

SHADOW BEHIND:
GREENWASHING IN FAST FASHION'S GREEN ADVERTISING PRACTICES

By

ZHIYANG WANG

A Graduation Paper Submitted to
New York University, Shanghai



In Partial Fulfillment of the Requirements for the
Bachelor of Science Degree in
Interactive Media Arts

Advisor: Benjamin Bratton

December 2022

Table of Contents

Table of Contents	2
Abstract.....	3
Keywords	3
Introduction.....	4
Key Literature Review	5
Research Methodology	8
<i>Case Study</i>	9
<i>Experiment</i>	13
Research Findings and Discussion	16
Conclusion and Future Work	17
Work Cited	20
Acknowledgement	23

Abstract

This study aims to identify appropriate artistic mediums for raising consumer awareness of greenwashing in the fast fashion industry. The research was conducted through a literature review, case studies, and experiments. Traditional art forms, such as shadow art, and new media mediums, including web-based visual visualization and physical computing, were analyzed to determine their effectiveness in communicating the issue of greenwashing. The findings suggest that the use of shadow art in a physical computing installation that is immersive and interactive can effectively convey the discrepancy between greenwashing advertising and the reality of corporate practices in the fast fashion industry.

Keywords: Interactive Media Arts, Environmental Arts, Greenwashing, Green Advertising, Physical Computing, Web Design, Visualization, p5.js, Shadow Arts, Fast Fashion

Introduction

The fashion industry is one of the most environmentally exploitative industries worldwide, with an environmental impact that includes the generation of more than 92 million tons of waste and the consumption of 79 trillion liters of water each year. Fast fashion has increased the environmental exploitation of the fashion industry. Since 2020, fashion brands have produced almost twice as many clothes as in 2000 (Niinimäki et al., 2020). Since the 20th century, as public awareness of environmental issues has increased, consumers have tended to purchase sustainable products. NYU Stern's Center for Sustainable Business statics showed that 50% of CPG growth from 2013 to 2018 is from sustainable marketing products (Whelan & Kronthal-Sacco, 2019). The fashion industry has taken several actions to demonstrate its corporate environmental responsibility to the public. Green advertising through media distribution is one of the approaches that corporates use (Fernando et al., 2014).

Green advertising is a media that responds to the development trend of the global environmental movement and the public's call for corporate responsibility. Fast fashion in the fashion industry also adopted green advertising. However, the purpose of fast fashion's green advertising is in doubt. Because the business model of fast fashion is making profits from mass manufacturing and encouraging consumers to consume new clothing (Niinimäki et al., 2020). The fast fashion business model is the opposite of sustainable. I argue that fast fashion's green advertising is false environmental propaganda of greenwashing advertising. greenwashing refers to falsely advertising a company's environmental efforts, spending more resources to promote the organization's green practices than the resources spent on environmentally sound practices (Becker-Olsen and Potucek, 2013). Fast fashion's green advertising is a false environmental

propaganda phenomenon that needs the attention of consumers to be suspected and get closer to greenwashing and discover the capital evil hidden behind it (Becker-Olsen and Potucek, 2013).

For sustainability concerns, the interactive artwork could make participants both empathetic and thought-provoking, and most were willing to critically engage with their pre-existing notions of sustainability (Bendor, Roy, et al., 2017). In this project, I will use first explore greenwashing in Fast Fashion's Green Advertising Practices. The first is centered around the history and theory of greenwashing, specifically media influence, as a medium for corporate interaction with the public. After that, I will explore the mediums in interactive art, through case studies, experiments, etc. Eventually, I can produce an interactive artwork based on a suitable artistic medium that exposes the greenwashing facts of fast fashion's green advertising practices and enables the public to learn how to approach the phenomenon through interaction.

Key Literature Review

How to expose the greenwashing hidden behind green advertising in the fast fashion industry through interactive art installation? To answer these questions, we must examine the relationship between green advertising and greenwashing and figure out the suitable art forms to deliver this context. An interactive artwork that exposes greenwashing in green advertising can be built.

In *greenwashing Consumption: The Didactic Framing of ExxonMobil's Energy Solutions*, Emily Plec and Mary Pettenger examined ExxonMobil's green advertising practices and figured out ExxonMobil defines green energy through green advertising to construct a didactic green framework that hides its environmental pollution, stifles criticism, and prevents scrutiny of consumer ideology (Plec & Pettenger, 2012). In corporates' practice, green advertising serves as

a medium that enables the public the opportunity to learn about their environmental practices. Green advertising is produced and disseminated by companies. Information is transmitted from the enterprise to the public in a one-way. Companies link their products, services, or corporate identity with mainstream green concepts, environmental values, and ecological images. Thus, it can achieve the purpose of product marketing, image enhancement, or restoration communication. Plec and Pettenger used framing analysis and specific television advertising case studies. It determined that ExxonMobil persuaded consumers that ExxonMobil was an innovative and environmentally friendly company through a hidden social and natural framework. This framework guided resigned didactic framing through extremely powerful technology and authoritarian dominance.

Plec & Pettenger's analysis of ExxonMobil's greenwashing advertising practices shows how a corporate greenwashing campaign can achieve greenwashing. In their study, it is to the advantage of companies to wash green through advertising. But a different point of view is presented in Tarabieh's study. Tarabieh stated greenwashing has a direct negative impact on green purchase intention. Also, greenwashing has an indirect negative effect on it through green confusion and green perceived risk (Tarabieh, 2021). Tarabieh used structural equation modeling to conduct an empirical study on Jordanian food and beverage corporations (Tarabieh, 2021). Tarabieh's research confirms that the communicated image of environmental awareness in Plec & Pettenger's green advertising can generate a positive response. However, green advertising that does not convey the corporate picture can create green confusion. Green confusion affects consumers' green trust. Confused consumers are warier with companies that provide vague and contradictory green advertising (Tarabieh, 2021).

The above two papers are based on the analysis of greenwashing practices. The two articles come to different conclusions about the impact of greenwashing advertising. The difference in this conclusion comes from the different consumers' perceptions of green advertising. It can conclude Consumer awareness is essential in the process of companies' greenwashing. If consumers can have the concept of greenwashing in their advertising and remain critical when they see green advertising, then green advertising may have side effects for companies (Tarabieh, 2021). Conversely, consumers who are not aware of the existence of greenwashing may fall into the corporate media myth. They will believe that consuming environmentally friendly products is saving the planet" instead of reflecting on how the production of consumer goods affects society and changes the natural environment (Plec & Pettenger, 2012).

In *Meet the humanities* by Mike Hulme, the authors propose a framework for addressing the challenges posed by climate change. They argue that addressing this issue requires a multi-disciplinary approach, involving not only the natural and social sciences, but also philosophy, religion, and the creative arts. By combining these perspectives, the authors suggest that we can develop solutions to climate change that are both effective and sustainable in the long term (Hulme, 2011). These fields like philosophy, religion, and the arts, do not directly solve climate change problems. However, they can provide valuable insights and perspectives that can help to advance our understanding of the issues involved. Especially, the arts can inspire us to imagine new, more sustainable ways of living on Earth. greenwashing in the fast fashion industry and climate change are both environmental issues. Interaction is a powerful tool for raising awareness about these issues and helping the public understand the problems and their consequences. By using engaging and immersive experiences, interactive arts can help to bring these issues to life in a way that traditional forms of communication may not be able to.

Aviva Rahmani discussed the *Blued Trees project* which is a great practice of how the art participates in the environmental issues in *The Blued Trees Symphony as Transdisciplinary Mediation for Environmental Policy*. Rahmani, based on observations, produced the Blue Tree Symphony, a five-movement acoustic

It can be found that consumer awareness determines whether a company's greenwashing can mislead consumers in the two studies by Plec & Pettenger and Tarabieh. Hulme and Rahmani's Hulme and Rahmani's article provides an artistic solution to the problem of greenwashing in the fast fashion industry. I was able to expose the greenwashing problem to the public through interactive art, and by raising public awareness, I was able to motivate companies to stop greenwashing. For sustainability concerns, the interactive artwork could make participants both empathetic and thought-provoking, and most were willing to critically engage with their pre-existing notions of sustainability (Bendor, Roy, et al., 2017). In my project, based on the greenwashing phenomenon I researched greenwashing in Fast Fashion's Green Advertising Practices and the role of art in environmental issues, especially interactive art, I will mainly research interactive art media to see figure out the best medium to deliver the context that exposes the facts of greenwashing in Fast Fashion Green Advertising Practices that enables the public to learn how to approach this phenomenon through interaction.

Research Methodology

Suitable art media can be discovered through case studies and experiments. In Dombrowski's study *Social Justice-Oriented Interaction Design*, it is noted that social justice design should be along six dimensions transformation, recognition, reciprocity, enablement, distribution, and accountability (Dombrowski et al., 2016). Recognizing a phenomenon as a problem is the first step necessary to work toward social change (Dombrowski et al., 2016).

Dombrowski's social justice design methodology can be applied in the design of artworks that expose greenwashing. Media that can deliver the context of greenwashing in the fast fashion industry is suitable for this project.

Case Study

1. Shadow Art

In *Grasping Shadows: The Dark Side of Literature, Painting, Photography, and Film*, Sharpe examines the relationship between shadow and art. He argues that the shadow has an extended meaning and can be used to direct the audience's attention in space and time (Sharpe, 47). In the third chapter of the book, *THE LOOK-ELSEWHERE SHADOW*, Sharpe notes that the shadow of nothingness can point to something substantial that is coming and suggests that shadow art can reveal truths about its subject (Sharpe, 146). There is a correlation between shadow art and greenwashing in green advertising. Greenwashing advertising hides the fact that companies are not environmentally friendly by constructing a virtual illusion. By focusing on the shadows after the ontology, shadow art draws the viewer's attention to the real existence of the greenwashing practice. Therefore, shadow art is a good artistic medium to criticize the greenwashing phenomenon in green advertising.

TIDE is a 15-foot-tall champagne glass pyramid installation located in a New York storefront window. The piece, created by artist Kenyon, is a miniature model of a house cast in glass and illuminated by lights, resulting in the house's shadow appearing invisible when submerged in the water-filled pyramid (Kenyon). Through this use of shadow art, *TIDE* provides a visual representation of the looming housing crisis, highlighting the conflict between the still-standing glass pyramid and the shadow of the house. This conflict serves to increase the viewer's awareness of the existence of housing problems, highlighting the power of shadow art to engage audiences on an important social and environmental issue

2. Interactive Web Artwork/Visualization Art Work

Visualization has a significant impact on how the public perceives environmental problems, and solutions, and whether the public perceives policies as legitimate. Data visualizations can make the invisible visible. Visualized objects can be quickly disseminated on the Internet and social media to convey information in a more persuasive way than text and are therefore very influential in opinion formation and decision-making. (Metze, 2020). Therefore, in my work, I can visualize the problem of greenwashing in green advertising in the fast fashion industry and make it into a web page with good human-computer interaction. The connection could be more clearly and widely delivered to the audience.

Shengli's work, "*PlaNet in Crisis: A Web-Based Meditation on Climate Grief*," explores the fragmented and chaotic nature of climate change-related grief through web-based design. In this work, Shengli visualized ExxonMobil's press statement on climate policy about the global temperature change from 1880 to 2016, highlighting the conflict between the statement and the reality of climate change (Shengli, 2022). This effective use of design for recognition allows viewers to better understand and confront the issue of climate change.

The use of visualization in web-based art, as demonstrated in Shengli's work can be an effective tool for helping the public to understand and recognize complex issues such as greenwashing in the fast fashion industry. By using visualizations such as infographics and data visualizations, web-based art can clearly illustrate the extent to which companies in the industry are engaging in greenwashing and the impact of their production processes on the environment. This can help the public to see the discrepancies between companies' marketing claims and the reality of their environmental impact, and to understand the need for action to address the issue of greenwashing in the fast fashion industry. Visualization can help to engage the public on an

3. Physical Computing Interactive Art

Yeseul Song's project "Slow Dimming Study: Distance Makes Your Heart Grow Fonder" effectively uses interactive design to highlight the social dilemma of maintaining physical distance in the context of the COVID-19 pandemic. By recreating everyday interactions such as turning lights on and off and intervening at key moments, the project provides a personal experience that allows users to better understand and perceive the importance of the 6-foot rule (Yeseul, 2021). This approach can have a positive influence on individuals' attitudes and feelings about the rule and can help to reinforce the need for continued adherence to physical distancing guidelines. Additionally, the use of interactive design allows the project to effectively convey the existence of the problem and its relevance to individuals' daily lives, making it more likely to engage and motivate them to take action.



Fig 2. Yeseul Song's Slow Dimming Study: Distance Makes Your Heart Grow Fonder

In the context of greenwashing in the fast fashion industry, physical computing could also be used to allow the public to interact with visualizations and simulations that illustrate the

environmental impact of the industry and how companies engage in greenwashing. This would provide a personal experience that allows users to better understand the issue and the existence of the problem and can motivate them to take action to address it. Additionally, the use of physical computing can make the information more engaging and accessible, which can help to capture the public's attention and interest in the issue.

Experiment

1. Just a tree

Just a tree is a web-based art project that uses p5.js to visualize ambient humidity and temperature. The project utilizes serial communication via Arduino IOT 33 and humidity and temperature sensors to obtain real-time data on ambient conditions, which is then used to generate a tree in p5.js that changes size and color according to humidity and temperature. This approach allows the project to provide a dynamic and interactive representation of ambient conditions, engaging viewers and helping them to understand the relationship between humidity, temperature, and the natural environment.

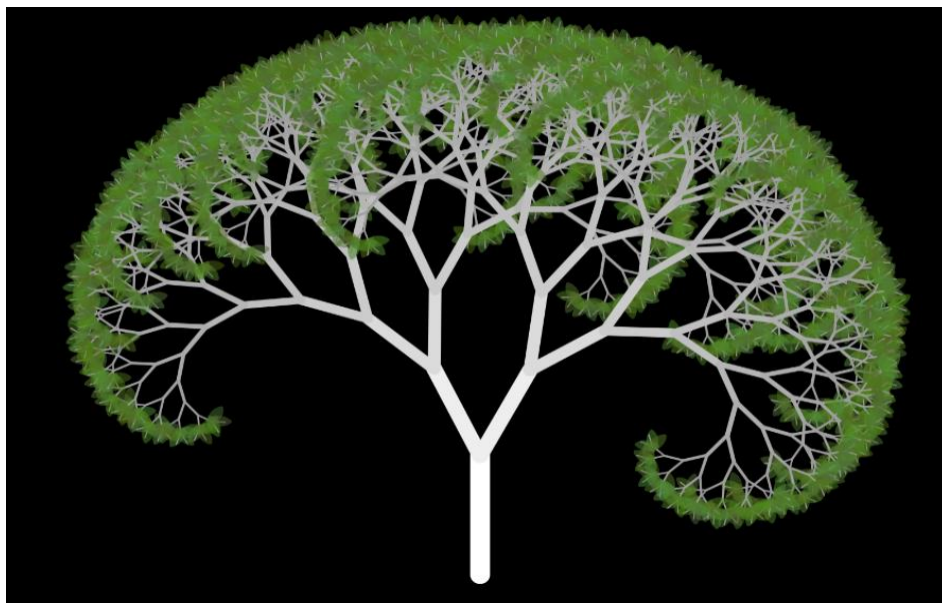


Fig 3. Zhiyang Wang's Experiment Project Just a tree P5.js Sketch Screenshot

In this experiment, I focus on testing whether visualization interaction design can achieve "recognizing a phenomenon as a problem is the first step in working towards social change". Trees are a valuable part of the natural environment, providing valuable sensory information that helps us understand and navigate our surroundings. This work brings this outdoor perception indoors, using a vivid digital tree to illustrate the role that trees play in helping humans perceive their environment. The falling leaves of the tree in this piece serve as a symbol of the changing seasons, and the tree's response to changes in the indoor environment can serve as a reminder of the importance of maintaining optimal conditions for trees to thrive. By drawing the viewer's attention back to the environment and encouraging them to take action to improve it, this work can help to promote a greater appreciation and understanding of the role that trees play in our lives.

The experiment involved 17 participants, who all reported a strong intuitive understanding of the context and purpose of the work. One participant noted that the work could serve as an important reminder of the potential consequences of environmental degradation and that future generations may only be able to gain a similar understanding of the natural world through similar projects. The successful results of the experiment demonstrate the effectiveness of using visualization and physical interaction to facilitate clear perception and understanding of the intended context and message of a work of art.

2. Wandering

Wandering is an interactive physical computing project that uses the p5.js programming library to visualize the experience of playing with an intangible ball on a cotton cloud held by the user. The project utilizes serial communication via an Arduino IOT 33 and IMU sensors to collect real-time data on ambient conditions, which is then used to generate a ball with particle

effects in p5.js that move in response to the user's rotating movements with slow, meditative melodies and ambient sounds that create a sense of calm and tranquility. The combination of physical computing and visualizations in this project allows for a unique and engaging interactive experience.

The purpose of this project is to investigate whether visual interaction design via offering the solution first can effectively impart the context of the project to the audience. The project aims to promote reflection on the rapid pace of life in the 21st century, where individuals are often preoccupied with achieving efficiency. Through a meditation experience, users are invited to consider their own life's path and see if there should slow down.



Fig 4. Zhiyang Wang's Experiment Project Wandering Physical Part

The user test involved 16 participants. All participants reported that the work was meditative and that they experienced a sense of peace while interacting with it. However, only some of the participants were able to accurately describe the content of the work without being provided with its context. When the original design intent was explained to the users, they indicated that they were able to understand the work's context but noted that it was challenging to arrive at this understanding on their own. Overall, the feedback suggests that the work

effectively fosters contemplation on the pace of life, but its meaning may not be immediately apparent without additional information.

Research Findings and Discussion

This study aims to explore the potential of various art media to raise awareness of the prevalence of greenwashing in the fast fashion industry. Through a review of the existing literature on this topic, it was found that increasing consumer awareness of greenwashing is a critical step in addressing this problem. Interactive art, in particular, has the potential to engage audiences in a more immersive way, allowing them to better understand the nature and consequences of greenwashing in the fast fashion industry. By considering a range of artistic mediums, this study seeks to identify those that are particularly well-suited to this purpose and to develop a prototype for an interactive art installation that effectively communicates the findings of this research.

During this study, three specific art media were analyzed in detail as potential platforms for raising awareness of greenwashing in the fast fashion industry: shadow art, interactive web artwork/visualization artwork, and physical computing interactive art. Ultimately, it was decided that shadow art, while an interesting and potentially effective medium, would not be adopted for this project due to its traditional nature. Instead, the focus was placed on exploring the potential for incorporating the core conflict of shadow art – the interaction between the subject and the shadow – into the proposed interactive art installation. This conflict is analogous to the conflict between greenwashing advertising and the hidden facts about corporate practices in the fast fashion industry, making it a suitable basis for communicating the research findings on this topic.

The analysis of visualization and web-based art media led to the conclusion that a visual piece, delivered via a web-based platform, would be an effective means of communicating the

the severity of the greenwashing problem in the fast fashion industry to a broad audience. The use of a web-based vehicle for this artwork would facilitate its distribution and increase its potential reach, allowing for greater awareness of the issue of greenwashing in the fast fashion industry. This, in turn, could help to mobilize consumers to take action against greenwashing practices and to support companies that are committed to responsible and sustainable practices.

After conducting a case study and experiment of physical computing interactive art, it was determined that this art medium has the potential to effectively engage users and facilitate their understanding of the message of the artwork. This was demonstrated through two experiments, in which two different approaches to delivering the context of the work were tested. In the first experiment, a direct narrative approach was used, allowing users to directly access the context of the work and generate positive feedback. In the second experiment, a more indirect approach was used, in which the solution to the problem was presented directly rather than the problem itself. While this approach was effective in delivering the solution, it was more challenging for users to think about the problem that the artwork was addressing. Overall, the results of these experiments suggest that physical computing interactive art is a promising medium for communicating the findings of this research on greenwashing in the fast fashion industry.

Conclusion and Future Work

In my proposed artwork, I will take a direct and explicit approach to expose the prevalence and harmfulness of greenwashing advertising in the fast fashion industry. To do so, I will draw on philosophical concepts from shadow art and use physical computing interactive art to create an immersive and engaging installation that allows users to directly experience the conflict between greenwashing ads and the hidden facts about corporate practices in the fast

fashion industry. This interactive artwork will be produced using new media technology and will be designed to leave a lasting impression on participants. Additionally, data related to greenwashing in the fast fashion industry will be visualized and disseminated online, allowing for the wider dissemination of the ideas behind the artwork and increasing the visibility of this important issue. By combining online and offline elements in this way, it is anticipated that the proposed artwork will be both impactful and effective in raising awareness of greenwashing in the fast fashion industry.

In this study, the objective is to gain a comprehensive understanding of the mechanisms behind greenwashing advertising in the fast fashion industry and to raise public awareness of this issue through the incorporation of this research into interactive artworks. It is hoped that these artworks will attract the attention of consumers and encourage them to boycott the greenwashing behavior of fast fashion companies. By doing so, it is expected that these companies will come to realize that greenwashing is not an effective means of generating economic benefits and will therefore be incentivized to make positive changes.

The focus is on the analysis of existing academic materials on the topic of greenwashing in the fast fashion industry, rather than on the collection of new empirical data on greenwashing advertising. However, future research in this area could benefit from a more comprehensive approach that includes the collection of additional data like a YouTube video *7 Things In Sustainability That We're Improving On | H&M* released by H&M on Jun 4, 2021, for advertising its contributions to sustainability (H&M 2021) on greenwashing practices in the fast fashion industry. This could involve, for example, the systematic gathering of greenwashing advertising materials and the analysis of their content and prevalence in the market. Such an

the approach would provide a more robust basis for understanding the nature and scope of greenwashing in the fast fashion industry and could inform efforts to combat this phenomenon.

In addition to the analysis of existing academic materials, the proposed interactive art installation will involve the design and testing of a prototype. This prototype will be evaluated through user testing, and feedback from these tests will be used to refine and improve the design of the artwork. By conducting iterative testing and refinement, it is anticipated that the final product will be well-suited to its intended audience and will effectively communicate the research findings on greenwashing in the fast fashion industry

Work Cited

- Becker-Olsen, Karen, and Sean Potucek. "Greenwashing." *Encyclopedia of Corporate Social Responsibility*, 2013, pp. 1318–1323., https://doi.org/10.1007/978-3-642-28036-8_104.
- Fernando, Angeline Gautami, et al. "If You Blog, Will They Follow? Using Online Media to Set the Agenda for Consumer Concerns on 'Greenwashed' Environmental Claims." *Journal of Advertising*, vol. 43, no. 2, 2014, pp. 167–180., <https://doi.org/10.1080/00913367.2013.841088>.
- Gillespie, Ryan. "The art of criticism in the age of interactive technology: critics, participatory culture, and the avant-garde." *International journal of communication* [Online], 3 Feb. 2012, pp. 56+. Gale Literature Resource Center, link.gale.com/apps/doc/A281461597/LitRC?u=anon~160873f8&sid=googleScholar&xid=327533d2. Accessed 12 Dec. 2022.
- Hulme, Mike. "Meet the Humanities." *Nature Climate Change*, vol. 1, no. 4, 2011, pp. 177–179., <https://doi.org/10.1038/nclimate1150>.
- Kangun, Norman, et al. "Environmental Advertising Claims: A Preliminary Investigation." *Journal of Public Policy & Marketing*, vol. 10, no. 2, Sept. 1991, pp. 47–58., <https://doi.org/10.1177/074391569101000203>.
- McCall, Iain. "How to Spot Greenwashing in Product Design." *4D Products*, 5 Aug. 2022, <https://4dproducts.co.uk/how-to-spot-greenwashing-in-product-design/>.

- Metze, Tamara. "Visualization in Environmental Policy and Planning: A Systematic Review and Research Agenda." *Journal of Environmental Policy & Planning*, vol. 22, no. 5, 2020, pp. 745–760., <https://doi.org/10.1080/1523908x.2020.1798751>.
- Mitra, Niloy J., and Mark Pauly. "Shadow Art." *ACM Transactions on Graphics*, vol. 28, no. 5, 2009, pp. 1–7., <https://doi.org/10.1145/1618452.1618502>.
- Niinimäki, Kirsi, et al. "The Environmental Price of Fast Fashion." *Nature Reviews Earth & Environment*, vol. 1, no. 4, 2020, pp. 189–200., <https://doi.org/10.1038/s43017-020-0039-9>.
- Plato, and Francis Macdonald Cornford. "SOCRATES – GLAUCON." *The Republic of Plato*, Oxford University Press, London, 1978.
- Rahmani, Aviva. "The Blued Trees Symphony as Transdisciplinary Mediation for Environmental Policy." *Media+Environment*, vol. 3, no. 1, 2021, <https://doi.org/10.1525/001c.25256>.
- Sharpe, William. *Grasping Shadows the Dark Side of Literature, Painting, Photography, and Film*. Oxford University Press, 2020.
- Tarabieh, Saeed M.Z. "The Impact of Greenwash Practices over Green Purchase Intention: The Mediating Effects of Green Confusion, Green Perceived Risk, and Green Trust." *Management Science Letters*, 2021, pp. 451–464., <https://doi.org/10.5267/j.msl.2020.9.022>.

Whelan, Tensie, and Randi Kronthal-Sacco. "Research: Actually, Consumers Do Buy Sustainable Products." Harvard Business Review, Harvard Business Review, 17 Sept. 2021, <https://hbr.org/2019/06/research-actually-consumers-do-buy-sustainable-products>.

Zhang, Yanxiang, et al. "3D Shadow Art Sculpture Based on Real Items." Proceedings of the 2017 ACM SIGCHI Conference on Creativity and Cognition, 2017, <https://doi.org/10.1145/3059454.3078858>.

Acknowledgement

I would like to express my sincere gratitude to Prof. Benjamin Bratton, Prof. Bogna Konior, Prof. Stavros Didakis, Prof. Yeseul Song, Shengli Wen, Liancheng Gong, and the Class of 2023 IMA students for their valuable support to this work. Prof. Bratton, Prof. Konior, and Prof. Didakis provided valuable guidance and insights throughout the research process. Prof. Song generously shared her expertise on a related topic, and Liancheng Gong offered valuable support during the course of this project. I would also like to thank the Class of 2023 IMA students for their participation in the study and for their valuable input and ideas on the peer review sections, which helped to enhance the success of this project.

This research would not have been possible without the support and contributions of these individuals, and we are deeply grateful for their efforts. We hope that the findings of this study, which suggest that the use of shadow art in a physical computing installation can effectively convey the discrepancy between greenwashing advertising and the reality of corporate practices in the fast fashion industry, will be of value to both academics and practitioners working to address the issue of greenwashing. We hope that this work will contribute to the ongoing efforts to raise consumer awareness of greenwashing and promote more sustainable practices in the fast fashion industry."