615

795   Hulme, M. (2014). Why We Disagree About Climate Change: Understanding Controversy,

796   Inaction and Opportunity. In Greg Garrard (Ed.), *The Oxford Handbook of*

797   *Ecocriticism*. Oxford University Press.

798   *https://twitter.com/billmckibben/status/1211276652178759680*. (n.d.). X (Formerly Twitter).

799   Retrieved September 6, 2023, from

800   https://twitter.com/billmckibben/status/1211276652178759680

801

802 King, T. (2003). *The Truth About Stories: A Native Narrative*. Toronto: House of Anansi

803   Press.

804 Kluwick, U. (2014). Talking about Climate Change: The Ecological Crisis and Narrative

805   Form. In Greg Garrard (Ed.), *The Oxford Handbook of Ecocriticism*. Oxford

806   University Press.

807 Leopold, A. (1986). *A Sand County Almanac and Sketches Here and There*. Illustrated by:

808   Charles W. Schwartz. London/Oxford/New York: Oxford University Press.

809 Meadows, D. (1994). "Envisioning A Sustainable World."

810   https://donellameadows.org/archives/envisioning-a-sustainable-world/

811 Moore, E. (2016). Green Screen or Smokescreen? Hollywood's Messages about Nature and

812   the Environment. *Environmental Communication*, 10(5), 686-

813   697, DOI: 10.1080/17524032.2019.1710226

814 Mühlhäusler, P. & Peace, A. (2006). "Environmental Discourses." *Annual Review of*

815   *Anthropology*, (35), 457-479.

816 McKibben, B. [@billmckibben]. (2019, December 29). *Loosely inspired by Dickens, this*

817   *Bangladeshi animated tale about climate change is wonderfully done. It never blinks*

818   *at the horrors in store, but refuses to give up hope*. [Tweet].

819   Twitter. https://twitter.com/billmckibben

820 Orr, David W. (2013). Place and Pedagogy. *Ecological Literacy: Education and Transition to*

821   *a Postmodern World.* New York: State University of New York Press. 125-131

822 Peace, A. (2018). Environmental Discourse Analysis. *Environmental Humanities*. In Noel

823   Castree, Mike Hulme, and James Proctor (Eds.). Routledge, London and New York.

824 Pike, D. M. (2012). *Enviro-Toons: Green Themes in Animated Cinema and Television.*

825   Jefferson, NC: McFarland.

826 Stephanie, L & Stephanie, F. (2012). The Sustainable Humanities. *PMLA*, (127), 572-578

827   Renand, Chris. (2012). *The Lorax*. Illumination Entertainment.

828   The Business Standard. (2021, October 16). My Role in 'Tomorrow' Was to Motivate Our

829   Team and Help Them Dream Big - Mohammad Shihab Uddin.

830   https://www.tbsnews.net/glitz/my-role-tomorrow-was-motivate-our-team-and-help-

831   them-dream-big-mohammad-shihab-uddin-316519

832   Thoreau, H. D. (1854). *Walden*. Obtained from Project Gutenberg,

833   http://www.gutenberg.org/ebooks/205.

834   Uddin, M. S. (2019). *Tomorrow.* Kazi Media Limited.

835   Unger, N. (2012). *Beyond Nature's Housekeepers: Women in American Environmental*

836   *History*. Oxford University Press (Illustrated Edition).

837   Van Rossum, G., & Drake, F. L. (2009). *Python 3 Reference Manual*. Scotts Valley, CA:

838   CreateSpace. https://towardsdatascience.com/how-to-scrape-youtube-comments-with-

839   python-61ff197115d4

840   Warner, M. (2002). Publics and Counterpublics. Public Culture, 14(1), 49–90.

841   https://doi.org/10.1215/08992363-14-1-49.

842   Wolfe, D. (2008). The Ecological Jeremiad, the American Myth, and the Vivid Force of

843   Color in Dr. Seuss's *The Lorax. Environmental Communication*. 2(1), 3-24.