What role has CG technology had in building public awareness and reflection on environmental protection

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Thesis proposal

Research question or title

What role has CG technology had in building public awareness and reflection on environmental protection?

Abstract

This thesis analyses CG films as a communication medium and explores the way it triggers the public's thoughts and reflections on environmental issues. Based on the theoretical framework of environmental communication and the theoretical framework of audience response, this paper analyses how CG films can enhance the sense of identity and participation of different cultural groups in environmental issues by combining environmental themes in different cultural contexts. Taking Mad Max: Fury Road, The Martian and Avatar as examples, it explores the ways and themes of different CG films in presenting issues. The paper further analyses the visual effects and emotional advantages of CG films in the communication of environmental themes, and this analysis reveals that it is often necessary to consider the diversity and acceptance of audiences while highlighting environmental issues in CG films.

Draft introduction

Environmental sustainability is already an inevitable development trend. As emerging computer graphics technologies are integrated into the field of mass media, new art forms and different conceptions of the environment are created along with them. As Hariman, R., & Lucaites, J. L. (2007) stated: because the image both transcends any code and remains relatively unambiguous, it can become a site not only for ideological transmission, but also for the depiction of dynamic negotiations that are rich, materialised plays on social power relations in everyday life (p9). With the gradual acceptance of visualised image-based presentations by the general public, the mechanisms and effects of CG films in environmental awareness and behavioral change are subconsciously transforming people's lives. This paper will explore the role and impact of CG films in environmental protection communication, with a special focus on how they construct public awareness and reflection on environmental protection. In the process of analysing existing CG film cases, this form of environmental protection awareness dissemination not only enhances the audience's deep knowledge of the natural environment, but also provides a wide range of opportunities and connections for cultural innovation and creativity.

Keywords/key phrases

CG Film,VFX ,Sustainability ,Computer Graphics ,GG Biodiversity

Research design methods

The research methodology of this paper focuses primarily on qualitative research of peer-reviewed material. By analysing detailed descriptions and comments from scholars in the field of mass communication such as journals, books, and dissertations, it explains the impact that CG cinema has had on the general public in terms of raising environmental awareness and communication. In order to further explain this impact, specific examples of film-making are given to provide an accurate and easy-to-understand way into the public's mind. In addition, in order to gather more real and convincing examples, the results of several peer experiments are also referenced to further understand the feedback on the impact of CG films on public perception. Through this comprehensive analysis, it aims to reveal the specific mechanisms and effects of CG films in the communication of environmental themes.

Draft literature review

Whether the mass media can actually convey a message to the audience, especially in terms of youth, can actually raise environmental awareness and be educational.According to McDonagh and Brereton (2010), "film has a profound influence in framing how we conceptualise and address ourselves and lifestyles, and by inference our global problems" (p. 134). Vivanco (2002) in his article Seeing Green: Knowing and Saving the Environment on Film" refers to the crucial role of mass media in the construction and communication of environmental problems and solutions, reflecting the close connection between film and television media and public environmental awareness.Matthew and Sarah and Anna (2018) fully support the previous viewpoints and state that film has a great potential to disseminate environmental information and raise public environmental awareness, and through the presentation of visual images, film can help people to better understand environmental issues and pay attention to protected species. Regarding the aspect of mass media communication contributing to information transfer, Toledo, M., Yangco, R., & Espınosa, A. (2014) gave the results of a specific experiment, which was carried out in La Salle Green Hills during the first year of high school in the academic year 2009-2010. The researchers encouraged the use of media comics as an alternative teaching strategy because it improves students' problem-solving skills. The combination of learning activities and environmental education methods can greatly increase student engagement with environmental and scientific issues. Especially for children's cognitive education, visualised products with images are more likely to capture

children's attention. Thus, Mayumi, Solomon, and Chang (2005) suggest that popular films need to address environmental issues because of their educational role and potential to reach a wide audience. The apparent educational potential of films has sparked debate about the kind of environmental education that an overly commercialised and centralised culture industry can bring to children.

One of the most contentious issues is the emphasis on environmental protection that often comes with certain risks in commercialised CG films. Ingram (2004) observes that one way studios can address environmental problems and cater to corporate ownership is to approach the subject from a mainstream environmental perspective, which places "environmental concerns within the needs of a capitalist economy to sustain commodity markets". of a capitalist economy to sustain commodity consumption, profit maximisation and economic growth" (p. 13). Simply put, the beautiful natural landscapes and rare species displayed in films may attract large numbers of tourists to the filming locations, aggravating ecological pressures on environmentally sensitive areas In order to maximise the positive impacts of films in environmental protection, further research and careful management is therefore needed to balance the relationship between information dissemination and environmental protection. Hansen (2010) contends that "The artifacts of media culture are ... not innocent entertainment but are thoroughly ideological artifacts bound up with political rhetoric, struggles, agendas, and policies" (p. 8). This indicates that films are not only entertainment tools, but also carry important political and ideological messages. This idea is particularly important in the case of films that emphasise environmental themes and their associated commercial activities. Officials increase the transparency of business operations and inform the public about the environmental measures taken in the production and commercialisation of films. Through these environmental protection measures, a better balance can be struck between commercial interests and environmental protection concepts to ensure that films spread environmental awareness while avoiding negative impacts on the environment. Just for example, certain films may change consumer demand for endangered species, and some films may show plants and animals that are regarded as pets or commodities, increasing the risk of illegal hunting and trade in these species.

Despite the fact that there are a number of factors mentioned above that may be mishandled and may create a serious conflict of environmental awareness for the audience, the extent of the impact of this important integration of CG effects technology into films cannot be ignored. Choi, S. K. (2009) demonstrates that: visual effects on CG technology become the concentration and symbol of the state-of-the-art technology. The emergence and application of CG effects technology has pushed forward the new development of contemporary cinema, making the film creation to change dramatically in terms of content, technology and production process. This technology not only allows for the modification of scenes, the addition of characters, the adjustment of lighting and shadows, and the production of pyrotechnic effects on real footage, but

also allows for the creation of "live-action, computer-rendered" films through computer rendering and the combination of motion and expression capture technology. To further illustrate this point, Whissel, K. (2014) suggests that "the visual effects of narrative cinema maintain a continuity of design structure and formal function from the analogue to the digital era. Digital visual effects build on the stylistic traditions established by earlier filmmakers while providing new and more powerful tools to achieve these goals. "By transforming the imaginary into the "real", CG effects have fulfilled the creative dreams of many directors, allowing surrealist films to break free from the constraints of traditional filmmaking and to break through the limits of time and space.

Therefore, under this series of influences, an excellent CG film with environmental themes needs to effectively coordinate the relationship between commercialisation and core environmental concepts, and to a certain extent avoid the contradiction between cultural conflict and audience aggravation. There are four aspects worth pondering and analysing: firstly, how CG films can stimulate the audience's potential thinking about environmental issues; secondly, what are the unique advantages of CG films in the dissemination of environmental themes; thirdly, how to consider the diversity and acceptance of the audience while highlighting environmental issues in CG films. And finally, how CG films should emphasise the importance of environmental protection to the audience in the future. In this study, we will use three examples of CG films as well as references to research reports from scholars in different fields to comprehensively analyse and expand on this discussion.

Outline and draft chapters for each chapter

1、Introduction

2、Literature Review

3、Methodology

4、Theoretical Logical Framework

    4.1 Environmental Communication Framework: Environmental communication is an interdisciplinary field that examines the generation, dissemination and reception of environmental information, and its impact on public behaviour and policy.The uniqueness of CG film as a communication medium: CG film, as a part of environmental communication, is able to enhance the effectiveness of environmental information dissemination through visual narrative and technological display. The effect of environmental information dissemination through visual narratives and

technological presentations.

4.2 Cultural Identity Theory : Cultural identity influences how individuals receive and interpret information, the impact of CG films on audience's emotions and behaviors, and the fact that CG films, by combining environmental protection themes from different cultures, can enhance the sense of identity and participation of different cultural groups in environmental issues.

5、How CG films can trigger potential audience thinking about environmental

issues?

5.1 Mad Max: Fury Road shows a post-apocalyptic desert landscape that warns of depleting resources and environmental degradation.

5.2 The Martian uses CG technology to simulate growing plants on Mars, demonstrating the potential of science to solve food and resource problems.

5.3 By showcasing the ecosystems of Pandora and the predatory behaviour of humans, Avatar inspires a wide-ranging discussion on ecological conservation and sustainable development.

6、What are the unique advantages of CG films in communicating environmental

themes?

6.1 Visual Effects and Emotional Impact

6.2 Story-driven and plot-led

7、How do CG films consider audience diversity and acceptance while highlighting

environmental issues?

7.1 Balancing commercialization with environmental messages

8、How should CG films emphasize the importance of environmental protection to

audiences in the future?

9、Conclusions

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