

Generative Artificial Intelligence

A Threat to the Graphic Design Industry?

Scott J. Weiland

Department of Mass Communications
King's College
Wilkes-Barre, PA, USA
scottweiland@kings.edu

Jake Miscavage

Department of Mass Communications
King's College
Wilkes-Barre, PA, USA

Generative artificial intelligence

A Threat to the Graphic Design Industry?

Abstract

Generative Artificial intelligence (GAI) captured widespread public and media attention for its ability to create text, images, video, or audio. What are the implications of using AI to generate media? How will AI generated media impact the creative arts, artistic expression, and those employed by such endeavours? The purpose of this phenomenological research study was to explore perceptions of media created via GAI, with qualitative interviews (N = 25) conducted to investigate the impact of such media. Respondents indicated they were familiar with GAI and were using it for entertainment purposes. The majority reported that GAI artwork is visually appealing and interesting, but the majority also noted that they did not identify AI as a form of life. When asked if GAI could replace graphic designers and other artists the responses were split almost evenly, at times suggesting that GAI could replace creative professionals. The findings from this study provide great insight into the uses and gratifications of GAI and implications related to the future of GAI.

Keywords: generative artificial intelligence; GAI; AI; large language models; LLM; graphic design; creativity; uses and gratification

Introduction

The public now has access to technology that can create visual and auditory media from words that are typed into a program (Ramesh et al, 2021). This technology, or generative artificial intelligence (GAI), once only appeared in science fiction. Zhang et al (2023) noted, “GAI seems to propel our world closer to the realm of Cyberpunk—a futuristic milieu characterized by the coexistence of ‘high tech and low life’” (para. 1).

GAI is having a great impact. Riparbelli (2023) indicated, “The thing is that AI generated media is already transforming the media landscape and we’re on the verge of a major paradigm shift in media production and consumption” (para. 8). Companies like OpenAI, an artificial intelligence research organization, have created artificial intelligence image generation technology that is used by upwards of 1.5 million users a day (OpenAI, 2022).

GAI is an evolution of AI. Lukan (2023) noted, “AI software refers to computer programs leveraging artificial intelligence techniques to perform tasks and simulate human intelligence, enabling content generation, data analysis, prediction, process automation, and decision-making with minimal human intervention” (para. 3). According to Myer & Zayas (2023), “Generative AI are algorithms trained to predict data sequences based on training information. Two of the most common sequences they generate are text and images. Large Language Models (LLMs) are a subset of generative AI focused on text and image generation. LLMs are unique because they have been trained on enormous data sets. This training gives them capabilities beyond any AI we have seen before” (para. 3).

GAI artwork is becoming so advanced people are having trouble distinguishing between it and human created art. Brennan (2022) reported that Jason Allen, an artist, used GAI to create a digital painting that he entered in the Colorado State Fair Fine Arts competition, winning first place in the digital arts category. Zhang et al (2023) noted, “The potential of generative AI is profound; it can swiftly produce intricate paintings or eloquent articles in direct response to human requisites. However, the rapid development of generative AI also begets apprehensions regarding workforce displacement and market depression, thereby amplifying prevailing social disparities and fortifying the dominance of corporate behemoths” (para. 1).

While GAI is not science fiction, it is accessible, prevalent, and ubiquitous. Given GAI’s presence in society, how do people perceive GAI and its impact? What are the implications of GAI? How will this new technology impact the creative arts, creative expression, and those employed by such endeavors?

Theoretical Perspective

The researchers utilized uses and gratifications theory as a theoretical perspective to inform the research. Hyun Baek & Kim (2023) noted that the body of research that explores motivations for using GAI is quite limited, and in addition, the researchers were unable to locate research that explores motivations for using GAI for creating graphics and other artwork.

Niu et al. (2024) indicated that in recent decades, uses and gratifications theory has been tasked with explaining why technology is used and what satisfaction derived from its use. According to Niu et al. (2024), “U&G research has been quite fruitful and was recently applied to examine consumers’ usage of AI applications in various contexts. Some studies explored the factors that influence user gratification” (p.4). Skjuve et al. (2024) noted GAI gratifies users in the following ways: enhanced productivity, novelty, fun and amusement, creative work, learning and development, social interaction and support, and more.

Research Questions

This qualitative research project explored GAI and its implications. The following questions guided the research: “How widely is GAI used?”, “Is GAI artwork visually appealing, “Is AI a form of life?”, and “Could GAI replace graphic designers and other artists?”

Research Methods

Before implementing the research, approval was obtained from the (name omitted for anonymous submission) Institutional Review Board. Following approval, the researchers employed a phenomenological approach to uncover experiences with and attitudes toward GAI. The phenomenological approach is useful for investigating, uncovering, and understanding lived experiences (Gibbs, 2013). The body of literature regarding the phenomenological approach to understanding GAI is limited. However, the phenomenological approach is used in traditional and social media (Gibbs, 2013), and so the researchers utilized the phenomenological approach for the investigation, which consisted of 25 random interviews and observation of the subjects. Creswell (2025) noted that a suitable range of participants for phenomenological research, which is reflected

in the study, is three to 25 participants. Responses were recorded using the pen and paper method, and no identifying data was collected through the interviews. To obtain consent the researchers asked individuals to complete the interview, and upon introduction, the researchers provided subjects with an information sheet. If the individual agreed to participate in the interview, the researchers accepted this agreement as consent. After the data was collected the researchers entered the data into a Microsoft Excel spreadsheet and located themes, trends, and patterns, which were verified and confirmed by a faculty member who was not affiliated with the research.

Results

There were several themes identified through the research. The themes were found to be in the areas of “GAI Use,” “Visual Appeal,” “Artificial Life Acceptance,” and “Replacing Graphic Designers and Other Artists.”

GAI Use

When asked if they used GAI, all 25 respondents indicated that they were quite familiar with it and indicated that they are regularly using GAI to create media. When presented a follow up question as to the reason they were using GAI, all respondents indicated that they used the GAI for entertainment purposes. They also noted that they were interested in learning more about GAI and were interested in discovering how GAI could be used to assist with their learning and development. The researchers observed that while answering questions regarding the use of GAI, all the respondents appeared to be engaged and intrigued and were quite interested in providing answers. Body language and facial expressions were aligned with this observation.

Visual Appeal

Twenty-one respondents reported that GAI artwork is “visually appealing.” Those who stated that GAI artwork lacked visual appeal cited a variety of negative impacts that shaped their responses, including human exposure to deep fakes, the potential for humans to have false perceptions of the world, and loss of employment for graphic designers. Twenty-two respondents indicated that GAI artwork is “interesting.” When the researchers inquired as to why respondents found GAI to be interesting, 21 respondents indicated that they found the process to create the media by the AI to be interesting, but they feared that GAI could undesirably affect humans, which negatively impacted their views on the media created by AI. The researchers observed that while answering questions regarding the visual appeal of GAI artwork, all respondents’ body language and facial expressions made them appear to be uncomfortable, as many of the respondents were careful in choosing their words, squirmed while answering, and at times failed to make eye contact with the researchers.

Artificial Life Acceptance

Twenty-two respondents did not identify AI as a form of life. They cited that the process to create GAI was a mechanical process for inputting commands into a system that generated media, and they found that process lacked anything resembling life. Those respondents suggested that GAI was not like traditional creation of art. One subject noted, “It just takes commands from a database

and meshes it all together.” However, 3 respondents did consider AI to be a form of life. The common consensus behind their reasoning revolved around the communication or “dialogue” humans have with GAI. These subjects suggested that since a human asked the GAI to perform a task and the AI completed the task, they believed the AI was in fact alive, as it was in some way responding to their requests and appeared to be “thinking then responding.” The researchers observed that while answering questions regarding whether AI is a form of life, all the respondents appeared to be firm and confident in their responses. At times, strong opinions were expressed, and body language and facial expressions matched such confidence.

Replacing Graphic Designers and Other Artists

When asked if GAI could replace graphic designers and other artists there was no overwhelming majority. The responses were split almost evenly with 13 respondents who believe GAI could replace such artists. When asked the following follow-up question, “If you were an employer that needed graphic design services would you use AI generation image software or hire a full-time employee,” all respondents stated they would hire a person for the job. The interviewees seemed to fear that businessowners would be interested in the cost-cutting benefits of GAI, but regardless, respondents indicated they would hire a full-time designer citing the need for “originality” and “creativity” of the art. Five respondents noted that they would utilize GAI only do so if hiring a full-time employee would be too expensive. The researchers observed that while answering questions regarding whether could replace humans working in the creative arts, all respondents answered quickly and nervously, and appeared to choose their words carefully, as if they were trying not to offend the researchers. Their body language and facial expressions matched this discomfort, as respondents quickly answered and appeared relieved when this question was completed.

Discussion

The findings from this study provide great insight into perceptions of GAI, particularly as the researchers observed that the body of knowledge relative to GAI is limited. It is an emerging field and a polarizing topic. Riparbelli (2023) indicated, “We’re currently in the early days — a mix of enthusiastic innovators and early adopters, along with fear, distrust, and caution in common discourse is natural” (para. 89).

Respondents are familiar with and use GAI. This supports the findings of Ramesh et al (2021), Riparbelli (2023), and OpenAI (2022), who indicated that GAI is accessible and widely utilized as a form of technology. Respondents also found that GAI is appealing and interesting, especially the process to generate the media, but appeared uncomfortable with their responses. This is a significant finding as the body of literature refers to GAI as efficient (Edwards, 2023), but the words “appealing” or “interesting” are not frequently used to describe GAI. This may suggest that reasons for GAI use may be unclear. It is possible that GAI use has not yet been resolved by the public, therefore further research should be done to explore evolving public views of GAI. However, this finding does align with Skjuve et al. (2024), who noted that GAI gratifies users via enhanced productivity, novelty, fun and amusement, and more.

Respondents noted that they feared GAI could negatively affect humans’ perceptions of the world.

This finding is consistent with Riparbelli (2023) who indicated there are risks to using GAI, noting, “Questionable human-likeness, also known as the “uncanny valley, false implications of people, manipulation and sharing of misinformation (fake news), and undermining trust in media” (para. 75). This finding is also consistent with Grimes et al (2023) who noted, “Generative AI's ability to produce human-like text, images, and even videos has opened the door to the creation of "deep fakes" in various contexts” (para. 14).

Respondents were almost split evenly when reporting if they believed GAI could replace graphic artists or other artists. While appearing to be quite uncomfortable while responding to the question, their preference was to utilize human talent versus GAI. Respondents who would utilize GAI indicated that they would only do so if hiring a full-time graphic designer or related communications professional would be too expensive. Further research should be conducted to determine if creative professionals can reasonably fear that GAI could negatively impact their employment. It is possible that if companies value the cost efficiency of GAI, they may also value its potential to meet their communication needs. Zhang et al (2023) noted that GAI is a concern for graphic designers, “In response to generative AI, artists have staged mass protests with the slogan ‘NO to AI generated images’” (para. 2).

There are certain elements of cognition that are barriers to AI replacing humans. Naskar (2023) indicated, “Emotional Intelligence in AI would be extremely difficult to implement. By definition, emotional intelligence (EI) is the ability to understand, manage, and use emotions effectively in interpersonal relationships. This involves empathy, self-awareness, motivation, and social skills. Unlike AI, humans are capable of processing and responding to emotions, which are essential for building trust, collaboration, and effective communication” (para. 4). In addition, human creativity poses a barrier. “Human creativity is a valuable asset that cannot be replicated by AI. It is a unique ability possessed by humans that allows them to generate new ideas and solve complex problems. Human creativity is the driving force behind innovation and progress in many industries” (Naskar, 2023, para. 20). Future research should be conducted to explore the connection between creativity and AI. “As we move towards a future that is increasingly reliant on AI and automation, human creativity will become even more valuable. It’s what sets us apart from machines and allows us to innovate and progress towards a better future” (Naskar, 2023, para. 24).

Zhang et al (2023) suggested that graphic designers and other creative professionals should welcome GAI instead of resisting it, as GAI may increase earnings and improve the industry. According to Zhang et al (2023), “As economic theory suggests, generative AI helps them by increasing their efficiency. As a result, practitioners should think about how to incorporate generative AI into their workflow to improve it. For example, in the past, artists completed a painting by sketching, line drawing, and coloring. They can use generative AI to get a base and ‘fine tune’ it in the future” (p. 7). This finding is consistent with Skjuve et al. (2024), who indicated that enhanced productivity is a use of GAI. In the future, research could be conducted to explore ways that GAI could be useful for creative professionals and subsequent perceptions held by designers.

As more than half of the respondents reported they believed GAI could replace graphic designers and other artists, this finding may be inconsistent with the views of advertising agencies and related firms, as it may be possible to use GAI without replacing designers. Rackovolis (2023) noted that

the advertising agency Leo Burnett is working to integrate GAI into its creative process in a complementary manner. In an interview with the firm's national experience design director Chris Jovanov, he indicated, "we view ChatGPT and generative AI as valuable creative companions that enhance the creative process rather than replacing it. As the technology continues to mature, we'll continually evaluate how we can best use these tools to create great content" (para. 20). Dehman (2023) indicated, "GAI is a new tool in the toolbox for graphic designers, just as much as the template design applications that came before it, and this tool can have potential uses for graphic designers already. AI applications do show their usefulness in the early stages of the process, idea generation, and brainstorming" (p. 53). Further research should be conducted to explore the feasibility of (and purposes for) utilizing GAI by creative professionals in advertising agencies and related firms.

The respondents largely did not identify AI as a form of life. They viewed GAI as a mechanical process for generating media. Those who did view AI as a form of life did so due to a perceived "dialogue" with AI. This is an interesting finding as it may for some link human processes to AI. However, AI has several limitations, and while it lacks emotion and empathy, AI is not able to generate new ideas and engage in creativity outside of data input. (*Ai vs human creativity: Which one will win?* 2023). Edwards (2023) indicated, "For thousands of years, we've told ourselves that we as humans are unique and special among animals because we are creative—we are toolmakers. We have language and grammar. We can reason. We've seen in the past year that our place as the center of the intelligent universe is no longer assured, seemingly being chipped away month by month due to new machine learning research" (para. 40). Further research should be done to explore perceptions of GAI as a form of life.

Disclosure Statement

The authors report there are no competing interests to declare.

Data Availability Statement

The data presented in this study are available on request from the corresponding author. The data are not publicly available due to guidelines of the Institutional Review Board of (omitted for anonymous submission).

About the Authors

Dr. Scott J. Weiland is the Chair of the Mass Communications department and an Associate Professor of Mass Communications at King's College. His mass communications background includes leadership roles in broadcast communications, social media, and integrated marketing communications. Dr. Weiland's research interests include generative artificial intelligence, social media, web video, leadership communications, service learning in mass communications, and others. ORCID: Scott J. Weiland 0009-0003-4194-2010; <https://orcid.org/0009-0003-4194-2010>

Jake Miscavage is a researcher, graphic designer, and videographer. His research interests include social video production, artificial intelligence, social media and more.

References

- AIContentfy. (2023, November 7). Ai vs human creativity: Which one will win? <https://aicontentfy.com/en/blog/ai-vs-human-creativity-which-one-will-win>
- Brennan, N. (2022, September 1). *AI-generated artwork takes first place at Colorado State Fair* - 9news.com. 9News. <https://www.9news.com/article/news/local/next/next-with-kyle-clark/ai-artwork-first-place-prize-colorado-state-fair-competition/73-d4a6053b-3312-4445-9b20-13a9c38c9b90>
- Creswell, J. W. & Poth, C. N. (2025). *Qualitative inquiry and research design: Choosing among five approaches*. (5th ed.).
- Dehman, H. (2023). Graphic design, Already Intelligent? Current possibilities of generative AI applications in graphic design. (Dissertation). Retrieved from <https://urn.kb.se/resolve?urn=urn:nbn:se:mau:diva-62512>
- Edwards, B. (2023, November 16). From toy to tool: Dall-E 3 is a wake-up call for visual artists-and the rest of Us. <https://arstechnica.com/information-technology/2023/11/from-toy-to-tool-dall-e-3-is-a-wake-up-call-for-visual-artists-and-the-rest-of-us/>
- Gibbs, C. (2013, November 6). *Twitters impact on sports media relations*. Twitters Impact on Sports Media Relations. <http://hdl.handle.net/1893/18588>
- Grimes, M., von Krogh, G., Feuerriegel, S., Rink, F., & Gruber, M. (2023). From Scarcity to Abundance: Scholars and Scholarship in an Age of Generative Artificial Intelligence. *Academy of Management Journal*, 66(6), 1617–1624. <https://libraryaccess.kings.edu:2150/10.5465/amj.2023.4006>
- Hyun Baek, T., & Kim, M. (2023). Is chatgpt scary good? How user motivations affect creepiness and trust in Generative Artificial Intelligence. *Telematics and Informatics*, 83, 102030. <https://doi.org/10.1016/j.tele.2023.102030>
- Lukan, E. (2023, October 20). 50 best AI software for all use cases (with examples). <https://www.synthesia.io/post/best-ai-software#best-ai-software-for-image-generation>
- Myer, M., & Zayas, R. (2023, December 23). Generative AI, Llms and ai assistants: A deep dive into Customer Experience Technology. <https://www.copc.com/a-deep-dive-into-customer-experience-technology/>
- Niu, W., Zhang, W., Zhang, C., & Chen, X. (2024). The role of artificial intelligence autonomy in Higher Education: A uses and gratification perspective. *Sustainability*, 16(3), 1276. <https://doi.org/10.3390/su16031276>
- OpenAI. (2022, September 28). *Dall-E now available without waitlist*. DALL·E now available without waitlist. <https://openai.com/blog/dall-e-now-available-without-waitlist>

Ramesh, A., Pavlov, M., Goh, G., & Gray, S. (2021, January 25). *Dall·E: Creating images from text*. DALL·E: Creating images from text. <https://openai.com/blog/dall-e/>

Riparbelli, V. (2023, November 1). The future of (synthetic) media. <https://www.synthesia.io/post/the-future-of-synthetic-media#societal-impacts-and-the-future-of-synthetic-media>

Skjuve, M., Brandtzaeg, P. B., & Følstad, A. (2024). Why do people use chatgpt? exploring user motivations for generative conversational AI. *First Monday*. <https://doi.org/10.5210/fm.v29i1.13541>

Naskar, V. (2023, April 16). *Why ai can't replicate Human Emotional Intelligence and creativity*. Medium. <https://medium.com/illumination/why-ai-cant-replicate-human-emotional-intelligence-and-creativity-e5ad137033a5>

Zhang, K., Kwon, O., & Xiong, H. (2023). *The Impact of Generative Artificial Intelligence*. <https://arxiv.org/abs/2311.07071>.

