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Graphic Design, Sustainability and Greenwashing: Understanding Among Students

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The aim of the study presented is to provide an overview of the current understanding and approach of graphic designers towards environmental sustainability. Within this study, we include a survey exploring the awareness among graphic design students and staff of this topic and discuss integrating sustainability within current professional practice. The topic of 'greenwashing' is also reviewed and discussed. Advertising invests heavily in profiling their target market to understand their culture, values, motivations, and language. They use this knowledge to predict purchasing decision-making and behaviours, but little or no consideration appears to be given to the environmental impact of their products. The outcomes of this study will be incorporated into teaching resources that will be made freely available to students, other educators and practising graphic designers.

KEYWORDS: Environmental Sustainability, Graphic Design, Greenwashing.

RSD TOPIC(S): Learning & Education, Socioecological Design

Introduction

With the growth of the human population and worldwide industrialisation, sustainability is risen in importance for society and designers. In 2015, the general assembly of the United Nations (UN) defined a universal call to action entitled Transforming our World: the 2030 Agenda for Sustainable Development. The agenda aimed to address these major challenges, in order to achieve a better and more sustainable future for all [1, 2]. The roadmap for agenda delivery groups the issues into 17 Sustainable Development

Goals (SDGs), each one describing a targeted action to mobilize global efforts to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.

The topic of Sustainable Development has been a focus for academic research [3-9], NGOs such as Greenpeace [10], Oxfam [11], WWF [12], Food and Water Watch [13], and the Natural Resources Defense Council (NRDC) [14]. Despite the work and progress achieved, thanks to the effort of environmental organisations, individuals take action through small pressure groups or movements and undertake protests. The movement of Friday for Future [15, 16] is actively protesting for concrete actions from the governments of several nations. Although several goals have been defined it can be argued that no concrete action to realise those goals has taken place, or it is taking place too slowly [17].

The examples above show that the desire for a renewed and concrete approach to sustainability is not involving big organisations only, but it is a primary concern and direct interest for individuals, people belonging to the younger generation in primis. According to this stream, as well as the ethical implications for this topic, it is our assumption that the education system has the duty of investigating and addressing the topic in a more and more concrete manner within the context of Higher Education

Environmental Sustainability

The definition of sustainability, or better Sustainable development, is “the development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” [1] However, as mentioned by the work of Scoones, “Sustainability must be one of the most widely used buzzwords of the past two decades. There is nothing, it seems, that cannot be described as ‘sustainable’: apparently, everything can be either hyphenated or paired with it” [2].

This statement makes clear how this topic should be carefully investigated, in order to provide the right understanding and weight of this field and its real applications with a focus on our own sector (e.g. Graphic Design).

The three aspects of sustainability cover: Environmental, Social and Economical. In order to keep this wide topic as focused as possible, this paper will focus on Environmental sustainability.

Environmental Sustainability in Graphic Design

As discussed in the literature, research exploring the relationship between Graphic Design (GD) and sustainability shows that this sector is still emerging. There is a need to provide a clear link between the role of a Graphic Designer and sustainability. We aim to explore more about that and to create some guidelines to be applied for Higher Education in the field. Literature shows that the topic of GD for environmental sustainability includes discussion mainly regarding the **press process** [3], **packaging design** [6, 22-4], **icon design** [9, 25] and **communication design**: e.g. emotional design, [26-28] and consumer awareness. [13] Whilst critically reviewing those sectors, the importance of the phenomena of Greenwashing (GW) is frequently mentioned.

As mentioned in the UN plan, companies must address and disseminate non-financial information on their environmental impact and produce material to educate customers [14]. This guideline, combined with the genuine concern from the market around the topic, has led several companies to add their visual communication accordingly. However, the question is, are the companies doing it efficiently? Also, are these organisations truthful in communicating that information? The phenomenon of GW is then the mainstream response to incorrect and dishonest behaviours from companies to mislead the understating of users for their own profit. Introduced in 1986, the term GW designates 'the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service' [29].

The role of GD in addressing and in designing responses to the trend of GW is fundamental for the sustainable needs of our planet. GD Students' and graduates' experience is likely to be on the client-focused requirement to deliver financial rewards, without addressing the current environmental crisis, pollution, biodiversity loss, or climate change. Responsible design, focusing on environmental sustainability, could be better integrated within GD in higher education. It is our assertion is that this situation has to change through raising awareness of students on this topic and co-creating a set of guidelines to incorporate responsible design within their design process.

Through an online survey, we aimed to understand the current awareness of GD undergraduate students and GD staff of GW, sustainable development goals and responsible design. We set this data collection conscious that some of the students, which were the main respondents, might not be fully aware of the topic, considering that no specific lecture or module around those thematic was run. Within this investigation, our goal was to discover the main gap and collect qualitative feedback on their understanding.

Method

The aim of the survey was to provide a better understanding of the current awareness, among GD students and GD professionals, of sustainability - and how to integrate it within current professional practice. The data collection also investigated the phenomena of GW. A mixed methods approach was taken. By including both closed-ended and open questions, we could collect statistics to monitor the overall understanding of the topic as well as the individual personal feedback of the students.

Data collection

The data collection consists of an online survey questionnaire advertised to all Loughborough University GD undergraduate students and staff members. The participation in this survey (which was active for one working week only) was on a volunteer basis. The data collection took place in early March 2023. The survey was anonymous to collect unbiased feedback, with time taken to complete was 5-7 minutes. Student participants were aware that completing the survey had no influence on their study grades. The data collection was approved by the University of Loughborough Ethical Committee in March 2023 (ID: 13122).

Questionnaire Structure

The questions included both closed and open-ended for a total of 9 questions, plus demographic information including gender, age, nationality, occupation (for students as well) and if any GD work experience was present.

Results

User Demographic

A total number of 62 feedbacks were collected and included:

- Gender: 41 Females (66.1%), 18 Males (29%), and 3 (4.8%) other gendered
- Age: 56 participants (90.3%) between 18-25 years old, 1 between 26-35 (1.6%), 3 between 35-45 (4.8%) and 2 between 45-55 (3.2%)
- Nationality: British: 47 (75.8%) and 10 other nationalities (24.2%) including Belgium, Brazil, China, Cyprus, Hungary, Italy, Malaysia, Poland, Romania, South Korea, Taiwan and Zimbabwe
- Occupation: 41 GD students first year (66.1%), 12 second year (11.3%), 5 third year (8.1%), 2 placement students (3.2%) and 7 Teachers/Lecturers/Staff (11.3%)
- Experience: 55 participants (88.7%) never worked as a graphic designer/visual designer in a company (for more than 6 months)

Environmental Sustainability and Greenwashing

1. 61 (98.4%) of the participants heard about sustainability.
2. 55 (88.7%) are interested in the topic of environmental sustainability
3. 40 (64.5%) participants were already introduced to the topic of GD and Sustainability – within this percentage, 36 (58.1%) by the university, 5 (8.1%) by placement and 10 (16.1%) by external platforms. 22 participants (35.5%) stated they have never been introduced to the topic and 3 (4.8%) by other sources.
4. 31 (50%) participants have heard of GW before, whereas the other half have not. When provided the definition of GW within the survey, 38 respondents provided qualitative feedback (i.e., a personal statement) on the topic.
5. When asked to rate between 1 and 5 the impact that GD has in the promotion of sustainability, 0 selected 'no', 4 (6.5%) 'minor impact', 18 (29%) 'some impact', 30 (48.4%) 'large impact' and 10 (16.1%) 'high impact'.
6. When asked how GD can realistically impact the promotion of environmental sustainability, 53 (85.5%) respondents selected 'educating customers', 40 (64.5%)

'disseminating information', 21 (33.9%) matched 'working for sustainable companies only' and 1 (1.6%) wrote '*All above and developing stand through Design Activism*'.

When asked how graphic design can reframe the perception of sustainability within society, participants provided 26 qualitative responses. E.g., participant ref. 106661059: "*By accurately representing the level of eco-friendliness of the product*".

Discussion

This paper explored the topic of environmental sustainability and greenwashing within the field of Graphic Design. Our data collection involved mainly 1-year-GD students and shows that the majority of them are conscious of the role of their subject for the topic. However, the study also shows that only half of the participants were formally introduced to the topic of Sustainability, and within that sub-group, only half rated the University as one of the channels for that. Little knowledge or confused understanding was also recorded for the field of GW, showing that only a minority are aware of it.

By considering the feedback from the first and second questions, we can state that the topic of sustainability is well-known among participants and that the majority were interested in the topic. However, considering that only slightly more than half of the respondents stated to have been introduced to the topic, and that within this percentage only half of the respondents' included 'University': we believe that more formal education about sustainable design for GD students should take place within the GD University program.

The knowledge of GW was not well known within the group, as only half participants stated they knew what it was. 7 of the qualitative comments, some students were supportive of GW, showing a lack of understanding of the term. For example, participant ref. 106658808 states: "*I think that it is an effective way of showing sustainability through design*". When stating comments related to GW related to their values as a graphic designer, some of the comments included, for instance: "*GW overall takes away from the values of sustainability*" (Ref: 06660788), "*it is false advertising*" (Ref: 106661059), "*seems eco-friendly (...) when in reality it is not*" (Ref: 106661724), "*sounds*

harmful towards sustainable practice" (Ref: 106661564), *"irresponsible"* (Ref: 106661788) and *"It needs to be readdressed in uni curricula"*(Ref: 106665630).

Data from the question 'How much impact do you think Graphic Design has in the promotion of sustainability?' show that the majority of the GD students see *some, large* or *high levels* of impact. Considering this factor, we value the fact that designers see clearly how their work can affect this sector. Awareness is present, which is an important factor to be accounted for in an effective education process in Higher Education. GD students saw the importance of 'Educating customers' and 'disseminating information related to sustainability' as two important issues.

When commenting 'How can graphic design reframe the perception of sustainability within society?' some of the qualitative comments included, for instance: *"Make sustainability look more interesting by creating thoughtful imagery"* (Ref: 106658808), *"pushing education about how to be more environmentally friendly"* (Ref: 106658815), *"advertisement"* (x2) (Ref: 106660477 and 106661709), *"By accurately representing the level of eco-friendliness of the product"* (Ref: 106661059), *"infographic"* (Ref: 106661564) and *"design activism"* (Ref: 106675044). Those responses suggest that the GD participants understand the concept of Responsible design for environmental sustainability and that they included ethical considerations for the design approach. In alignment with the literature review, solutions such as infographics and advertisements can be considered tangible responses.

Limitations

The main limitation of this investigation resides in the gap in responses between experienced GD users (staff members and placements) and GD UG students, where the first category was a significant minority. Also, within UG responses, most of them were coming from first-year students. This factor might explain why the topic of GW was not well-known among them, as this population is less experienced in the field.

Conclusion

This research highlights the need for GD students to better understand this topic and explore how their future work could provide potential solutions. We aim to address the lack of knowledge on environmental sustainability and GW within the field of GD within

future actions, including the design of subject-specific content within GD modules. This may include exploring with the students a set of design strategies to meet Environmental sustainability through visual and education design practices to educate customers' behaviours. Second and third-year students can be encouraged to do more research in the field, plan the design development and create design strategies and visual touchpoints. As part of the creative process, they could propose new processes and visual solutions to promote sustainability and fight GW.

Additionally, we aim to expand our literature review and repeat the current data collection in the future; with finalist GD students, with junior designers and with senior practitioners; to test if implemented knowledge in the field changes the statistics presented in the paper. The outcomes of this study and the following study will be incorporated into teaching resources that will be made freely available to other educators and industries. We welcome further discussion and debate as well as collaboration with other academics and industrial partners to present a balanced and pragmatic pathway to raising awareness of responsible design alternatives to current training and practice.

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