

How watching Avatar the Movie Elicits Feelings of Awe in the Audience of Reddit Users

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Abstract

Advancing climate change has led to the use of environmental movies, to promote environmental awareness. With the rise of streaming and social media platforms such as Netflix and TikTok, visual storytelling has become an effective medium to connect individuals with nature and foster pro-environmental attitudes. Environmental films use awe, a self-expansive emotion that enhances appreciation for the environment, to evoke meaningful media experiences for the audience. This study examines the eliciting factors of awe discussed in audience reactions to Avatar 2 on Reddit, using text mining to analyse large amounts of qualitative data. The goal is to better understand the key mechanism of awe behind meaningful media experiences that promote environmental awareness. Therefore, this study focuses on how fans of Avatar 2 within an online Reddit community discuss their experiences of awe in response to the movie. For this, the subreddit "Avatar" with the filter terms "Avatar WoW2" and "Awe" were used. This study employed an exploratory mixed-methods approach, integrating text mining through computer-assisted text analysis in Orange with qualitative content analysis. Using LDA topic modelling on the entire dataset of 726 audience responses, physical, social, and cognitive elicitors of awe discussed by the audience were identified. Furthermore, these elicitors were investigated based on theorised central and peripheral features of awe experiences. Thus, topic keywords, along with the comments and posts, were scanned for their relation to awe features. The analysis reveals that the audience on Reddit of Avatar 2 predominantly emphasises central features of awe vastness and accommodation, along with the peripheral features of beauty, threat, ability, supernatural causes, and virtue. These elements are assumed to collectively enhance the audience's awe and foster meaningful media experiences. The study concludes that Avatar 2 serves as an exemplary environmental film that employs awe to create meaningful media experiences that can raise environmental awareness. Future research recommendations include enhancing reliability by involving multiple researchers in topic labelling, comparing Awe elicitors from the second movie with the first Avatar movie, and expanding the analysis to other sources such as interviews or questionnaires to further explore the mechanisms behind meaningful media experiences.

Keywords: Awe, Meaningful Media Experiences, Environmental Movie, Reddit, Avatar 2, Topic Modelling, LDA

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“Avatar asks us to see that everything is connected, all human beings to each other, and us to the Earth. And if you have to go four and a half light years to another, made-up planet to appreciate this miracle of the world that we have right here, well, you know what, that’s the wonder of cinema right there, that’s the magic” (James Cameron, 2010)

Advancing climate change, evident in rising sea and land temperatures, has prompted the use of alternative technologies to communicate messages promoting environmental awareness to a wider audience (Sanson et al., 2019; Silk et al., 2018). With the rise in media usage over recent years, social media and streaming platforms have become central channels for communication, effectively reaching a broad audience and spreading messages that promote environmental awareness (Silk et al., 2018). Environmental movies now serve as a medium to enhance the connection between individuals and nature (Ives et al., 2017; McCormack et al., 2021; Silk et al., 2018). Visual storytelling through pro-environmental films promotes environmental awareness by encouraging online discussions and capturing the viewer's attention with a common degree of narrativity (Braddock & Dillard, 2016, p. 447; McCormack et al., 2021). Recognising the crucial role of connecting to nature in shaping pro-environmental attitudes and actions, environmental films emerge as agents for change (Clayton et al., 2017; McCormack et al., 2021). By fostering self-transcendence experiences, environmental films are believed to enhance viewers' environmental awareness, leading to what is known as meaningful media experiences, experiences that extend beyond the self (McCormack et al., 2021; Raney et al., 2018). The key mechanism for such meaningful experiences is the evocation of awe, a self-expansive emotion rooted in feeling connected to surroundings and the vast world (McCormack et al., 2021; Yaden et al., 2017). This awe-related state encompasses central features and peripheral features (Keltner & Haidt, 2003). To benefit from the future potential of environmental movies in raising environmental awareness, this study aims to examine the specific factors in these films that elicit feelings of awe in audience reactions. Despite the growing body of research on the effects of environmental movies, the focus lies explicitly on the cinematic implementation of environmental themes. In contrast, the actual effect of persuasive techniques on the audiences remains relatively unexplored. To fill this gap, established models explain mechanisms for creating meaningful media experiences in environmental

movies that enhance environmental awareness (McCormack et al., 2021). By taking a closer look at audience reactions, the key mechanism of awe and its eliciting factors can be further understood. Recognising the role of social media in fostering movie fan communities, the study draws on reactions from an online fan community of the movie *Avatar: The World of Water 2* on the social media platform Reddit (Esquivias, 2023; Gray et al., 2017).

In the last few years, the availability of vast amounts of human-generated data has increased and challenges for the quick development of specialised software to analyse qualitative text (Iliev et al., 2015). With the advantages of text mining to analyse a large amount of qualitative content it allows for the compatibility of quantitative statistical methods with gathering data from social media posts (Yu et al., 2011). Text mining is commonly referred to as the technique for collecting relevant data from document collections by identifying and examining existing patterns while utilising computer algorithms for counting words enabling a textual analysis that focuses on natural language processing (Feldman & Sanger, 2007; Yu et al., 2015). Thus, text mining is used as a statistical method to analyse the audience's reactions on Reddit.

1.1. Theoretical Framework: Awe as Mechanism to create Meaningful Media

Experiences

Research indicates that the most important mechanism for experiencing meaningful moments through media exposure is to evoke a feeling of awe (McCormack et al., 2021). According to Keltner and Haidt's definition (2003), awe is the result of two central features: a sense of magnitude in perception (vastness) and the process of making sense of one's environment by processing information from novel situations (accommodation) (Chen & Mongrain, 2020; Keltner & Haidt, 2003). These feelings stem from a sense of self-expansion triggered by nature exposure (Yan & Jia, 2021; Zelenski and Desrochers, 2021). Specifically expansive landscape shots, charismatic fauna, ecological processes and display of connectedness and the power of nature are emphasised to facilitate feelings of awe and therefore lead to an increased feeling of self-transcendence (McCormack et al., 2021).

1.1.1. Features and Eliciting Factors of Awe

Unlike various emotions, awe is considered a complex sensation capable of eliciting positive and negative feelings. Being confronted with the vastness of the ocean can for instance evoke awe by showcasing the beauty of nature, as well as a sense of threat due to the mysterious depths. An experience is labelled awe-inspiring only when both central features, vastness and accommodation, are present. Additionally, existing research categorizes awe into five peripheral features: beauty, virtue, threat, ability, and supernatural causality (Keltner & Haidt,

2003; Nakayama et al., 2020). Beauty can be understood through various lenses, including sexual desire and attraction or biophilia, which encompasses an appreciation for nature and scenes (Buss, 1994; Keltner & Haidt, 2003; Wilson, 1984). Virtue, on the other hand, can be elicited by characters who exhibit strengths and moral virtues, portraying moral beauty. Threat confines dangerous experiences not only with nature but also with characters. Ability refers to exceptional talent and skills that command respect and admiration. Supernatural causality involves the perception of a supernatural being or force, which can evoke both glory and terror (Angyal, 1941; Keltner & Haidt, 2003). Consequently, the responses to the movie Avatar on Reddit may exhibit various of these facets of awe. To delve into the audience's perceptions of Avatar, the paper concentrates on identifying the specific characteristics of awe present in their responses.

To evoke awe in an audience, specific triggers must be present. Research identified three key eliciting factors: social, physical and cognitive (Keltner & Haidt, 2003). Social elicitors evoke awe by focusing on human emotions, relationships, and societal concepts, often involving empathy and connection with characters (Graziosi & Yaden, 2021; Keltner & Haidt, 2003). Physical elicitors emphasise natural beauty, cinematic techniques, and sensory experiences, involving direct sensory immersion in the film's world (Graziosi & Yaden, 2021; Keltner & Haidt, 2003; Shiota et al., 2007). Cognitive elicitors engage with intellectual themes and conceptual depth, involving contemplation and understanding of abstract concepts through intellectual engagement and reflective thought ((Keltner & Haidt, 2003; Shiota et al., 2007).

1.1.2. Research Gap of the Emotion Awe

Despite its diversity, psychology's exploration of awe has been notably limited within the realms of emotion research. Instead, scholars have predominantly focused on how various emotions like sadness or anger manifest in different art forms and whether they can be accurately perceived by observers. Moreover, research concerning the movie Avatar focuses predominantly on technologies in the movie and does not examine audience responses first-hand (Gabrielson & Juslin, 2001; Keltner & Haidt, 2003). Hence, there exists little research examining expressions of awe in an online community.

Since the release of the first Avatar movie the online community of the Avatar fanbase has been present and influential. Next to creating language communities inspired by the language of the movie (Schreyer, 2015), online fandoms can bring up the courage and power to implement real-life interventions such as promoting intercultural communication inspired by the values and morals of a movie (Zhan & Yan, 2017). Especially, social media serves as

an excellent platform that enables fandoms to build communities while connecting with people with similar interests. Examining online narratives, fandoms constitute a common constant showing their presence on various online platforms (Esquivias, 2023; Gray et al., 2017). Especially, Reddit's anonymity and user-driven content foster spontaneous and unfiltered conversations, enhancing the authenticity and reflecting real-world reactions in the extracted data (Proferes et al., 2021).

1.2. James Cameron's Avatar

In the year 2009, the highly anticipated blockbuster *Avatar* directed by James Cameron who also produced and directed high-selling movies such as *Titanic* and *Terminator* achieved an incredibly high banking of \$2.8 billion within the first two years after its release and with that reached millions of people from numbers of different countries in no time (Taylor, 2013). With nine Oscar nominations, the movie was not only complimented for its narrative storyline but praised for the animation and technology which was categorised as time-breaking. As briefly expressed in James Cameron's introductory quote during his Golden Globe acceptance speech, the intended message of this movie is to raise awareness of the destructive nature of humankind in exploiting our green planet. Cameron highlights the beauty and deep roots that connect humankind and nature (Taylor, 2013).

The story is set in the future 2154 on Pandora, a planet close to Earth, that is enriched with a diversity of resources. The Na'vi tribe is a peaceful population living with harmony and gratitude for their environment and sharing a deep connection with nature. As the story continues the audience is taken on a journey into a completely different world that still resembles the earth to some extent while learning about the values of the Na'vi tribe and their appreciation for nature.

Based on the multitude of themes that are depicted in *Avatar* like colonialism, resistance and environmental issues the movie gained incredible recognition by a broad and diverse audience (Wicaksono et al., 2023). In his book about *Avatar and Nature Spirituality*, Taylor (2013) compares the movie with the psychological Rorschach test in which individuals see a collection of images and based on context, cultural differences and personal histories the interpretation of said images varies to a great extent. Despite the various reasons why the movie might have caught the attention of fans, it may provide the same fundament causing individuals to gain deeper environmental awareness and engage in pro-environmental behaviour. This raises the question of whether the movie succeeded in achieving its intended goal through fostering meaningful media experiences in the audience.

Consequently, it is important to delve into the authentic responses of the audience within their comments about the film. Employing a selection of a text mining approach as the research design, this choice enables the evaluation of audience reactions through the identification of awe, thereby allowing for an exploration of correlations with features of awe through which environmental films exert meaningful media experiences on their viewership (McCormack et al., 2021).

1.3. The current Study

While James Cameron's Avatar movies serve as a fundament for various studies exploring cinematic implementations contributing to its enormous success, few studies target actual audience responses and linguistic expressions used to discuss the movie. Finding the particular characteristics that have influenced such a broad audience is highly interesting, especially in light of James Cameron's intention to use the Avatar films to bring attention to environmental issues. Specifically, how watching the movie Avatar elicits feelings of awe in Reddit users, examining awe as a key mechanism for creating meaningful movie experiences. Since meaningful media experiences are believed to positively influence viewers' environmental awareness, the research aimed to understand the factors that enhance feelings of awe. To achieve this, audience responses on Reddit about the environmental movie Avatar: The Way of Water were analysed using topic modelling. This analysis considered the presence of awe-related features (such as vastness and accommodation) and the eliciting factors (social, physical, cognitive) that generate feelings of awe.

RQ: How do Avatar 2 fans in an online fan community (on Reddit) talk about their experience of awe in response to the movie?

2. Method

This study employed an exploratory mixed-methods approach, integrating text mining through computer-assisted text analysis with qualitative research to delve into audience responses within online fan communities. By examining the topics generated by the topic model, we thoroughly analyze the entire dataset to uncover the physical, social, and cognitive triggers of awe discussed by the audiences. Furthermore, these elicitors are investigated based on existing central and peripheral features of awe experiences. Thereby, the distinct features included in the movie that account for awe-related audience responses can be discovered.

2.1. Materials: Online Platform Reddit

Reddit is an online platform that is predominantly used in research based on its relative open data access compared to other social media platforms such as Twitter and

Facebook (Baumgartener et al., 2020). The data for this study is scrapped from Reddit and taken from an Avatar fan community with over 382.019 members. Utilising secondary data eliminated the necessity for participant recruitment, with participants comprised of Reddit users subscribed to the Avatar subreddit. Subreddits, which are communities users can participate, cover a wide range of topics and are created by any user. Users can write posts or comment on posts related to the subreddit. On Reddit, it is possible to filter comments and posts from a subreddit based on specific keywords. Due to the large size of the entire subreddit, an automatic filter was applied to manage the volume of content. For this study, the Avatar subreddit was refined using the filter terms “Avatar WoW2” and “Awe” to concentrate on comments related to the second Avatar movie and the concept of awe. This filtering process, facilitated by Reddit settings, helped organize the subreddit content according to these specified keywords (Weld et al., 2024). As a result, the dataset for this study includes posts and comments from the Avatar subreddit that match the filters “Avatar WoW2” and “Awe.” These filters were chosen to capture more recent audience responses to environmental themes depicted with advanced cinematic technologies. Moreover, focusing on content related to awe helped improve the quality of the dataset while reducing the number of posts and comments.

The dataset filtered for this study consists of 726 statements, totaling 49,597 words, including 678 comments and 48 posts, sourced from the Avatar subreddit. The audience exists of members that subscribe to the Avatar subreddit on Reddit. On Reddit, users can similar to other social media platforms like (“upvote”) and dislike (“downvote”) posts. It's worth noting that membership criteria, such as rules and restrictions, can differ depending on the subreddit. The rules for the Avatar subreddit that each member must follow include staying on topic, respecting other members, avoiding low-effort content (such as spam or obsessive posts), posting appropriate content (no sexual material), adhering to the spoiler policy, and following guidelines for art, fanfiction, and promotions. Given that Reddit users consist of 67% white male users and generally fall within the age range of 18 to 29 years, it is presumed that they largely represent the demographic of emerging adults (Westrupp et al., 2022). However, within the Avatar community, individual engagement levels can vary; some users may contribute more content than others. Posts within subreddits are generally organised by time, upvotes, or specific filters. For this study, the subreddit was organised by "hottest" posts, meaning those with the most comments and upvotes.

2.2. Data Analysis

The methodology used to analyse the data is topic analysis, which is a natural language processing (NLP) technique. For the data analysis, the program Orange Data Mining Software version 3.35.0 is used to carry out a topic analysis (Demsar et al., 2013). The tools in “Orange tools” combine various components for data mining while using a hierarchical structure. Its advantages compared to other existing data mining modules comprise the differentiated and wide offer of features, maturity, a substantial user community supported by an engaging forum, and extensive documentation covering scripting languages, tutorials, and a dataset repository for developers (Sharma & Paliwal, 2023).

2.2.1. Pre-Processing

The data was scrapped from Reddit using Python and preprocessed to retain relevant information for further analysis. Thereby, the corpus was limited to posts and comments that contain textual data in the body of the post. The data was then converted into an Excel file (.csv) so that it could be used in the Orange platform.

Afterwards, standard pre-processing steps were applied like lowercase transformation, URL removal; tokenization meaning the separation of text into words; filtering stop words, using a list of 835 English stop words. These settings have been tested multiple times in different combinations to achieve the best quality dataset. Stop words transport no meaning as they are so common that they can be removed without significantly changing the meaning of a text (i.e. articles and prepositions). Additionally, to the list of English stop words, individual stop words that often emerge within the topic analysis but do not have any value to the analysis have been taken out in the pre-processing step to achieve a more fitting topic analysis (see Appendix). This removal was an iterative process.

2.2.2. Topic modelling

In the data analysis phase, Latent Dirichlet Allocation (LDA) topic modelling was employed to uncover underlying thematic structures within the corpus. LDA is a generative probabilistic model that assumes each document is a mixture of topics, and each word in the document is generated from one of these topics. By estimating the distribution of topics across the corpus and the distribution of words within each topic, LDA facilitates the identification of coherent and interpretable topics. This approach allowed for the exploration of latent themes present in the data, providing valuable insights into the content and organisation of the documents (Kherwa & Bansal, 2019).

The first step of the topic modelling was to identify a usable number of topics to extract by LDA topic modelling. According to research, there is no particular method to

choose a good quality number of topics (Eshima et al., 2024). One way to set several topics is coherence scores. Using statistics, a topic coherence score can be used to gain insight into the human interpretability of one topic and the words in it. A coherence score tells us about the correspondence of a concept through human judgment. Another option for choosing a good-quality topic model is to focus on topics based on domain knowledge. Thereby, the researcher decides on the number of topics based on what seems most reasonable considering the content of the corpus (Eshima et al., 2024). Since the corpus used in this analysis consists of content about the movie Avatar, coherence scores turned out to be less useful because words and concepts related to the movie could not be interpreted correctly. Therefore, the number of topics is chosen by the researcher based on what topics seem most reasonable. This step is manually done by the researcher and the topics are highly dependent on the number of topics the researcher decides on.

The default of topics for LDA in orange consists of 10 topics. The outcome of the topic modelling analysis provides a list of 10 topics comprised of multiple words that represent a certain topic. Through repeated trials of adding and removing topics, nine topics were selected as the most interpretable number. This decision was made because any number of topics above nine did not provide any new topic insights or add information. This process involves subjective decision-making and depends on the researcher's judgement.

it is essential to acknowledge the exploratory nature of this research, characterised by its lack of precision and unidirectionality (Casula et al., 2021). Before the analysis and assessing the results, making assumptions is the sole means available for estimating both the quantity and characteristics of existing topics. Consequently, assumptions regarding the nature of identified topics, as discovered through methodologies such as topic analysis, remain speculative and are subject to subsequent confirmation or refutation.

2.2.3. Topic interpretation

The nine topics from the topic model were labelled and interpreted. First, the marginal topic probabilities for each of the nine identified topics were calculated, which indicate the probability of that said topic to occur in the dataset. Using ChatGPT-3.5, suitable headings for each topic's keywords were generated by prompting "Please provide headings for the following words:...", followed by pasting the 10 keywords from each topic. These headings then served as inspiration for creating suitable titles for each topic and were contextualised accordingly. Based on a qualitative content analysis approach, including decontextualisation and recontextualisation (Lindgren et al., 2020), each topic was analysed and interpreted based on the seven characteristics of awe: vastness, accommodation, threat, beauty, ability, virtue,

Given the inherent subjectivity in this process, it is crucial to acknowledge the researcher's characteristics that may influence their judgment. This study focuses on identifying features of awe in audience expressions within the dataset. The researcher, being personally impressed and enchanted by the Avatar films, might adopt a more positive stance towards the films' effects, particularly regarding feelings of awe. During topic analysis, topics were interpreted to highlight instances of awe, potentially introducing some degree of researcher bias. This bias should be acknowledged, as the topics are investigated based on existing features of awe and categorised into one of the three elicitors of awe. Recognising this potential bias is essential for a comprehensive evaluation of the study's limitations and the reliability of its outcomes (Hickman et al., 2022; Westrupp et al., 2022).

3. Results

A topic model with nine topics was conducted. Below, the keywords, marginal topic probability, and the label of each topic are presented. Subsequently, each topic is interpreted based on its relation to awe. Each topic is examined for existing central and peripheral features of awe and whether it belongs to one of the three eliciting factors (physical, social, cognitive). In the second table, topics are displayed based on their interpretation as eliciting factors. Additionally, the identified features of awe within each topic are presented. Finally, the overall identified social, physical, and cognitive elicitors associated with each topic are explained.

3.1. Topic Analysis

Table 1

Top-10 key terms, Marginal Topic Probability (MTP), topic labels for each of the 9 topics from the subreddit

Topic	MTP	Key Words	Label
Topic 1	0.08	movie, plants, scene, character, true, pretty, watching, coming, issues, sounds	“Nature's Cinematic Splendor in Avatar”
Topic 2	0.09	war, plane, tey, movie, connection, people, share, polyphemus, cheering, human	“Exploring Eywa: The Magic and Controversy of Connection in Avatar”

Topic 3	0.08	wars, star, scenes, Avatar, movie, movies, humans, clan, worst, animation	“Appreciation Characters in advanced Animation in Avatar”
Topic 4	0.12	scenes, scene, earth, conflict, movie, Avatar, original, characters, cameron, reason	“Social Concepts and Conflicts: The Navi way of living”
Topic 5	0.08	movie, sat, flying, personality, feeling, language, audio, cut, cut	“The Art of Language and Emotion in Avatar”
Topic 6	0.11	Avatar, interaction, bad, mushroom, 3d, image, metayina, movies, scenes, tsireya	“The Magical Interactions and 3D Imagery in Avatar”
Topic 7	0.08	movie, water, disney, Avatar, film, version, cameron, sequels, lot, focused	“The Cinematic Magic of Water in Disney's Avatar Sequels”
Topic 8	0.13	movie, Avatar, soundtrack, film, left, movies, music, happened, minutes, hope	“The Soundtrack's Role in Avatar and Its Cinematic Magic”
Topic 9	0.08	people, score, humans, film, axial, parent, generation, finally, eyes, james	““Impact on Generations Through Cinematic Excellence”

3.1.1. Topic Interpretation

Topic 1: “Nature's Cinematic Splendor in Avatar”. The first topic consists of the keywords “movie, plants, scene, character, true, pretty, watching, coming, issues, sounds”. According to Reddit users, “Avatar's” scenes entailing depiction of nature, captivate audiences with inspiring awe through a blend of real and imaginative elements: “They mix fake plants with real ones, and use blacklights along with the decorations at night. (...)Their horticulture team *really* put work into many of the beautiful freaks of nature that call earth home (...) and when combined with the well-placed speakers playing ambient alien jungle sounds, it's breathtaking”. Thereby, Earth's natural wonders are brought to life on Pandora going beyond what is familiar to the audience. As vastness is defined as being confronted with something that feels greater than oneself, the “breathtaking” nature scenes indicate an

evoked sense of vastness when being confronted with nature. Moreover, *Avatar* challenges viewers to appreciate the incredible complexity of the natural world, fostering a cognitive process of accommodation. "(...) we could all be living better and being more respectful of Nature. Cameron is trying to show the beauty and intelligence of nature through these *Avatar* movies (...)" It serves as a powerful reminder of the magic around us, encouraging a renewed understanding of our place within it. Therefore, when audiences encounter the depiction of nature, it acts as a physical elicitor by presenting both its vastness and accommodating aspects, thereby creating a sense of awe. In particular, the peripheral features of awe, beauty and supernatural elements, are vividly described as "beautiful freaks of nature". This represents the appreciation of physical beauty in the audience's responses, which feel unique and powerful.

Topic 2: "Exploring Eywa: The Magic and Controversy of Connection in *Avatar*". The keywords of the second topic are "war, plane, tey, movie, connection, people, share, polyphemus, cheering, human". Most audience responses within topic 2 deal with the meaning of the connection between Eywa, the mother spirit, and people. "It is a matter of perspective, having Eywa managing humanity as she does to the na'vi could mean that humans finally got back to their connection with nature, but many people would react poorly to this, since many humans value their freedom above anything else. Even if Eywa was meant to be a good entity many will not see her that way." This shows the active approach of the audience to understand the novel concept of Eywa and the need to make sense of the portrayed unfamiliar spirit, a part of the process of accommodation. Furthermore, Eywa as a whole is referred to as something magical "Eywas control over animals is pure magic." underlining that the audience feels confronted with something greater than themselves. This is not only an indication of vastness but also in line with the peripheral features of supernatural causes as Eywa is referred to as something "magical". Moreover, the response stresses the amazement over the ability of Eywa to control. Related to that is that the audience sees Eywa in two kinds of ways, beautiful but also threatening. Considering that the concept- theory of Eywa is what is mostly discussed by the audience, topic 2 is considered a cognitive elicitor, exemplifying the impact the concept of Eywa has on creating an awe experience for the audience.

Topic 3: "Appreciation Characters in advanced Animation in *Avatar*". In the third topic, keywords are "wars, star, scenes, *Avatar*, movie, movies, humans, clan, worst, animation". A major aspect that made the *Avatar* movies popular, is the advanced animation of creating an imaginative world that is so similar to a live-action movie. Especially, the

unbelievable human features of the animated characters captivate audiences. A Reddit user writes “I think the CGI was too good. They captured too much of the human expressions... Her rage was awe-inspiring, vicious, and truly frightening.” This brings characters to life in a way that is both beautiful and scary. By showcasing the depth of human emotion conveyed through advanced animation the animation does not only accompany features of vastness from the greatness of the animation, but a sense of accommodation as a need to grasp the blending boundaries of real characters and animated characters is evoked. Other users express their amazement over the character's transformation from grief to blind rage and then back to maternal care: “I absolutely loved how the grief for her son turned into a blind rage, then cold and calculated manipulation of her opponent and then she came back to be the mom she is as soon as her daughter needed her. Absolutely amazing.” This shows the possibility for a deep appreciation for the characters portrayed. Statements such as “(...) It's so beautiful to look at. I'm not an animation expert but I can only imagine how much you have to study skeletal and muscle movements in order to make everything flow so naturally.” this shows that the animation creates an immersive experience where viewers can fully engage with the beauty of the presented characters. The audience is expressing the moral beauty of the character's virtue that comes alive through the advanced technology of animation. Focusing on the appreciation of characters' moral behaviour and emotional acting, topic 3 is labelled as a social eliciting factor for awe.

Topic 4: “Social Concepts and Conflicts: The Navi way of Living”. Topic four contains the keywords: “scenes, scene, earth, conflict, movie, Avatar, original, characters, cameron, reason”. The Na'vi way of life and their relationship with nature are depicted with such enchanting detail that they transport viewers into a world of pure magic: “Eywa, Avatars and the entire way of live and biology of Navi are pure magic.” The audience points out being confronted with a completely new societal way of living that is new to the societal concepts we are familiar with, underlining the accommodation. Moreover, this topic gives examples of feeling vastness related to social abilities: “(...) Another one that impressed me was when Jake and Neytiri start killing everyone on the ship. It was shocking, especially when you see Neytiri go into Berserker Mode killing the vast majority and Spider scared to death in the background”. This comment depicts how the audience is confronted with social situations that seem to have a greater cause than themselves. Two particularly impactful scenes highlighted by the Reddit user blend beauty with intensity letting the audience shiver over the realness and raw power emotions of the characters. The original characters and their journeys reflect virtue in the broader themes of social concepts like family and social

conflicts. Thereby, not only moral beauty but threat is discussed, underlining the duality of virtue. Therefore, topic 4 is considered a social elicitor as well.

Topic 5: “The Art of Language and Emotion in Avatar”. Topic 5 revolves around key terms such as “movie, sat, flying, personality, feeling, language, audio, cut, cut”, concentrating on language, personality, and emotion to create a truly immersive cinematic experience. The film intentionally tones down the Na'vi accents and language as Jake Sully integrates with their culture, making the Na'vi seem less alien and more relatable to the audience. In the second movie, English is predominantly used, whereas the first movie relies more heavily on the Navi language. As a result, some viewers state “(...) the Navi language scenes (...) were always a lot more intense” criticising that part of the uniqueness of the Navi is vanishing. Even though this initially speaks against creating awe experiences, many other comments related to topic 5 discuss primarily the theory that sits behind the change of language use: “I think they toned down Na'vi accents because we have to spend the whole movie with them and the goal seems to be that they should seem less alien to us, in a way”; “The idea is that as Jake settles in, the na'vi language sounds like English to him now, hence why the na'vi language isn't spoken as much in this movie (...)”. Again, an approach to make sense of what is shown in the movie is visible accounting for an experience of accommodation. Even though this topic showcases the power of language and emotion in the film, using them to bridge the gap between humans and the Na'vi, making their world feel more accessible, it does not include elements of vastness, such as encountering something greater. This contributes to the idea that the use of language might elicit emotions similar to awe, but does not include both key characteristics of awe. Therefore, topic 5 is not used for the further analysis.

Topic 6: “The Magical Interactions and 3D Imagery in Avatar”. Topic 6 comprises the terms “Avatar, interaction, bad, mushroom, 3d, image, metayina, movies, scenes, tsireya”. A standout moment discussed by the audience is when Kiri explores the underwater depths: “(...) mouth in a massive smile, wide open, no bubbles. The boys try to keep up again underwater and again have to surface for air, then the Metkayina kids talk amongst themselves underwater before joining the other kids .She was clearly relaxed and calm, comfortable even in her environment. Almost like she was glide.” The Reddit audience expresses the admiration for the character's abilities which can be linked to perceiving vastness over extraordinary abilities and the virtue of a character. Next to showing the character's extraordinary abilities, this scene showcases the magic of Cameron's 3D effects, making the underwater environment feel incredibly real and immersive which accounts for

physical elicitors as well. The depiction of Kiri's calm and relaxed state, gliding effortlessly, highlights the beauty and peacefulness of the underwater world of Pandora.

The interaction between the Metkayina kids and Kiri further adds to the film's enchantment. "Same goes for the ilu interaction. She isn't moving much and is completely relaxed and in her element there". This is also a new way of interacting between the characters, allowing the audience to adapt to the newly introduced way of communicating. Their ability to communicate and move underwater with ease reflects a deep connection with their environment. These scenes not only demonstrate the technical prowess of the film's visuals but also emphasise the harmony between the characters and their surroundings. Therefore, this topic is suitable for both, a physical and social elicitor.

Topic 7: "The Cinematic Magic of Water in Disney's Avatar Sequels". The words "movie, water, disney, Avatar, film, version, cameron, sequels, lot, focused" are the keywords for topic 7. In contrast to the first movie Avatar, "Avatar: The World of Water" introduces a new habitat on Pandora with the Metkayina clan living in the water. Thereby, adding a new concept to the Avatar nature that the audience is not familiar with yet. This ensures both, a need for accommodation in understanding the new clan and their way of living in the water and for vastness by creating unfamiliar nature scenes, that allows the audience to feel they are confronted with something great and unknown. One particularly awe-inspiring scene that is pointed out by the audience multiple times is when the Tulkun return. The camera captures this scene with a low shot over the water, not only enhancing the visual experience but also making the audience feel as if they are truly part of the world on screen. "That scene and when Payakan jumps out of the water while playing with Lo'ak I was like. Holy fuck. I would honestly believe you if you said they filmed a real whale jumping out water and just reskinned it and added Lo'ak"; "The jump this movie did... I recall the scene when the Tulkun return. The camera is focused on the spectacle in a low shot over the water. It felt like a cinematic documentary. So *real*." That's the magic of this movie. It makes you *believe*. And in reflection, it's surreal." The blend of stunning visuals and realistic elements is a signature of Cameron's filmmaking, making viewers believe in the world he has created but also making it hard to grasp. The sequels focus intensely on presenting the beauty and power of water to the audience, using advanced filming techniques to bring these scenes to life. Moreover, emphasising the unbelievable realness of such scenes praises the ability of the movie makers to create such an immersive world. Cameron's dedication to creating a believable and awe-inspiring cinematic experience through the fusion of a surreal yet

believable world that leaves audiences in awe. Therefore, the cinematic magic of water is categorised as a physical elicitor.

Topic 8: “The Soundtrack's Role in Avatar and Its Cinematic Magic”. This topic revolves around the key terms “movie, Avatar, soundtrack, film, left, movies, music, happened, minutes, hope” The Avatar movies are renowned not only for their visual splendour but also for their evocative soundtracks that immerse audiences in another world. The music, composed to complement James Cameron's vision, plays a crucial role in physically eliciting the film's magic. Such sensory details portray another part of eliciting vastness, as complex songs increase the immersion into something that feels greater than oneself. While some fans appreciate the inclusion of new sounds in the sequels, others find themselves captivated by recurring themes like “A New Star”. This piece, which marks the return of humans, has a lasting impact and demonstrates the power of music in these films. The music consistently maintains the immersive quality of the Avatar universe, keeping viewers engaged and within the world of Pandora. Watching Avatar in a VR 3D movie theatre further amplifies the awe-inspiring experience. It transforms the screen into a window into another world, allowing viewers to relive the cinematic magic of the original release. This suspension of disbelief shows how well the film can transport audiences by combining visuals and music to create a magical experience: “I 've just watched Avatar in a VR 3d movie theater and I relived the awe of the cinematic experience 13 years ago. It never felt like I was looking at a screen but a window into another world. Magic happened when I suspended my disbelief” However, the reuse of certain songs, such as the theme played during the mother Tulkun's death, has sparked mixed reactions: “I personally do not like the reuse of songs from the first movie. Especially the song when the mother tulkun is killed. (...) Now I'm comparing the 2 scenes in my head and I shouldnt be but the music is now making me do that and taking me out of the moment.”. This comparison can pull audiences out of the current scene, highlighting the importance of music themes to keep such feelings of vastness. Thus, the Avatar soundtrack, acts as a physical elicitor in evoking awe and sustaining the film's immersive experience. Whether through emotional music or the strategic reuse of powerful themes, the music helps to provide a glimpse into the captivating world of Pandora, leaving audiences enchanted and profoundly moved.

Topic 9: “Impact on Generations Through Cinematic Excellence”. The words comprising Topic 9, including “people, score, humans, film, axial, parent, generation, finally, eyes, james” encapsulate the overarching narrative of Avatar that goes beyond the beauty of nature. James Cameron's Avatar has left a mark on audiences since its release, captivating

people with its stunning visuals, compelling lore, and profound messages. According to Reddit users, the film stands in stark contrast to the often hollow, creatively uninspired movies that dominate the industry today. Its enduring appeal and rich storytelling continue to resonate, particularly among those who experienced it in their youth and have carried that appreciation into adulthood: “It’s the first sci fi epic that I saw in cinema when I was young and absolutely blew me away , I loved its lore , its action , it’s characters it’s message and of course it’s beauty. My love for it has only grown as I’ve got older , I’m not sure but I think there’s a few like me and as you say hopefully other generations will turn to it as well.”

Avatar itself serves as a beacon for younger generations, imparting valuable lessons through its art and entertainment. It emphasises the importance of respecting nature, understanding complex emotions, and appreciating the beauty of the world around us. As new audiences discover Avatar, its timeless themes and awe-inspiring visuals can guide them toward a more thoughtful and appreciative perspective: “Thinking of the sequels being on their way gives me comfort - it’s not outlandish to say that many of us, particularly younger people, take their cues of how/who to be from art and entertainment, and “Avatar’s” lessons could help ensure the upcoming generation gets off on the right foot.” In essence, Avatar is more than just a film. It is a cultural cornerstone that has influenced and inspired multiple generations. Its ability to evoke awe through the vastness and beauty of its cinematic world ensures that it remains a beloved masterpiece, offering lessons and inspiration for years to come which is highly appreciated by the audience. Because of these profound lessons and their impact on generations, this topic is regarded as a cognitive elicitor of awe.

Table 2

The 9 Topics from the Topic Model categorised in Eliciting Factors and Awe related states.

	Central Features		Peripheral Features				
	Vastness	Accomodation	Beauty	Threat	Ability	Virtue	Supernatural
Social elicitors							
The Magical Interactions and 3D Imagery in Avatar (Topic 6)	X	X	X		X	X	X
Appreciation Characters in	X	X	X			X	

advanced

Animation in
Avatar (Topic 3)

Social Concepts and Conflicts:	X	X	X	X		X	
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The Navi way of
living (Topic 4)

Physical

elicitors

The Magical Interactions and 3D Imagery in Avatar (Topic 6)	X	X	X		X	X	X
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Nature's
Cinematic
Splendor in
Avatar (Topic 1)

The Cinematic Magic of Water in Disney's Avatar Sequels (Topic 7)	X	X	X		X		X
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The Soundtrack's
Role in Avatar
and Its Cinematic
Magic (Topic 8)

Cognitive

Elicitors

Exploring Eywa: The Magic and Controversy of Connection in Avatar (Topic 2)	X	X	X	X	X		X
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Impact on Generations Through Cinematic Excellence (Topic 9)	X	X	X	X
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3.1.2. Identified Elicitors of Awe

Social Elicitors. The Avatar movies are renowned for their advanced animation, which brings imaginative and animated characters to life with stunning realism. By incorporating all seven features of awe in social elicitors, like character interactions, social conflicts, and facial expressions, the audience is exposed to direct factors that enhance awe and create meaningful moments. The human-like expressions of the animated characters capture the depth of human emotion, making them both beautiful and terrifying. This animation not only highlights the technical achievements of the film but also blurs the lines between reality and animation, eliciting awe through the audience's appreciation of the character's emotional journeys. The Na'vi way of life and their harmonious relationship with nature transport viewers into a magical world. The societal structure of the Na'vi introduces new social concepts that are unfamiliar to the audience, provoking a sense of vastness and prompting social reflection. The detailed depiction of these social concepts and conflicts, such as Neytiri's intense battle scenes, blends beauty with raw emotional power. These scenes reflect broader themes of family and societal conflicts, encouraging viewers to reconsider their societal norms. Unique social interactions, such as Na'vi's underwater communication, showcase new ways of interacting that enhance the film's enchantment and sense of awe. The audience's admiration for these abilities reflects an appreciation for virtue and a perception of vastness. The original characters and their journeys through these conflicts add depth to the film, making it a profound social elicitor of awe. By combining elements of beauty, virtue, ability, and supernatural threats, these scenes emphasise the harmony between the characters and their environment, creating an immersive and awe-inspiring experience.

Physical Elicitors. The physical elicitors expressed by the audience include the splendour of nature, the cinematic magic of water, and a powerful soundtrack, all of which create an immersive and breathtaking experience. These physical elicitors were the most frequently discussed among audiences and are thus believed to significantly contribute to feelings of awe. Except for threat, all features of awe were identified within these physical

elicitors mentioned in audience discussions. The film captivates with its stunning depiction of nature, blending real and imaginative elements. The use of real and fake plants, along with ambient sounds, creates a world that feels both familiar and extraordinary. This detailed portrayal challenges viewers to appreciate nature's complexity, fostering a cognitive process of accommodation and evoking awe through its vastness and beauty. In "Avatar: The Way of Water," the introduction of the Metkayina clan and their aquatic habitat adds a new dimension to the visuals. Scenes like the return of the Tulkun create an immersive and surreal experience. Advanced filming techniques and realistic elements make these water scenes feel magical and believable, enhancing the sense of vastness and wonder. The soundtrack plays a crucial role in immersing audiences in the world of Pandora. The music complements the visual splendour and enhances the emotional impact of the scenes. Watching Avatar in a VR 3D theatre further is stated to amplify this awe-inspiring experience, transforming the screen into a window into another world. The strategic use of music themes maintains the film's immersive quality, with the soundtrack and vast nature scenes remaining powerful physical elicitors, evoking awe and sustaining the film's enchanting atmosphere.

Cognitive Elicitors. James Cameron's Avatar captivates audiences by deeply engaging them through profound themes and complex concepts, provoking a cognitive process. Overall, the cognitive elicitors identified in the audience's responses combine all seven features of awe. The film's rich storytelling, novel concepts and meaningful messages stand out in comparison to today's often uninspired films, making Avatar a cultural touchstone for generations. It has left a lasting impact on those who first experienced it in their youth and continue to cherish its lessons into adulthood, emphasising respect for nature and the beauty of the world. As new generations discover Avatar, its timeless themes and awe-inspiring concepts guide them toward a more thoughtful perspective on human connection to nature. A central cognitive elicitor that is mentioned by the audience is the concept of Eywa, the mother spirit, which challenges viewers to reconsider humanity's relationship with nature. This concept requires audiences to engage in the cognitive process of accommodation, integrating and understanding this novel idea of being one with nature. Eywa is often described as magical, evoking a sense of vastness and confronting viewers with something greater than themselves. Discussions about Eywa's role and significance prompt reflections on broader themes of connection, control, and freedom, highlighting the film's intellectual depth. Hence, Avatar evokes cognitive awe by challenging different generations to think critically about their environment, fostering a deeper understanding and appreciation that transcends the cinematic experience.

4. Discussion

The current study aimed to investigate how watching the movie *Avatar* elicits feelings of awe in the audience of Reddit users. Awe was examined as a key mechanism for creating meaningful movie experiences. Since meaningful media experiences are believed to positively influence viewers' environmental awareness, the study sought to understand the factors that enhanced feelings of awe in the audience. To achieve this, audience responses on Reddit about the environmental movie *Avatar: The Way of Water* were analysed using topic modeling based on the existence of features (vastness, accommodation, etc.) and the eliciting factors (social, physical, cognitive) that generate feelings of awe.

Overall, the nine topics derived from audience responses on Reddit contain the depiction of splendid nature, the novel concept of Eywa, appreciation for animated characters, social concepts and conflicts, the use of 3D imagery, the focus of water in the sequels, the impact of a magical soundtrack, and the film's influence across generations. Within these topics, results indicate that aspects of all three awe elicitors are present in audience responses. Physical elicitors were the most frequently discussed, followed by social elicitors, and cognitive elicitors in third place. The central features of awe, vastness and accommodation, appeared in nearly every topic, except for topic 5, which was excluded for not meeting the necessary conditions for awe. Each of the three elicitors includes all five peripheral features of awe, except for threat, which was not associated with the physical elicitor. The following discussion will focus in more detail on the central and peripheral features of awe identified in audience responses, as well as the most prominently discussed eliciting factors.

4.1. Main Findings

4.1.1. *Central Features of Awe*

Audience reactions to the film reveal a strong sense of vastness, particularly in its portrayal of Pandora's natural environment. This setting, combining real and imaginative elements, creates awe-inspiring scenes that highlight nature's complexity and beauty. The concept of Eywa, a force greater than humanity, instils a sense of smallness and self-loss in the audience. The Na'vi's harmonious way of life with nature presents viewers with a greater cause, while the underwater scenes and evocative music heighten the film's immersive quality. Research on environmental films suggests that such immersive fictional narratives, blending reality and fantasy, foster a necessary sense of transcendence. These self-transcendent experiences are considered higher-level and leave a deep impact on individuals (Hwang & Cho, 2021; McCormack et al., 2021; Taylor, 2013). Interestingly, elements of

vastness not only enhance narrative immersion but also actively promote a sense of interconnectedness with the universe. By creating transcendent experiences that emphasise nature connectedness, these scenes directly target to increase environmental awareness in the audience (McCormack et al., 2021).

In contrast to the eight topics chosen for further analysis, the topic “The Art of Language and Emotion in Avatar” was excluded due to the absence of audience expressions about aspects of vastness. The shift to predominantly English dialogue in the second movie, which replaced the sense of transcendence evoked by the original film's language, supported audience identification with the Na’vi, making them more relatable. Although this counteracts the creation of awe, it aligns with another pathway of environmental movie persuasion where identity interactions lead to an expanded perspective and increased self-efficacy. This suggests that the movie employed persuasive mechanisms beyond just awe (Lambert, 2023; McCormack et al., 2021).

Furthermore, audiences express the need to reconcile the remarkable integration of real and animated elements, which enhances appreciation of the natural world's diversity. This blend makes Pandora's extraordinary aspects feel both believable and awe-inspiring. Viewers are challenged to adapt to the new clan's water-based lifestyle, unfamiliar social concepts, character interactions, and the integration of musical themes with visual and emotional narratives, requiring active engagement and accommodation (Hwang & Cho, 2021; Keltner & Haidt, 2003). Obscuring things that our mind struggles to grasp encourages reflective thinking about the Na’vi’s interaction with nature, guiding audiences towards a deeper understanding of their harmonious relationship with nature. This reflective process prompts viewers to rethink their perception of the world and their place in it, encouraging cognitive engagement that extends beyond the film itself (Keltner & Haidt, 2003; McCormack et al., 2021).

4.1.2. Peripheral Features of Awe

Among the peripheral features of awe, beauty was identified in nine different topics and was the most frequently mentioned aspect by audiences across all three elicitors. This suggests that beauty had the most significant impact on creating a sense of awe in Avatar. Audience responses highlight the film's advanced visuals, harmonious relationship with nature, stunning scenes, and profound themes, contributing to an aesthetically pleasing experience. This aligns with research showing that aesthetic pleasure, especially the beauty of nature, enhances feelings of awe as well as nature connectedness (Keltner & Haidt, 2003; Zhang & Keltner, 2016). Virtue is evident in five topics, particularly through the depiction of

the Na'vi's respect for nature, family dynamics, and societal conflicts. These moral themes resonate with audiences, encouraging them to reflect on and potentially change their behaviour and values towards nature and society. Ability is highlighted as memorable for the audience in four topics. The extraordinary skills demonstrated through the technical achievements in animation and CGI, along with the unique abilities of the Na'vi, which merge fantasy with realism, captivate and challenge the audience to fully comprehend (Hwang & Cho, 2021; Keltner & Haidt, 2003; Taylor, 2013). Supernatural causes are evident in four topics, focusing on the magical elements of Pandora, the connection to Eywa, and the spiritual aspects of Na'vi culture. Research suggests that encountering spiritually conveyed messages can not only induce awe but also enhance spiritual beliefs, making the audience more receptive to the movie's spiritual message (Keltner & Haidt, 2003; Zhang & Keltner, 2016). Despite negative emotions being part of awe, the audience discusses threats the least. Threat is vividly present in two topics, manifesting in the social conflicts and existential dangers faced by the Na'vi and the natural world. Research links threat-based awe with feelings of powerlessness. Since the movie aims to promote pro-environmental behaviour, this sense of powerlessness might be counterproductive, possibly explaining the minimal inclusion of threat-based awe (Gordon et al., 2017; Keltner & Haidt, 2003). With every peripheral feature being present in the audience's experiences with the movie, these elements collectively create a multifaceted experience of awe, engaging viewers emotionally, sensorially, intellectually, and existentially.

4.1.3. Elicitors of Awe in Avatar

The audience most frequently mentioned physical elicitors of awe, prominently highlighting beauty, ability, virtue, and supernatural causes. Nature scenes in *Avatar* are often cited by viewers as favourites, eliciting positive emotions due to the stunning portrayal of nature. Research linking awe with depictions of natural scenes aligns with viewers' feelings of encountering something greater than themselves, emphasising expansive landscapes, charismatic fauna, ecological processes, and interconnectedness to induce awe and foster self-transcendence. The blend of real and imaginative nature elements, created through advanced filming techniques, deeply immerses the audience leading to a transcendent experience (Hwang & Cho, 2021; Sari, 2021; Yan & Jia, 2021). Pandora's vast and detailed world, grand themes, and technological achievements evoke this feeling, triggering self-transcendent emotions and encouraging pro-environmental actions through nature exposure. This enhances perceptions of life's meaning, fostering a meaningful experience (McCormack et al., 2021; Rivera et al., 2019). Moreover, the technical achievements in CGI and immersive

3D effects, combined with the realistic portrayal of extraordinary elements like the Tulkun, showcase not only the film's beauty and remarkable ability to the viewers. The audience also praises the immersive experience enhanced by an emotional soundtrack, contributing to a sublime blend of fiction and reality, that fosters a sense of losing oneself in the film. This is supported by research stating that the experience of awe is intensified through both visual and auditory stimuli (Das, 2023; Sami, 2021). In addition, the magical elements of Pandora, like bioluminescent plants and creatures, and the enchanting atmosphere created by merging real and imaginative aspects, introduce supernatural aspects to the viewer. This contributes to conveying the film's environmental messages from a spiritual viewpoint. The thin line between realistic and imaginative elements enhances the portrayal of nature as something novel to discover, allowing the audience to immerse themselves in a new world while maintaining a connection to real-world issues. This is significant because research suggests that without the required realism, achieving awe is less effective (Sami, 2021).

The results indicate that *Avatar* vividly presents all five peripheral features of awe, beauty, virtue, ability, threat, and supernatural causes, through various social elicitors. The film's advanced animation captures the depth of human emotion and the harmonious relationship of the Na'vi with nature, portraying societal interactions and conflicts with stunning beauty. This portrayal brings themes of family and societal conflicts closer to the audience, prompting viewers to reconsider their own values through the Na'vi's respectful relationship with nature (Sari, 2021). Moments of shared humanity, such as interconnectedness and scenes depicting parental sacrifice, can lead to self-transcendence, deeply connected with the experience of awe. These moments, evoked through the beauty of moral behaviour and virtue, contribute to meaningful media experiences by giving morality a sense of higher power and meaning, encouraging the audience to question their own morals (Keltner & Haidt, 2003; Oliver et al., 2018). Moreover, the unique social interactions, such as underwater communication, and the emotional depth achieved through animation are memorable for the audience highlighting the admiration for the portrayed exceptional abilities. The extraordinary abilities, like the Na'vi's connection to Eywa and the extraordinary flora and fauna, introduce a sense of supernatural causes. Thereby, the relationship between the Na'vi and Eywa mirrors that between an individual and a higher power, connecting various features of awe that enhance the awareness of social values. This heightened awareness of interconnectedness among humans, nature, and the universe signifies self-transcendent moments which are a key to meaningful media experiences (Keltner & Haidt, 2003; McCormack et al., 2021).

Cognitive elicitors are highlighted on Reddit by users who discuss the significant theories presented in the movie. Meaningful moments are composed of cognitive components, such as engaging in reflective thoughts and experiencing something greater than oneself (McCormack et al., 2021). The film delves into profound and meaningful themes, showcasing a visually and conceptually rich depiction of nature and the Na'vi's spiritual connection. Through aspects of beauty, virtue, supernatural causes, and threat, the audience is exposed to the central themes of respecting nature and the interconnectedness of all life. According to research, discovering something grand within something familiar is a cognitive process that involves both accommodation and feelings of vastness (Keltner & Haidt, 2003). By portraying a typical destructive colonisation, such as the invasion and destruction caused by humans, the conflicts and challenges faced by the Na'vi are recognisable. The existential threats to their way of life and Pandora's natural world increase the audience's sense of environmental connectedness. This portrayal prompts the audience to question human behaviour, creating meaningful movie experiences and fostering a greater connection with nature (Lambert, 2023; McCormack et al., 2021). Additionally, in the audience's references to the concept of Eywa and the interconnection of the Na'vi culture with nature, admiration and fear of nature as the mother spirit are emphasised. Research indicates that Eywa symbolises nature as an active character. By depicting nature as a character presented with features of awe, the film underscores the Na'vi's ecocentric perspective, deepening the viewer's cognitive engagement with the environment and enhancing the overall meaningful experience with nature (Dubey et al., 2024; McCormack et al., 2021).

4.2. Limitations and Strengths

A strength of this study is its data collection method. By qualitatively analysing audience comments on Reddit, the study captures viewer responses firsthand. This approach allows for an in-depth examination of the emotions elicited by the film. While most research on environmental films focuses on theoretical persuasion techniques, this study examines what resonates with the audience and what is discussed among viewers by investigating their responses (Ahn, 2021).

Nevertheless, there are some limitations to using an online platform like Reddit. Since Reddit is the primary content source, it reflects the views of active fan community participants, not the entire movie audience. While Reddit is open, it represents just one of many social media platforms, each offering unique perspectives. Therefore, this study only reflects the responses of the Avatar audience active on Reddit, and demographic estimates of participants are limited. Data from other platforms like Twitter or Instagram might yield

different results (Hruska & Maresova, 2020; Shahbaznezhad et al., 2021). Additionally, only a specific segment of the audience expresses their reactions to the movie on public social media, while a considerable amount remains beyond the reach of mining media content (Adams, 2024; Barnes et al., 2021; Wicaksana & Candrasari, 2023). Therefore, for further research, it is recommended to also analyse audience content from other sources such as interviews or questionnaires.

While analysing audience content about *Avatar: The Way of Water*, many users compared it to the first movie, often preferring the original. With statements such as “Franglen doing the second film's score was a great way to honor Horner, but sadly it is just severely lacking and not memorable. Soundtracks make or break a movie and the music being bland is holding this movie back.” and “I absolutely agree reusing too much of the same theme for very specific parts makes me compare the two movies too much.” users highlighted the first film's superiority in creating awe, citing a more immersive experience due to a magical soundtrack or immersive experiences. They also felt the facial features in the second movie were too realistic, reducing the sense of awe. Additionally, the social interactions, especially among the kids, were seen as too similar to teen dramas, detracting from the sense of novelty. This suggests a need for greater accommodation to evoke feelings of awe. Currently, there is limited research comparing the first and second *Avatar* movies. Existing studies indicate fundamental differences between the films, such as the use of languages and a greater blending between humans and Na'vi, which may lead to varying audience experiences (Lambert, 2023). Therefore, it is recommended to compare the awe features and elicitors from the second movie with the first *Avatar* movie for comparison to further investigate meaningful media experiences.

Additionally, there is a challenge in interpreting topics based on their keywords, even with extensive pre-processing. The keywords often appeared too similar across topics or too broad, requiring the researcher to spend considerable time and effort scanning the dataset and reading the most representative documents to accurately label the topics (Nowak et al., 2018). Research notes that the process of finding topics and labelling them is a subjective process that allows for creative interpretation, sometimes resulting in subjective perception and biased decisions from the researcher (Chen et al., 2023). This qualitative approach complicates the replicability and justification of decisions for readers. To improve reliability, future research should involve at least two researchers independently labelling topics (Saldana, 2016).

To advance the research of environmental films, future studies should investigate the balance between awe and other persuasive mechanisms, such as social identification, used to enhance viewers' environmental awareness. Unlike awe, which is an emotion elicited by vastness and accommodation, social identification arises from relating to and identifying with another character. Establishing a balance between these mechanisms may be challenging due to their contrasting nature, but it is essential to leverage the strengths of both (McCormack et al., 2021).

4.3. Conclusion

This study aimed to explore how fans of Avatar 2 within an online fan community (on Reddit) discuss their experiences of awe in response to the movie. The analysis provided valuable insights into the eliciting factors of awe and the related features mentioned by the audience that contribute to meaningful media experiences. Avatar 2 serves as a powerful environmental film, creating an immersive experience through first physical, second social and third cognitive elicitors. Audiences expressed the central features of awe, namely vastness and accommodation, across all three elicitors. Additionally, the experiences of awe were supported by all five peripheral features. Mostly beauty was present in the topics discussed by the audience. The second most vivid feature was virtue which was identified in five topics. Ability and supernatural causes were present in four topics. The least present feature of awe that was mentioned by the audience was threat. These elements enabled the audience to experience awe, leading to meaningful media experiences.

In conclusion, Avatar 2 exemplifies how an environmental movie can use awe to create meaningful media experiences, fostering greater environmental awareness in the audience. For future research, it is suggested to enhance reliability by having at least two researchers independently label the topics. Additionally, analysing the elicitors of the second movie with the first Avatar movie for comparison and investigating audience content from other sources, such as interviews or questionnaires, are recommended to further explore meaningful media experiences.

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Appendix**Individual Stop Words**

neytiri

absolutely

jake

neytiri

spider

kiri

lo

ak

quaritch

deleted