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Impact of Generative Artificial Intelligence in Graphic Arts: A Review

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Abstract

Generative technologies are set to transform graphic design workflows through automated content generation, personalized outputs at scale, and rapid iteration capabilities. While early research identifies opportunities to streamline processes and expand the creative scope, questions remain on optimally weaving computational abilities with human skills. Comparative studies have highlighted limitations in AI reproducing nuanced human outputs emphasizing the importance of expert guidance. As roles evolve with shifting skill demands, risks to livelihoods and craft knowledge are observed posing the need for addressed change. A comprehensive review identifies means to maximize benefits through strategic human-AI partnerships positioning design principles and decision making at the forefront while leveraging algorithmic potentials. Collaborative mixed-method approaches focusing on interdisciplinary issues provide direction balancing strengths yet preserving innate human creativity indispensable to visual communications. With knowledge-based practices sensitively aiding technological progress, responsible AI integration challenges can be surmounted.

Keywords: Graphic design, Artificial intelligence, Computational creativity, Automation, Human-computer collaboration