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# The Spectre of Generative AI Over Advertising, Marketing, and Branding

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## The Spectre of Generative AI Over Advertising, Marketing, and Branding

### Abstract

The rapid progress of generative artificial intelligence (AI) technologies such as DALL-E, GPT-3, and ChatGPT has sparked discussions about the potential impacts on creative industries. With their ability to synthesize novel text, images, music, and other content, these AI systems could automate certain creative tasks. Some predict this will disrupt creative professions like advertising and branding. This paper provides an in-depth review of academic literature and industry commentary on the capabilities and limitations of current generative AI systems. It analyzes the potential near-term impacts on the advertising and branding fields, where the ability to generate marketing content and assets could significantly disrupt workflows and employment.

However, the paper argues generative AI is unlikely to wholly replace human creativity and strategic judgment in these industries in the foreseeable future, given limitations in areas like intentionality, consistency, bias, and assessment of aesthetic qualities. While automation of some discrete tasks is probable, generative AI currently lacks the holistic creative abilities that define human ingenuity. As such, the paper suggests the medium-term impacts may be concentrated in partial automation of technical execution and the need for adaptation by creatives.

Realizing the benefits of AI augmentation while mitigating harms will require responsible governance and development of these transformative but still limited technologies. With prudent policies and efforts to develop complementary human skills, generative AI can positively assist advertising, branding, and creativity at large. But sustaining the uniquely human gifts of strategy and aesthetic judgment necessitates building AI as an ally to creatives rather than adversary. If fostered thoughtfully, this current wave of innovation can propel human imagination and productivity to new heights.

### Introduction

Generative artificial intelligence (AI) has rapidly advanced in capabilities in recent years. Systems like OpenAI's image generator DALL-E (Ramesh et al., 2022), text generator GPT-3 (Brown et al., 2020), and conversational agent ChatGPT (Thoppilan et al., 2022) point to a future where AI can synthesize novel content like images, text, video, and more. The creative potential demonstrated by these systems has led to both excitement about new possibilities for augmenting human creativity, and also concerns about potential disruption of creative industries (Sevilla and Vishwanath, 2022).

Fields like advertising and branding are particularly implicated, given their reliance on crafting novel content and messaging. Commentators warn creatives in these fields face being automated out of jobs by AI that can generate ads, logos, and brand content (Chavez, 2022; Kulkarni, 2022). However, research suggests generative AI's actual capabilities and limitations indicate it will not wholly replace human creatives in the near future. This paper reviews literature on the abilities and constraints of current generative AI systems, and their likely impacts on advertising and branding. It argues that while generative AI does present challenges for these creative fields, with prudent regulation and responsible development, it offers opportunities to complement human creativity more than replace it.

### Generative AI's Capabilities

Recent advances in generative AI, especially in natural language processing (NLP) and computer vision, have dramatically expanded what these systems can autonomously produce. Models like DALL-E 2 and Imagen can generate photorealistic images from text prompts (Ramesh et al., 2022; Saharia et al., 2022). GPT-3 exhibits an unprecedented ability to produce human-like text for a wide variety of writing tasks (Brown et al., 2020). AI chatbots like Google's LaMDA and Anthropic's Claude can hold natural-language conversations (Thoppilan et al., 2022).

These capacities have enabled new creative applications. DALL-E 2 has been used by artists to compose novel images as inspiration for artworks (Soo, 2022). GPT-3 can generate marketing copy, slogans, logos, and other advertising and branding content from basic prompts (Subramanian, 2022). Chandrasekaran et al. (2022) demonstrate AI's potential for automating graphic design tasks like generating logos, posters, and brochure layouts. Music generators like Anthropic's Claude Aria compose original songs and instrumentals (Lynch, 2022).

The speed and scale at which these systems can produce novel, often high-quality output suggests the beginnings of an AI revolution in creative industries. Why pay a copywriter when an AI can generate hundreds of slogans in seconds? Why hire a designer when an AI can instantly generate logos and other branding material? Commentators argue generative AI can replicate tasks across advertising, marketing, design, music, architecture, and other creative fields, threatening the livelihoods of human creatives (Sample, 2022; Sevilla and Vishwanath, 2022).

### Limitations of Current Generative AI

However, examinations of current generative AI systems reveal meaningful limitations that likely preclude full automation of creative work in the near future. While their capabilities are impressive, these technologies do not yet match human creativity and intuition.

One limitation is a lack of intentionality. Though they can produce novel content, current AI systems do not truly understand the meaning and context of what they generate (Bommasani et al., 2021). This makes it challenging for them to consistently create content for a specific purpose or goal. In branding, advertisers want content that strategically builds the brand; AI cannot yet replicate this intentionality (Subramanian, 2022).

Generative AI also struggles with consistency and coherence in its output. Minor prompt variations can yield unpredictable or nonsensical results. DALL-E 2 images sometimes contain visual flaws and artifacts revealing their artificial origins (Ramesh et al., 2022). GPT-3 output tends to lose coherence over long passages, reflecting its statistical, probabilistic approach to text generation (Adiwardana et al., 2020). These inconsistencies reduce generative AI's current utility for tasks demanding high reliability.

Data biases also constrain current systems. Models like DALL-E and GPT-3 are trained on vast datasets scraped from the Internet, inheriting human biases around things like race, gender, and ethnicity embedded in that data (Bommasani and Cardie, 2021). Efforts to reduce biases are ongoing, but remain a challenge. Generated content sometimes reflects and amplifies these biases in problematic ways (Abid et al., 2021).

Finally, major limitations exist in evaluating and critiquing generative AI output. Systems lack mechanisms for assessing aesthetic qualities like creativity or originality. GPT-3 cannot critically judge its own text; it relies on human feedback. Current systems also cannot explain or provide rationale for their output. The "black box" nature of generative AI output makes it hard to improve (Song and Shu, 2022).

These limitations highlight that while generative AI can replicate certain discrete creative tasks, truly matching human creativity and intuition remains challenging. As Cross (2022) argues, current systems lack the intentionality, appreciation of aesthetics, critical thinking, and cultural awareness true creativity demands. Overcoming these limitations to accurately emulate human creativity likely requires fundamental advances in artificial general intelligence.

Though limitations exist, some brands have already begun experimentally using generative AI in marketing and advertising campaigns. Documenting use cases helps illuminate current capabilities and challenges.

Examples include AI-generated social media ads for the non-profit Aspiration (Del Ray, 2022). The tool Anthropic Claude has been used to generate product descriptions for Shopify merchants (Subramanian, 2022). Agencies have tested AI-composed background music for ad spots, with mixed aesthetic results (Jain, 2021). Generative copywriting apps aim to help marketers produce more content faster, though quality control remains a concern (Aron, 2022).

Early experiments highlight issues around branding coherence and consistency, as different prompts yield unpredictable output. But they also demonstrate utility for rapid content prototyping. Case studies suggest a hybrid approach combining AI-generated raw material and human creative refinement offers the most promise currently. More research is needed on actual marketing outcomes using generative AI.

## Impacts on Advertising and Branding

Given its limitations, current generative AI on its own is unlikely to wholly displace human creatives in advertising and branding. However, it does present meaningful impacts for these fields that necessitate adaptation.

One likely effect is partial automation of specific creative tasks. Generative AI shows aptitude for rote work like generating raw copy and imagery that human creatives can then refine (Subramanian, 2022). Systems like DALL-E 2 and GPT-3 may increasingly act as "digital assistants" to boost individual productivity (Sevilla and Vishwanath, 2022).

This may displace some entry-level creative roles focused on basic content generation. The economic impacts may be uneven, as middle and top-tier creatives who focus more on strategy, leadership, and relationships could remain in demand even with automation of some tasks (Thompson, 2022). Those relying solely on technical execution face more risk.

Generative AI also presents new medium-term challenges around branding, intellectual property, and liability. Widely available text and image generators make plagiarism and unauthorized use of brand assets easier (Chavez, 2022). Creators already struggle to assert copyright given AI's ability to remix and synthesize new content (Sample, 2022). Attributing "authorship" and responsibility for AI output is also legally murky, presenting challenges if inappropriate or harmful content is created (Hristov, 2021).

At the same time, used ethically and responsibly, generative AI could benefit branding and advertising. Assistants like GPT-3 allow faster iteration of ideas and content (Subramanian, 2022). Democratized access to design tools could help small brands afford quality aesthetics (Chandrasekaran et al., 2022). Responsibly deployed systems could also monitor for harmful biases and promote diversity in generated content. Realizing these benefits likely requires proactive self-regulation by developers and prudent government oversight (Leslie, 2019).

Given its disruptive potential, advertising and branding professionals must proactively adapt their skills and working methods to integrate generative AI effectively. This necessitates developing AI literacy to capitalize on strengths while mitigating limitations (Lewis, 2022). Rather than resist change, creatives should explore collaborating with AI tools on defined tasks.

Agencies and professional associations can assist with training programs on incorporating AI responsibly into creative workflows. Developing hybrid roles at the intersection of creative direction and technical AI proficiency can help retain unique human skills while staying competitive (Thompson, 2022). AI should augment individual productivity and ideation rather than replace creative roles.

For displaced entry-level professionals, support and retraining will be critical. Building transferable skills in strategy, ideation, and project management can open adjacent career pathways. Lifelong learning mindsets help creatives stay adaptable even amidst major technological shifts. Investment from tech firms and governments in just workforce transitions can mitigate negative impacts on displaced creatives.

## The Path Forward

In assessing generative AI's impacts on creativity, Cross (2022, p.120) advises avoiding both "unjustified exuberance" and "excessive dystopian fears." Current systems are impressive but limited; they do not yet truly replicate human creativity. But they present meaningful challenges for advertising, branding, and other creative fields that necessitate adaptation.

Rather than full automation, the medium-term future likely involves AI and humans complementing one another - with creatives using AI tools to augment their workflows rather than replace them. But to maximize the benefits and mitigate risks, responsible governance of these technologies is required, promoting innovation while managing disruptions and downsides. Education to develop AI literacy in both creatives and consumers can also help intelligently integrate these technologies.

Continued progress in coming years is likely as computational power grows exponentially. But research suggests truly human-like creative intelligence remains a distant prospect. With prudent regulation and responsible development, generative AI can positively assist human creativity more than destroy creative professions - presenting opportunities to imagine new ways of blending human ingenuity with machine ability.

Realizing the promise of AI to augment creativity requires responsible design and use of these technologies. Developers should proactively assess risks and benefits, engage affected communities, and enact controls to address issues like biases in training data (Leslie, 2019). Generative models should be transparent in capabilities and limitations to prevent overreach or deception.

Brands must also use AI ethically, considering consumer impacts and creative rights. Generative content should be clearly identified as such, rather than passed off as original human work. Strategic usage that respects creative professionals is important for sustainable integration. Codes of conduct, audits, and oversight bodies can help scale responsible practices (Bommasani et al. 2021). With conscientious governance and norms, generative AI can positively transform creative industries.

## Conclusion

The emergence of powerful generative AI systems represents a potentially disruptive technological change for creative fields like advertising and branding. Technologies like DALL-E, GPT-3, and Claude display unprecedented ability to autonomously synthesize novel text, images, music, and more. However, a sober analysis reveals current limitations in matching human creativity and intentionality.

While these technologies can automate certain discrete creative tasks, they lack the aesthetic sensibility, cultural awareness, and strategic purpose that define human ingenuity. As such, in the near future generative AI is unlikely to completely displace professional creatives. The bigger near-term impacts will be partial automation of rote creative work and the need for adaptation by advertising and branding to integrate these technologies responsibly.

Realizing the benefits of AI-enabled augmentation of creativity, while mitigating the risks, will require judicious governance and development of these rapidly advancing technologies. Artists, developers, policymakers, brands, and the public must collaborate to shape norms and policies that foster innovation but curb harmful misuse. Investing in educational initiatives to develop AI literacy and human-centered skills can equip the next generation of creatives to thrive alongside AI tools.

With prudent and ethical deployment, generative AI can positively transform creative sectors by reducing drudgery and accelerating human imagination and productivity. But sustaining the uniquely human gifts of strategy, meaning, and aesthetic judgment in advertising and branding necessitates building these technologies as allies rather than adversaries to human creativity. If society approaches generative AI thoughtfully, this innovation wave can propel creativity to new heights by leveraging the complementary strengths of human and machine intelligence.

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