

Climate Change in the Movie *Weathering with You*: Critical Discourse Analysis of Environmental Issues

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ABSTRACT

*Climate change is one of the integral problems that has been affecting people worldwide. A lot has been discussed in the academic field, and awareness about this matter has been raised in mainstream media, including the entertainment industry. Numerous studies have been conducted to explore the representation of climate change in movies. Unfortunately, insufficient attention has been given to examining the significance of language, specifically the linguistic patterns employed in the films. Therefore, this paper explores the linguistic patterns of climate change represented in a Japanese animation blockbuster, *Weathering with You*. The movie, as depicted in the title, addressed climate change in both implicit and explicit ways. Through Critical Discourse Analysis (CDA) underpinned by the Ecological Concern Framework, the study examines the layers of meaning in the language use of both Japanese and English. Comparing the source language, which is Japanese, with English will provide a multifaceted representation of climate change through language patterns. The CDA method enabled the analysis to explore linguistic features and provides an approach to incorporate language with social issues. The finding shows that throughout the movie, there are repetitions of the words 'rain', 'sunshine', 'sky' and 'weather'. Each of the words represents a certain discursive practice. There are three practices pinpointed in the movie. First, excessive rain is a disturbance to human life; second, the weather is beyond the control of human power; and third, humans are capable of mitigating climate change. These discursive presented different ideologies that are related to how humans perceive climate change and how it influences their actions toward the issue. Seeing how climate change becomes a central focus of an animated blockbuster, which is well received by audiences all around the world, rather than a topic discussed by global leaders, we argue that it has become a concern of global citizens as well. The findings exposed how global audiences subconsciously perceive climate change, and it would provide some input for environmentalists who are pursuing public environmental behavioural change.*

Keywords: Climate change; critical discourse analysis; multimodal analysis; anime; ecological concern

INTRODUCTION

The Kyoto Protocol was ratified in Kyoto, Japan, on the 11th of December 1997. The protocol's major role was to fight climate change or global warming by controlling the emission of greenhouse gases, specifically, to obtain a 6% reduction in the levels found in the 1990s by 2008–2012. Scientific evidence showed that emissions above the current rate could cause significant changes in global climate conditions. However, Japan withdrew from extending the Kyoto

Protocol's commitment to climate change in December 2011 during a UN conference. Japan's frankness or excuses about its unwillingness might appear as a surprise during the Cancun Summit. However, Imura (2005) had already given a hint when discussing Japan's international environmental policies and internal bureaucratic rivalry. Japan as a nation expresses concern about how efforts to protect the environment could be harmful to economic stability. Due to this, it would be interesting to explore how Japan express its concern towards climate change.

The withdrawal of the Kyoto Protocol indicates the rivalry between the environmental and trade ministries. It is fair to say that this inclination could be limited to Japan's administration and political stance. Therefore, it would be interesting to see Japan's perspectives on environmental issues from a different angle, namely entertainment. Other than economic and technological prowess, Japan's presence is also evident in the realm of entertainment through *anime*. It was dubbed as the world's most bankable genre (Brzeski, 2022). This indicates how *anime* is a prominent form of entertainment and, therefore, is influential towards social attitudes and environmental awareness. Due to this, it would be timely to explore an *anime* product with the objective of investigating Japanese as well as global audience perspectives on climate change. This study echoed Taufek et al. (2022: p. 206), who asserted that although administrative decision-makers are critical in dealing with climate change issues, the mitigation of the problem requires the involvement of the public. This study was triggered by the withdrawal of the Kyoto Protocol in 2011. The event could have influenced the perspectives of the Japanese public. Therefore, the effort to explore the underlying messages in a global blockbuster *anime* movie could draw insights into the analysis of the public's attitudes towards climate change.

REVIEW OF REPRESENTATION OF CLIMATE CHANGE IN MOVIES

The effectiveness of the use of movies in climate change communication has garnered scholarly attention over a fifteen-year span beginning in 2004, after the release of the American climate fiction-disaster film titled "The Day After Tomorrow". Researchers have explored various aspects of this topic, including the role of films in raising awareness, shaping public perception, and influencing environmental activism. For instance, Lowe et al. (2006) investigated the influence of "The Day After Tomorrow" on individuals' perceptions of climate change in the UK. Their analysis centres on four key aspects: the probability of severe consequences, the level of concern for climate change compared to other global issues, the drive to act, and the attribution of responsibility for the climate change problem. The findings suggest that, in the short term, watching the film led to notable shifts in attitudes. Viewers displayed significantly heightened concern regarding climate change and other environmental hazards. Sakellari (2015) stated that climate change films offer fresh insights and present believable cinematic scenarios, thereby influencing perceptions of climate change. However, they often fail to generate lasting changes in behaviour and attitudes over the long term. According to Sakellari, the persuasive impact of climate change films is not enduring due to their failure to recognise the role of individuals as responsible actors and the interactive nature of media. These films tend to rely on the notion that the media can easily manipulate the audience, overlooking the complex dynamics of communication and engagement. In addition, some researchers also investigated the effectiveness of making films to express climate change concerns in the classroom, and they believed that this approach enables students to engage in climate change discussions within their community, identify climate-related issues or environmental concerns that resonate locally, and create a film narrative to effectively convey their

personal viewpoint to fellow community members (Littrell et al., 2020). According to Onyekuru et al. (2020), the utilisation of movies to visually represent climate change issues in a meaningful way has been recognised as a potent tool for bridging the divide between complex scientific concepts and individuals' everyday experiences. They believed that this approach helps to simplify climate change issues, establish connections with personal interests, and effectively engage groups in discussions and subsequent actions. Climate change films primarily derive their value from their ability to educate and evoke emotions in relation to climate change communication. They are known for effectively conveying specific narratives, messages, viewpoints, and values through the skilful use of rhetorical and visual techniques. However, when it comes to influencing behavioural change, their impact is noticeably constrained. This limitation is not solely attributed to the films themselves but also stems from the characteristics of the audiences they target (Manzo, 2017).

On the other hand, there are several studies conducted to explore the representations of climate change in movies. Giaccardi et al. (2022) examined a collection of 37,453 film and TV scripts spanning the years 2016 to 2020. they discovered that merely 1,046 scripts, which amounts to 2.8 per cent, contained any terms associated with the climate, and a mere 0.6 per cent made a reference to "climate change" explicitly. According to a study conducted by Rose-Redwood and Bennett (2021) on ten climate change films produced in English between 2006 and 2019, it was found that the majority of climate change documentaries that were examined exhibit a common structure: a central narrator, typically a white male, embarks on a journey of discovery about climate change, sharing their newfound knowledge with the audience while encountering individuals from diverse backgrounds across the globe. Seventy-six per cent of those portrayed in the films as "victims" of the negative effects of climate change were racialised people. Hamonic (2017) pointed out that filmmakers like to find fertile ground in crafting plots centred around apocalyptic themes, utilising them as a platform to express their ideologies and critique the existing socio-political order. Through cautionary tales, these filmmakers aim to warn audiences to change their behaviours before the depicted apocalyptic scenarios become a reality.

Despite numerous studies have shown the representation of climate change in movies, and it is believed that filmmakers employed various cinematic techniques and storytelling approaches to shed light on the impacts of climate change, insufficient attention has been given to examining the significance of language, specifically the linguistic patterns employed in films, in academic research. The majority of research carried out on climate change communication and linguistic patterns (Atanasova & Koteyko, 2017; Dahl, 2017; Gjerstad & Fløttum, 2021) relies on analysing mass media and textual sources such as mainstream media, scientific reports, political documents, and social media but tend to exclude image analysis despite the raising usage of image and picture in the media. These include studies of words, combinations of words, and entire texts taken from different contexts (Fløttum, 2016). Recent studies indicate a strong connection between the interpretation individuals assign to climate change and the manner in which it is communicated. Language plays a vital role in this dynamic, as it not only mirrors and articulates information and perceptions but also shapes attitudes and actions (Fløttum, 2016). Therefore, this study proposes a Critical Discourse Analysis (CDA) to examine the language patterns of climate change communication in a Japanese animation movie. The CDA method was chosen because it is not only limited to exploring linguistics features, but it also provides an approach that incorporates language with social issues, and in this study, the social issue is climate change.

METHODOLOGY

In this section, we discuss the method and analytical framework which has been used to analyse the language and images in the film *Weathering with You*. Generally, critical discourse analysis (henceforth CDA) has been adopted as the main method. Seeing how climate change is a social issue and related to social justice, CDA is deemed the most suitable method that becomes an overarching umbrella of all the other approaches and analytical frameworks in this study.

The approach started off with watching the film and identifying the discourse particles or ideologies that seemed consistent in the film. Due to practical reasons, only scenes from the film that contain reference to weather both in spoken language and images, capture the ideological nuances that the film presents. Examination of selected images was undertaken by utilising the framework of narrative structure introduced by Kress and van Leeuwen (2023). Within the framework, the analysis focused on vectors, especially how these emanate from the participants/actors and from elements in the scene (e.g. rain, clouds).

Then, the analysis moved to a close examination of the actual spoken language (Japanese) and the subtitled language (English) was undertaken. Specifically, repeated keywords mentioned throughout the film were filtered. Then, words that surround the keywords were investigated to identify patterns and determine whether these patterns have any underlying meaning related to any ideologies. Finally, to tie it all together, the findings of the analysis of lexical and vector will be discussed using the framework of ecological concern. The subsequent subsections present detailed explanations of the main method, CDA and Ecological Concern Framework.

CRITICAL DISCOURSE ANALYSIS

As an approach, Critical Discourse Analysis or CDA, has evolved over the years and is used in different types of discourses. Proponents of CDA introduced different methods that are suitable for different types of analysis, including the Discourse-Historical Approach (Reisigl & Wodak, 2017), the Socio-cognitive approach (Van Dijk, 2009) and the Dialectical Relational approach, which is related to the three-dimensional framework (Fairclough, 1989). The latter is the analytical framework that is adopted in this study. A diagram that shows the three-dimensional framework used in this study is presented in Figure 1.

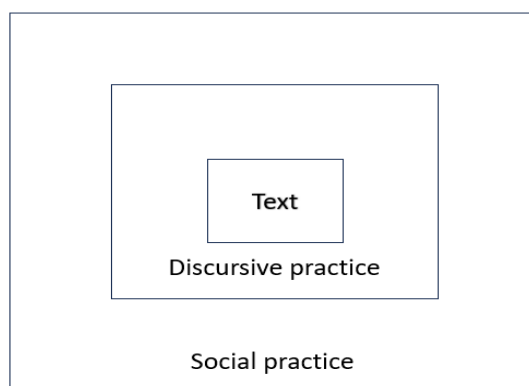


FIGURE 1. Three dimensions of a communicative event - Fairclough's 3-dimensional model

According to Fairclough, there are three dimensions in any communicative event, which are text, discursive practice and social practice (see Figure 1) - each of which influences the other dimension since, as you can see, the dimensions are embedded within a bigger outer dimension of social practice. To understand and analyse a discourse, one has to consider all these dimensions. Based on this model, we also adopted the three stages of analysis in CDA, which are description (of texts), interpretation and explanation. In our study, these stages are realised as such:

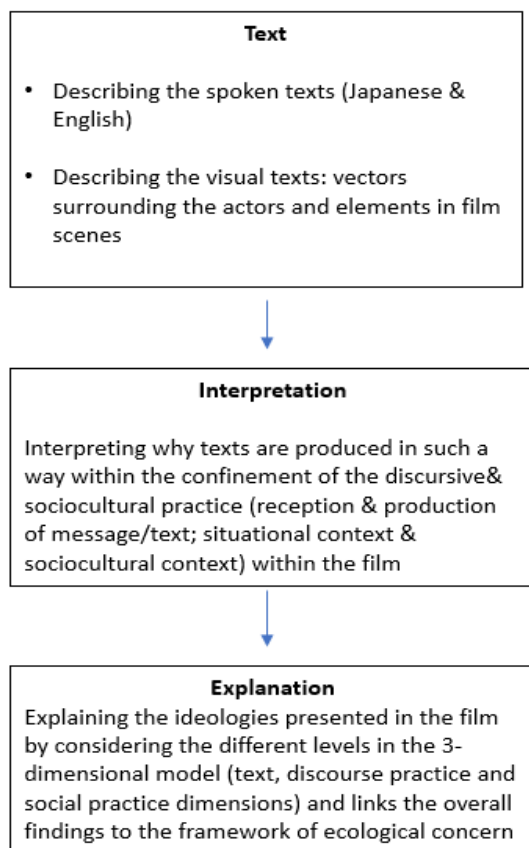


FIGURE 2. Three stages of analysis in our study based on Fairclough's approach to CDA

Basically, in the first stage (text), as shown in Figure 2, the spoken discourse from the *Weathering with You* movie was transcribed. Speeches identified with ideologies of climate change were then examined by first describing the language (text analysis). After that, selected images from the film scenes were captured and analysed using Kress and van Leeuwen's framework of visual analysis. A discussion of the framework used for visual analysis is presented in the next section. Then, in stage 2 (interpretation), the meaning (whether explicit or implicit) will be interpreted considering the cultural and social situations surrounding the movies (whether fiction or real life). Finally, in stage 3, an explanation as to which certain meanings (or ideologies) are projected in the movies and to what end is discussed through the lens of the Ecological Concern Framework.

VISUAL ANALYSIS OF MOVIE SCENES

Selected images were examined using a sociosemiotic approach introduced through the visual grammar framework (Kress & van Leeuwen, 2006, 2023). Despite the numerous analytical frameworks in their books that can be adopted, for the purpose of this study, we decided to focus on vectors. Alongside the practical reason, one of the main reasons for this decision is due to the fact that in the film, these were the more prominent features that were clearly visible in the cinematography. Generally, Kress and van Leeuwen categorised images into two main groups, which are narrative and conceptual images. The focus of this study is on the previous - images with narrative structures. It is within narrative structures that we can identify vectors, i.e. no vectors in conceptual images. In a recent publication by Kress and van Leeuwen (2023), they stated that:

“Vectors may be formed by bodies or limbs or tools ‘in action’ but there are many other ways of making represented elements vectoral. A road running diagonally across a picture space, for instance, can be a vector. The car driving on it is then an Actor in the process of ‘driving’”

(p. 55)

Another recent study by Huang (2022) noted that: "Arrows, gestures, eye-lines or other things that can indicate directions are vectors. When participants are connected by a vector, they are represented as doing something to or for each other" (p. 1333). Based on these two excerpts, we define vectors in our study as anything formed by the actors through their gestures, movement (through the body, limbs or tools held by them), gaze or anything formed by elements surrounding the actors, be it inanimate objects like arrows or cars, or simply the arrangement of elements in the image that formed certain directions (the lining of clouds, skyline or rain drops).

FRAMEWORK OF ECOLOGICAL CONCERN

It needs to be noted that the studies on the environment were undertaken with different motivations. Some researchers approached their subject from an ecological benefit or ecological-centric perspective, while others followed an Anthropocene-centric perspective. In other words, the study of the environment can be divided into two: one who sees the planet and its living things as equal. The second is studies that perceive the planet and its living things (other than humans) as merely a tool for humans' livelihood. The different approaches were comprehensively discussed by Kilbourne (W. Kilbourne, 1995). Kilbourne (1995) adopted ideas from Dobson (1990, 2007) in differentiating human behaviour towards environmental problems, then made a summary, as shown in Figure 1, Table 1 and Table 2.

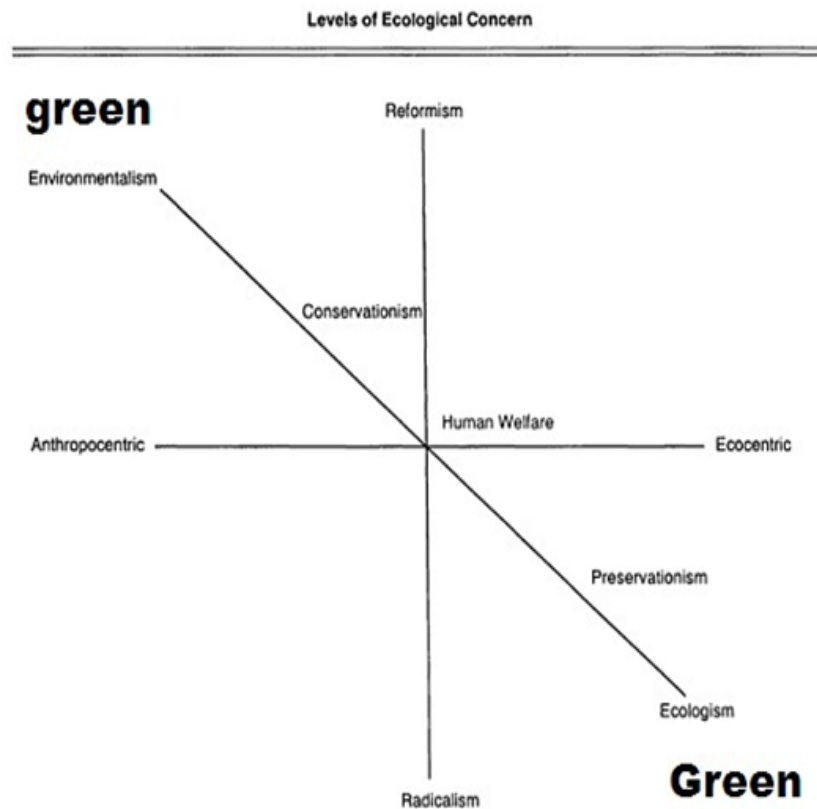


FIGURE 3. Levels of Ecological Concern (William E. Kilbourne 1995, p. 9)

TABLE 1. Definitions of Dimensions in Level of Ecological Concern

Dimension	Definitions
Reformism	<ul style="list-style-type: none"> · This tradition accepts axiomatic that the dominant social paradigm or the status quo should be maintained. · All necessary change, can be brought about by enacting new legislation on such problems as pollution control, recycling and toxic waste disposal
Radicalism	<ul style="list-style-type: none"> · The opposite extreme on the scale, the radicalism calls into question the paradigm itself. · Political reform is insufficient to engender the magnitude or type of change necessary to preserve the environment in the long run.
Anthopocentric	<ul style="list-style-type: none"> · It tends to see nature as instrumental value for purely human purposes. · This perspective is closely aligned with others such as technocentrism
Ecocentric	<ul style="list-style-type: none"> · The idea that the ecology is characterized by inherent value rather than human instrumental value

TABLE 2. Definitions of Behaviour in Level of Ecological Concern

Greenness	Definitions	Implications
Environmentalism	<ul style="list-style-type: none"> · An ideology of political reform motivated by a world view that dramatically deviates from that with which ecologism was developed. · As a social concept, circumscribes the domain of social critique within the prevailing view of post-industrial society as the technological, affluent, service society in opposition to the radical version of post-industrial society as low technology, agrarian and decentralized. 	<ul style="list-style-type: none"> · Unlimited economic growth and technological rationality as the sustaining ideologies of the dominant social paradigm. · Environmentalism does not present a challenge to the dominant paradigm. · From the perspective of ecologism, it can be concluded that environmental reform as currently practiced within the framework of Western industrial ideology may achieve too little, too late.
Conservationism	<ul style="list-style-type: none"> · The most anthropocentric and reformist position after environmentalism. It was formed out of the scientific and utilitarian perspective. · Nature is preserved for future human development. 	<ul style="list-style-type: none"> · Focus on efficient management of natural resources so that they will be available for future human-centered development and use.
Human Welfare	<ul style="list-style-type: none"> · An enhancement of conditions to include factors beyond the narrow economic vision of resource conservation's efficiency in resource allocation. 	<ul style="list-style-type: none"> · It argues against the degradation of the physical and social environment by reintroducing the soft variables. · It is much more critical of technological rationality and economic growth as policy. It compels the reevaluation of human needs to include the aesthetic and spiritual aspects of life with the recognition that nature degraded cannot provide.
Preservationism	<ul style="list-style-type: none"> · To move to the preservationist perspective, the aesthetic and spiritual dimensions must be introduced into the evaluation of nature. · Nature is preserved from development. · If the motivation for preservation is to provide human spiritual resuscitation, weak preservation is implied. If the motivation is an inherent value regardless of human use, then strong preservation is implied. 	<ul style="list-style-type: none"> · To be truly preservationist, an intrinsic value motivation must be present. The stock assumptions regarding free markets, material accumulation, and profits within the dominant social paradigm will begin to come under attack. Arguments will tend to be deontological rather than utilitarian, focusing on what is inherently "right" rather than the "greatest human good".
Ecologism	<ul style="list-style-type: none"> · Challenges the foundation of the dominant paradigm demanding a new paradigm in place of the old. · Provides the condition for an encompassing view of nature. · Requires political and positional radicalism. 	<ul style="list-style-type: none"> · Since the position requires a virtual overthrow of the dominant social paradigm, few, if any, advertisements will be found supporting the position. · From the ecologism position, the only Environmental product is the one that is produced from renewable resources at rates lower than the resources' replacement rate for non-frivolous human needs.

Kilbourne utilised two dimensions: political and positional (position of humans in nature). The chart introduces the concept of 'green' and 'Green'. After considering sociopolitical and economic issues in society, Kilbourne labelled the two ends of the positional dimension scales as anthropocentric (humans consider themselves as the occupants and treat other biotic creatures as tools) and ecologism (ecology is characterised by an inherent value rather than a human instrumental value). Then, he explained the political dimension scale as reformism (accepting the dominant social paradigm and the status quo should be maintained) and radicalism (questioning the dominant paradigm and insisting on drastic change). Based on the political and positional spectrums, he eventually divided 'GREEN' into five types of behaviours: environmentalism, conservationism, human welfare, preservationism, and ecologism. According to Kilbourne, "The

least green is environmentalism, which advocates technological solutions to environmental problems with political reform as the process. The greenest is ecocentrism, which requires radical change in political processes and respects the inherent value of nature. (W. Kilbourne, 1995, p. 192).

WEATHERING WITH YOU

The analysis framework mentioned previously will be used to explore the climate change inclination and ideology from the movie *Weathering with You*. As the title suggested, the movie centres around weather and climate. The movie was also chosen because it was the highest-grossing *anime* worldwide in 2019 and among the 10th highest-grossing *anime* movie of all time. The story is about a girl who has the power to change the weather. Due to desperate circumstances, despite being only 15 years old, she needs to work to support her brother and herself. She advertised her service as a weather girl, where she is known as *hare onna* or sunshine girl. She will be called to an event and pray so that it will be sunny during the day because a sunny day will bring profits to those participating in an outdoor event. While she is happy and finds her purpose in life by being the sunshine girl, she realises that every time her prayer for a sunny day was answered, it caused some part of her body to become transparent. This could mean she is losing her life or dying. Will she continue sacrificing herself for the sake of desirable weather, or will she choose herself over the weather? This could symbolically mean that humans would sacrifice their comfort or, to the extent, themselves for the sake of the weather. The movie centres around questions such as "What is more important, the sustainable weather conditions or the individual livelihood".

FINDINGS

As proposed in the methodology, the first step for data analysis is to choose scenes that contain utterances about weather or climate. After the scenes have been selected, the script of the scenes is transcribed. From the transcription, it is evident that there are four lexical that appear the most frequently. The four keywords or lexical are 雨(*ame*) or rain, 晴れ(*hare*) or sunshine, 空(*sora*) or sky and 天気(*tenki*) or weather. These four lexical alone, are sufficient to interpret the ecological inclination of the movie. Then, the analysis explores the concordance of those lexical. The concordance includes words and phrases that come before and after them. Therefore, the data consists of sentences or paragraphs that include these four keywords. The paragraphs and sentences are then categorised into discursive practices. From the analysis of the scenes and their lexical, it is evident that utterances of climate and weather appeared in three contexts or discursive practice. The first is when the movie illustrates how rain causes disturbance in human's daily activities. The second practice is when certain characters of the movie explain and demonstrate awareness that the weather is beyond the control of human power. The third practice is the opposite of the second practice, where the movie pinpoints how humans have the power to change the weather.

EXCESSIVE RAIN AS A DISTURBANCE FOR HUMAN ACTIVITIES

The first discursive practice is when the rain is perceived as something very negative and how the opposite of rain, which is the blue sky and sunshine, is anticipated as something very positive. The setting of the movie is Tokyo, which has been facing continuous rain. Therefore, the centrifugal force of the storyline is the non-stop rainfall. To be fair, the movie did admit the importance of rain, as shown in Image 1. At the beginning of the movie, the protagonist, Hodaka, was very happy when he saw rain falling on the ship he was on board. However, it becomes problematic when it is more than the usual fall. However, when there was a sudden fall of rain brought by the storm, as shown in Image 2. Hodaka almost fell out of the ship when he was saved by Mr Suga, who later became his employer, as shown in Image 3. This is the foreshadowing of how the most anticipated rain became the most dreaded weather throughout the movie.



IMAGE 1



IMAGE 2



IMAGE 3

Based on these three images, a brief analysis of vectors within narrative structures is discussed. In these screenshots, the protagonist is seen looking up, smiling, hoping, and looking forward to the rain. However, he was devastated because of the excessive rain that caused him to almost fall into the sea (Images 1 to 3). In Figure 1, the protagonist's gesture (him looking up at the sky with his gaze fixed on the sky) forms the vector. We consider this image as an action process (the action of the protagonist looking up towards the sky), where the actor can be considered the source “from which the vector emanates, or which, itself, in whole or in part, forms the vector” (Kress & van Leeuwen, 2023, p. 58). In Image 2, even though the actor/participant is visible, the image of him is blurred out in contrast to the sharp image of raindrops pouring from the sky. In this image, it is argued that the raindrops create vectors moving down and dramatically change how they are represented in Image 3. The image actor looking up is the main vector in Image 1, but the raindrops have replaced him as the main vector in Image 2. These two images can be considered non-transactional visual structure because it only contains one actor/participant (based on Kress & van Leeuwen's, 2023 definition). On the other hand, images that contain two participants are considered transactional visual structures, as in the case of Image 3.

In Image 3, the actor/protagonist is still looking up, but now he's looking at his saviour, Mr. Suga, instead of looking at the sky. It symbolically suggests that the sky is not a human saviour anymore. Mr Suga is lending a helping hand while the protagonist is accepting the help offered. Their hands reach out to the other's hand to form a vector. Even though this should be considered the main vector, the way it is being blurred out in the background with invisible expressions indicates other processes are taking centre stage. In particular, the image shows more sharply the streaks of sunlight (vectors moving down) and the clearing of the sky in the background, indicating that these vectors were happening more clearly than the vectors and action process done by the participants. This highlights the importance of the change of weather here. Perhaps indicating hope and assurance that things will be all right (Image 3)

These three images capture the notion that excessive amounts of rain have caused disturbance or hindrance in human daily activities. Therefore, the analysis of the lexical rain also shows that the utterance of the word rain usually comes in phrases that intensify the lexical. For example, as shown in the following table.

TABLE 3. List of lexical 'rain'

	Lexical rain	Intensifiers
1	非常に激しい雨 heavy rain	非常に激しい/ heavy
2	すげえ雨 storm	すげえ/ what a
3	局地的大雨 torrential rain, heavy rain	局地的/ torrential
4	雨ばかり downpours, raining so much, raining all the time, rainy	ばかり/ so much/ all the time
5	雨続き rainy days	続き/ rainy
6	ずっと雨/ going to rain	ずっと/ going to
7	観測史上最大の雨/ record breaking rainfall	観測史上最大/ record breaking
8	連続降雨日/ raining continuously	連続降/ continuously
9	強い雨 strong rain	強い/ strong
10	長雨 record rain fall	長/ record
11	100% 雨 100% rain	100%

The phrases in the table above highlight how the movie perceives excessive rain as problematic, and those descriptions of extreme rainfall are usually uttered in weather forecasts. The weather forecast has been among the significant scenarios in the movie. After describing the extreme rainfall, the discursive practice then pinpoints how it disrupts or hinders human daily activities, as shown in the following five dialogues. The four scripts indicate that excessive rain causes asthma, a sports player losing his match, and children being unable to play outside. The discursive practice also uses the lexicon opposite of *rain*, which is 晴れ (*hare*), to express how the absence of rain enables positive activities such as beautiful wedding ceremonies, more sales for street hawkers, and cosplayers able to showcase their costumes. Script 8 is when the narrator concludes how people in Tokyo are hoping for a sunny day.

Scene 1

今年は雨ばかりね。こんなじゃ外で遊べないし喘息にも悪いし。。最近の子供たちは可哀想。昔は春も夏も素敵な季節だったのに。

It's raining all the time this year. She can't play outside and it's bad for her asthma. I feel bad for children nowadays. We used to have beautiful spring and summer.

Scene 2

あいつ雨の日に弱くてさ負け続きなんだよ

It never wins on rainy days

Scene 3

お外でかけっこしたくて
I want to play outside but...

Scene 4

やっぱり一生に一度のことでしょう？青空の下に白いドレス姿で
It's a once in a lifetime event. I wanna wear white under a blue sky.

Scenes 5

晴れと雨とじゃ売り上げも段違いなのよ
We'll sell a lot more now (since the rain has stopped)

Scene 6

この日のためにブラックバイトにも与えて耐えて耐えて耐えてきて・・・
I worked so hard in a sweatshop just for today (cosplay fashion show).

Scene 7

流星雨今夜極大期で
To watch the meteor shower

Scene 8

雨ばかりの東京ではみんな様々な理由で晴れを求めていた
Everyone had their own reason to pursue sunshine in rainy Tokyo

Scene 9

人柱一人で狂った天気が元に戻るんなら俺は歓迎だけどね
If you could fix this crazy weather with one human sacrifice, I'd be happy

Scene 10

晴れ女が人柱になって消えることで狂った天気は元に戻るんだって
She gets sacrificed and disappears, then the weather goes back to normal

Scene 11

きっといつもの夏が戻ってくるよ
The usual summer will come back

Scene 12

だからま。。元に戻っただけだわ なんて思ったりもするね
So, well... I think it's just gone back to its original self

WEATHER IS BEYOND THE CONTROL OF HUMAN POWER

The second discursive practice is when elderly characters in the movie discuss how the weather conditions are beyond human control. The analysis of the lexicon weather or 天気 (*tenki*) demonstrates that weather is described as mystical, unpredictable and deteriorating, as shown in Table 4.

TABLE 4. List of lexical weather

	Lexical weather	modifier
1	天気のバランスが崩れている(the weather's off balance)	バランスが崩れている(off balance)
2	天気は自然現象 (Weather is a natural phenomenon)	自然現象 (a natural phenomenon)
3	天気は不思議だ weather is a mystery	不思議だ / mystery
4	天気は天気の気分 The weather changes on a whim	天気の気分/ changes on a whim
5	天気が元に戻る fix the weather	元に戻る/ fix
6	天気なんて狂ったまま The weather can stay crazy	狂ったまま / stay crazy

The most symbolic and significant expression of the notion beyond control is when the main protagonist, 晴れ女 (*hare onna*), walks past the Shinto temple gate, as depicted in the following images. After crossing the *toori*, or Shinto shrine gate, she became a weather maiden and was given the power to summon the sun as she liked. The monologue from the scene (Script 13) suggests only humans with superpowers can control the weather as she or he likes it. Then, she is floating in the sky, showing her ability to fly, symbolising superpowers.



IMAGE 4



IMAGE 5

With regards to the analysis of vectors, Images 4 and 5 are considered transactional visual structures with one participant in them. Image 4 shows a pattern like the one in Image 3 discussed before. Here the participant is seen doing an action process (walking towards the shrine) but this whole process is foregrounded as other processes are taking place and seem to be the more important processes in the image. In particular, the vectors of sunlight piercing through the clouds and showering on an umbrella that is turned upside down. The positioning of the umbrella (in an upside-down position/ vector moving down) is both literal and symbolic - i.e., the girl literally does not need the umbrella because the rain has stopped, and symbolically, the rainy days are no longer relevant because *hare onna* is here. The latter indicates human intervention in weather change (through superpowers), while the former might suggest discarding technology (an umbrella as a kind of human invention and technological product) when faced with disturbing weather.

In Image 5, the girl is seen floating in the sky. Even though this is the main process or action taking place, no clear vector is noted (moving up, down or sideways), which might suggest that the girl is in a balanced situation. However, many smaller vectors and processes are taking place in the image. Around the girl, many complex vectors are formed by what looks like flying fish and butterflies created from water. One that can be argued is that the second most important vector is the skyline formed by the clouds. The clouds are clearing away from where *hare Onna* is floating, and one cloud line formed in the middle of the screen creates a dramatic change of the weather - clearing of the sky from the clouds (suggesting rain clouds moving away from the girl) from left to right of the screen. This might suggest human intervention through superpowers.

Scene 13

思わず強く願いながら、鳥居をくぐった

Praying with all her heart, she passes the shrine gate

Analysis of the words *tenki* and *kisho*, which literally means weather, also provides clues on how there is a belief that the weather is beyond human control. Although the young girl in Script 14 mentioned that the current weather is abnormal, the elderly in Script 15 explained that the weather has never been normal in the first place. The discursive practice suggests that when the weather is predictable by humans, then it is considered normal. However, the elder explained, based on the painting from 800 years ago, the weather has never been predictable, hence, indicating that it is beyond human control.

Scene 14

治療って今年みたいな異常気象をですか

Like this year's abnormal weather?

何が異常気象じゃん。だいたい”観測史上初（はつ）”とか。。世間はすぐそんなことを言う。そりゃいつからの観測だ。せいぜい100年。この絵はいつ描かれたと思う。800年前だ。

There's nothing abnormal about that. They say in recorded history, but when did the records begin? 100 years ago, at best. How old do you think this is (painting)? 800 years old.

Scene 15

そもそも天気とは天気の気分。人の都合など構わず正常も異常も計れん。湿ってうごめく天と地の間で。売り落されぬようしがみつ。ただ仮住まいさせていただいているのが人間。昔はみなそれをよく知っておった。それでも天と人を結ぶ細い糸がある。それは天気の巫女。人の切なる願いを受け止め空に届けることのできる特別な人間。昔はどの村にもどの国にもそういう存在がおった。それが晴れ女じゃない

The weather changes on a whim. Regardless of human needs. We can't even tell what's the norm and what isn't. We're only allowed to stay temporarily in the space between the sky and the earth clinging hard not to be shaken off. We used to be aware of this in the past. But there's a thin thread linking us humans and the sky. That is the weather maiden. A special girl who can take in people's wishes and deliver them to the sky. In ancient time, there was one in every village and every country sound like the sunshine girl.

Another scene that shows how humans are not in control of the weather is shown in the following scenes. However, the context signifies humans as not in control and suggests that the extreme weather caused by climate change is not due to human interference. In other words, climate change is not an environmental problem, and it is merely a natural phenomenon.

Scene 16

東京のあの辺はさ もともと海だったんだよ。ほんの200年ぐらい前まではさ。江戸そのものが海のは入江だったそうだよ。それを人間と天気が少しずつ変えてきたんだ。だからま。。元に戻っただけだわ。なんて思ったりもするね。自分たちが世界の方とを変えちゃった。世界なんてさどうせもともと狂ってんだから。もともとは海だった。世界なんて最初から狂ってた。この世界がこうなのはだから誰のせいでもないんだ。

You know, that area used to be under the sea. Until 200 years ago. In old time, Tokyo was just a bay. Human beings and the weather changed it, little by little. So, well... I think it's just gone back to its original self. The world has always been crazy. It was under the sea. The world has always been crazy. So it's no one's fault that it's like this.

The second discursive practice suggested that in terms of social practice, the inclination of the practice falls under the preservationism scale from the Level of Ecological Concern framework. As explained in Table 2, 'Preservationism' is defined as the inclusion of aesthetic and spiritual dimensions in the evaluation of nature. Both scenes in the second discursive practice

highlight spiritual attributes such as lexical *inoru* or pray, *tenki no kibun* or weather's whim, *tenki no miko* or weather maiden and *ten to chi* or heaven and earth. This analysis suggests that the elderly are prone to view climate and weather from spiritual perspectives.

HUMANS ARE CAPABLE OF MITIGATING CLIMATE CHANGE

The third and final climate change-related discursive practice discovered in the movie is a practice that represents the notion that climate change can be mitigated through human efforts. This is depicted in Images 6, 7, 8 and 9:



IMAGE 6



IMAGE 7



IMAGE



IMAGE 9

The first three images (Images 6, 7, 8) are from scenes where the male and female protagonists make efforts that could change the world or the weather. The female protagonist, Hina or the sunshine girl, decided to sacrifice herself to the sky in exchange for a sunny day in Tokyo. The male protagonist, Hodaka, on the other hand, decides to bring back Hina regardless of what will happen to the weather. The last image is the fate of Tokyo decided by the two protagonists. They decided to return to the land and abandon sunny Tokyo. Therefore, since their return, the sunshine never returns, and the rain has never stopped, not even one day. Hence, Image 9 is the depiction of the consequences of their decision.

Since there is no clear vector in Image 9, the visual analysis of vectors will only consider images 6, 7 and 8. In Image 6, the protagonist, Hina, was in a situation where she was unsure whether she should return to land or stay in the sky. With her body still falling from the sky and moving downwards, whilst her hands and feet floating upwards show contradictory vectors, vectors are moving in a vertical line but opposite ways. Her hand floating upwards may also suggest her reaching out for Hodaka. This depicts her mental condition, which is still undecided about what she wants to do. On the contrary, the vector that emanates from Hodaka is a vector that moves straight downwards in a vertical line, with his hand reaching out to grab Hina from the fall, suggesting his solid determination to bring Hina back to land.

Both protagonists were shown in a horizontal-line vector, as shown in Image 7. This suggests them being in the same state of mind and determination. At this point, Hina was persuaded by Hodaka to go back to the land with him. Other minor vectors are in vertical lines like that of the protagonists' hair and Hodaka's handcuff, simply to show movements of them falling from the sky. In Image 8, both protagonists again are shown as having the same state of mind and determination, with both falling vertically headfirst towards land, symbolising their final decision. The keywords or lexical representing the discourse practice is the word 空 (sora) or sky. As shown in the following table, the lexicon 空 (sora) is connected to verbs such as alive, pray, influence and deliver. The verb implies human efforts that could influence or change the condition of the weather.

TABLE 5. List of lexical 'sky'

	Lexical sky	verb
1	空から降ってきたん/ fell down from the sky	降ってきたん/fell down
2	空に祈るだけで/ just by praying	祈るだけで/just by praying
3	空が青いだけで生きていてよかったって思えたり/ A blue sky makes you feel happy you're alive	生きていて/ alive
4	でも必ず空は彼女の願いに応えた/ But the sky would always answer her prayers	願い/ prayers
5	ただの空模様にこんなにも気持ちは動くんだ/ We're really influenced by the weather	動くんだ/ influenced
6	空につながっているんI realized how much the human heart is connected with the sky	つながって/connected
7	空から帰ってくる日/ the dead come back from the sky	帰って/ come back

8	魚が空を飛んでる、龍もいるFlying fish in the sky and even a dragon	飛んでる/ flying
9	空に届けること/ take in people's wishes and deliver them to the sky	届けること/ deliver them to
10	空と繋がったん/connected to the sky	繋がったん/ connected
11	ね。。見て。。空Look at the sky	見て。。/ Look
12	陽菜さんの引き換えに空を晴れたんだThe sky has cleared because she offered herself in exchange	引き換えに/ offer in exchange

Scene 17

あの景色、あの夏の日あの空の上で僕たちは世界の形を変えてしまったんだ
On that summer day, up on that sky we changed the shape of the world.

Scene 18

陽菜さんの引き換えに空を晴れたんだ。空の魚。陽菜 一緒に帰ろう。でも私が戻ったらまた天気が・・・

The sky has cleared because she offered herself in exchange. Sky fish. Let's go home, Hina
But if I do, the weather will...

もういい。。陽菜は晴れ女なんかじゃない。もう二度と晴れなくなつていい。青空よりも俺は陽菜がいい。天気なんて狂ったままでいいんだ

It's ok. That's enough. You're not the sunshine girl anymore. Who cares if we don't see the sunshine again. I want you more than any blue sky. The weather can stay crazy.

Scene 19

あの日降り出した雨はそれから1日もやむことなく。東京の街をゆっくりと水に沈めていき、3年がたった今でも降り続けている。

The rain started falling again that day, and never stop. It slowly sinking Tokyo into the water
It's still falling now, three years later.

Scene 20

あの時僕は僕たちは確かに世界を変えたんだ。僕は選んだんだあの人を。この世界をここで生きていくことを。

That day, we changed the world. I made a choice. I've chosen her. I've chosen this world.
I've chosen to live here.

Scripts 17 to 20 illustrate the third discursive practice, which is humans can determine the weather. Which is a totally different notion from the second discursive practice. Script 17 is the flashback and conviction of the protagonist that he did change the fate of Tokyo. Script 18 is a scene that captures the notion that humans' decisions could influence the fate of Tokyo. Then, Script 19 illustrates the effect of the decision made in Scene 18. These findings of the analysis agree with Hamonic's (2017) proposition that filmmakers tend to showcase plots surrounding apocalyptic themes and warn audiences to consider their behaviours before they become a reality.

In terms of social practice related to Ecological Concern, the notion that humans can influence the weather fits in with the Environmentalism level. As a social concept, it circumscribes the domain of social critique within the prevailing view of post-industrial society as the technological, affluent, service society. Environmentalism's discursive practice advocates unlimited economic growth and technological rationality as the sustaining ideologies of the dominant social paradigm. The fact that it is unwilling to change is symbolised by Hodaka's decision to prioritise his love for the female protagonist and abandon a sunny day in Tokyo. It highlighted how human decisions could influence the weather and activities.

DISCUSSION

The CDA approach, through a three-dimensional framework, identifies three consistent ideologies throughout the film. The ideologies are the discursive practices, namely excessive rain, weather beyond human control and human ability to mitigate climate change. The third dimension, which is the social practice, is analysed by applying the level of ecological concern as shown in Table 2. In the linguistic and image analysis of vectors related to the three discursive practices found in the film, we can see certain patterns that further reinforce ideas or ideologies that the filmmakers wish to make, whether explicitly or implicitly. This aligned with the description by Onyekuru et al. (2020), who asserted that movies are instrumental in reducing the gap between intricate scientific concepts and layman's understanding of the problem. In the first discursive practice, rain is perceived as something very negative, and vectors within the images analysed help to emphasise how the weather changes, whether subtly (Image 2) or dramatically (Image 3). In these images, the protagonist, Hodaka, plays the role of representing human reactions to the changes in whether – change of human emotions from feeling happy and scared to hopeful. This depiction is aligned within the anthropocentric context where human well-being is the central concern in climate change issues. Although human activities and emotional expressions are depicted in the scenes, through a cinematic technique of foregrounding and backgrounding, the changing weather takes centre stage. Weather changes refer to sunny days or rainy days or the appearance and disappearance of sun and flooding.

In the second discourse practice, it is mentioned that the focus is on how weather is beyond human control. However, in the images, it is noticeable that the resistance of humans to try and intervene with weather change and the disruption that it brought, whether through technological innovation or through superpowers (arguably through prayers and help from supernatural beings). This is portrayed through Images 4 and 5 of *hare onna* or the protagonist Hina praying at the shrine and floating in the sky, suggesting the potential of hope of using this power to change the course of weather conditions. Vectors emanating from the actor (Hina) and from elements in her surroundings emphasise the hope of human efforts to change this (vectors in rays of sunlight piercing through the clouds and over an upside-down umbrella) and the possibility of beating nature/weather (horizontal vector of cloud line that suggest cloud rains are backing away due to Hina's superpowers). It also, to some extent, suggests humans need the power to control everything, including those elements that are beyond their control, for example, weather conditions. This is parallel with the environmentalism category in the level of ecological concern table, where human is seen as the agent who could bring change or are in power to change through technological innovations.

The third and final discursive practice is related to how climate change can be mitigated through human efforts or actions. Images 6, 7 and 8 presented the film's rising action, climax, and resolution. Vectors in Image 6 empower the conflicting opinions that the protagonists have about the best course of action they should take now – to change the weather or not through Hina's sacrifice, such as rising action. Both decisions would have a major impact on the condition of the weather in the film. The contradicting vectors emanating from Hina's falling body and the determination of Hodaka were emphasised in Image 7. These can also be related to the disparity in human society today of whether their conscious choices would have any impact on climate change. In Images 8 and 9, again, the vectors assist in creating powerful scenes (the impactful climax of the film), be it showing the protagonists in horizontal or vertical lines, emphasising unity in mind and opinion about their aim and decision. They have decided to abandon efforts to fully eradicate bad weather (rainy days) through superpowers, and they are determined to live with the consequences of their actions. It should be noted that even though in the climax, each protagonist seems at peace with their decision to abandon their effort to change the weather conditions, in the final scenes (which took place years after the climax), it was shown briefly that *hare onna* still prays (perhaps hoping that the weather can change for the better). Despite the implication, the protagonists seem satisfied with the decision they made (to keep each other safe). This discursive practice is aligned with anthropocentric or Anthropocene social practice, where human well-being is recognised as the ultimate objective of ecological concern. Other beings, such as the planet, plants and animals, are only considered tools to fulfil human needs.

The three discourses or discursive practices are also the reflection of the four key aspects asserted by Lowe et al. (2006). The first discursive practice applies to the severity of climate change aspect, the second discourse reflects on the urge to act, and the third discursive practice consists of the facet of responsibility towards the climate change problem.

CONCLUSION

In conclusion, animated films offer numerous advantages for representing climate-related issues. They engage and educate audiences of all ages, simplifying complex concepts and making them accessible. Through visual storytelling, animation can capture the urgency of climate change, foster empathy, and inspire action, fostering a collective effort towards a sustainable future.

With regards to the examination of vectors in the selected film scenes, the importance of vectors to empower dramatic effects, creating and pushing the storyline was noted. Since weather elements are sometimes hard to visualise on the silver screen, it is possible to do it with an animated film and *Weathering with You* utilised the cinematic edge that animation has to not only create stunning and captivating film scenes but also to engrave an everlasting image of how weather and its elements impacted human lives. Filmmakers strive to create awareness about climate change and visualise the consequences of individuals' decisions and actions towards climate conditions. The findings indicate how movies are not only entertaining but could explain the relationship between humans and the climate. The discursive practice presented in the movie may not only represent Japanese inclination, but it could also represent global perspectives based on the popularity of the movie.

The discussion in the literature review admitted that the influence of movies includes educating and evoking climate change awareness among audiences; however, the same could not be said in terms of behavioural changes, as asserted by Sakellari (2015). Therefore, after

investigating the underlying messages of the movie, it would be timely to understand the effect of the narration towards behavioural changes among the audiences. This study can be further expanded by investigating the audiences' behavioural changes towards climate change issues.

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