AI & SOCIETY
https://doi.org/10.1007/s00146-025-02667-2

REVIEW

Perceptions and integration of generative artificial intelligence in creative practices and industries: a scoping review and conceptual model

Jack Tsao[1] · Cindy Xinyi Liang[2] · Collier Nogues[3] · Alice Wong[4]

Received: 9 September 2025 / Accepted: 29 September 2025

Abstract
Generative Artificial Intelligence (GenAI) is fundamentally transforming notions of creativity and creative production across disciplines, yet a comprehensive understanding of professional attitudes and integration patterns remains challenging. This scoping review examines how creative professionals perceive and integrate GenAI technologies across four domains: visual art and design, writing and literature, performing arts, and environmental and spatial design. Following PRISMA-ScR guidelines, we analysed 57 papers (2022–2025) from multiple databases, focusing mainly on empirically based studies of professional creative practice. We identify universal trends, including the shift from creation to curation and meta-creation, the emergence of new literacies (prompt engineering, AI evaluation), and the reconfiguration of expertise hierarchies. Career stage emerges as a critical factor: across domains, entry-level professionals demonstrate enthusiasm and view GenAI as a natural extension of digital tools, while senior practitioners express scepticism about expertise devaluation. All fields consistently position GenAI in early-stage conceptualisation rather than final production, developing hybrid methodologies that preserve human judgment in convergent creative phases. However, impacts manifest differently based on each field/sub-field's relationship to embodiment and materiality. Integration levels follow an inverse relationship with traditional notions of "pure" creativity—fields prioritising embodied practice and cultural authenticity (fine arts, literary fiction, classical music) show the most significant resistance. At the same time, commercially oriented domains embrace higher adoption for efficiency gains. Visual artists face "erasure by obscurity" from AI output volume; writers negotiate between nonlinear, associative language generation and AI's tendency toward coherence and cliché; performers uniquely embrace computational unpredictability as a generative force; architects balance efficiency imperatives with concerns about cultural homogenisation effects of Western-centric AI systems. Our conceptual framework positions creative professionals' attitudes along two dimensions: knowledge codifiability (tacit/embodied to explicit/codifiable) and output materiality (physical/permanent to digital/ephemeral). Key tensions include balancing productivity with meaningful engagement, volume with distinction, precision with serendipity, and individual with collective intelligence. Ultimately, our findings reveal complex patterns of ambivalence shaped by competing value systems. This review contributes a comprehensive mapping of GenAI applications across creative disciplines, potential disconnects between educational emphasis on critique and industry's pragmatic adoption, and gaps for future research on longitudinal skill impacts, emerging AI-native practices, Global South perspectives, and forms of creative resistance.

Keywords Generative artificial intelligence (GenAI) · Creative practice · Human-AI collaboration · Scoping review · Creative industries

✉ Jack Tsao
jtsao@hku.hk

Cindy Xinyi Liang
cindylxy@hku.hk

Collier Nogues
cnogues@cuhk.edu.hk

Alice Wong
alicesmw@hku.hk

[1] Common Core Office, The University of Hong Kong, Pokfulam, Hong Kong

[2] University Libraries, The University of Hong Kong, Pokfulam, Hong Kong

[3] Department of English, The Chinese University of Hong Kong, Shatin, Hong Kong

[4] Department of Philosophy, The University of Hong Kong, Pokfulam, Hong Kong

Published online: 08 October 2025

1 Introduction

Generative Artificial Intelligence (GenAI) is profoundly reconfiguring and unsettling creative production across disciplines, from design and visual arts to creative writing, filmmaking, theatre and music, video games development, architecture and environmental design, and industrial and product fabrication. As GenAI technologies and systems– representing both progressions in Artificial Intelligence (AI) capabilities and a component within broader AI technological stacks[1]– become increasingly accessible and proficient in human creative tasks, their integration into creative workflows presents unprecedented opportunities and complex challenges for practitioners. The integration of GenAI by creative professionals is a critical area of investigation as organisations and creative professionals grapple with how to harness these applications while maintaining artistic integrity and authorship. For higher education institutions, industry repercussions will cascade into altering what competencies are emphasised within creative programmes and how they are taught. Large language models (LLMs), text-to-image and other multimodal generators have already demonstrated remarkable capabilities in creative tasks that were once considered exclusively human domains. These advancements raise fundamental questions about the nature of creativity, authorship, and the role of AI in creative production (Tsao and Nogues, 2024).

Definitions of creativity vary by disciplines of research and practice and are often contested within disciplines (Puryear and Lamb 2020). Neuroscience research emphasises idea generation and idea evaluation (Beaty 2020). Sociologists describe creativity as intentional configurations that deliver a surprise for a given audience (Godart et al. 2020) or as a process of actualising ideas through problem-solving (Novak-Leonard et al. 2022). Creative fields exhibit low consensus about definitions of creativity (Brandt 2021) but tend to emphasise the combination of novelty and usefulness within a given context (Dake 1991; Sternberg and Lubart 1999). Often, there are distinctions between creativity as a property of a person or object and creativity as a process (Green et al. 2024; Pelowski et al. 2017; Walia 2019). The advent of GenAI as a participant in human creative endeavours has challenged all of these approaches, such that an update of a "standard definition" of creativity is necessary (Runco 2023). The term "co-creativity" has become common parlance as a distinguishing term to describe human-AI collaborative making in specific disciplines, from visual arts (Karimi et al. 2020) to writing (Qian and Hu 2024) and with reference more broadly to human-AI co-production (Haase and Pokutta 2024). Some scholars have argued that the term should be codified among researchers and practitioners and become an area of focus as AI increasingly affects creative disciplines (Wingström et al. 2022).

Of course, creative practitioners have long incorporated algorithmic and machine learning tools into their workflows, from Microsoft's Office Assistant in 1997 to the choreography assistant Isadora in 2000 to Adobe Photoshop's content-aware fill tool in 2010. But by 2022, advancements in transformer technology combined with increased computational power and training dataset quality, made prolific use of AI more technically feasible. OpenAI's public release of ChatGPT-3 late that year precipitated a flood of options as competitors rushed to release their own versions of user-friendly GenAI software tools. Broader applications like the text-to-image generator Midjourney and LLM tools, including DeepSeek and ChatGPT 4o have been supplemented by industry-specific software. Examples include BricsCAD or ArkoAI for architecture, LALAL.AI and Izotope Ozone for music production, and Sudowrite for creative writing. Furthermore, the competitive landscape of GenAI tools is characterised by the continuous introduction of new features like February 2025's Deep Research and March 2025's image generation tools.

GenAI-created or assisted art is making headlines. Examples include the US$1.09 million auction of a painting by the AI robot Ai-Da in November 2024; Brian Eno's January 2024 GenAI-assisted film *Eno*; and Sheila Heti's November 2023 *New Yorker* short story co-written with a chatbot, "According to Alice." In higher education settings, administrators and teachers are trying to balance academic integrity with objectives of preparing creative professionals with the technological skills needed for the future workforce—even as instructors learn about new GenAI tools at the same pace as students (Fathoni 2023; Keith 2024; Liu 2024).

This scoping review examines the intersection of GenAI tools with creative workflows and practitioners' conceptions of creativity. The rationale for this focus is threefold. First, an evaluation of professional acceptance offers critical insights into how creative practitioners perceive and adopt—or resist—this technology. Second, creative professionals across diverse disciplines are already integrating GenAI into their workflows in ways that reshape traditional practices. Understanding these processes is vital for guiding industry advancements and informing the development of curricula and policies that address both opportunities and challenges. Third, arising ethical challenges—particularly

[1] The paper focuses primarily on GenAI, and for avoidance of doubt, we will use the terms "AI" and "GenAI" interchangeably. We acknowledge that "GenAI" encompasses technologies with different architectures—from language models to image generators. However, its use reflects how creative practitioners encounter these tools:as a general category of content-generating AI rather than discrete technical systems. While limiting technical precision, this approach captures professional attitudes toward the GenAI ecosystem as actually experienced.

around authenticity, authorship, and displacement anxieties—demand thoughtful consideration to establish responsible and sustainable practices in professional and educational contexts.

1.1 Research objectives

In response, this scoping review aims to:

A. Provide an overview of how GenAI is integrated across creative production, examining trends, challenges, and opportunities across different creative fields.
B. Identify key research gaps and propose a conceptual framework as a precursor for systematic reviews and future research on GenAI and creativity in professional and higher educational settings.

Based on our aims, a scoping review instead of a systematic review was deemed more appropriate because we were interested in identifying definitions and concepts within creative fields and mapping professional discussions of integration characteristics and factors. We identified four broad creative industries: (1) Visual Art and Design (Fine arts, digital arts, graphic design, visual communication); (2) Writing and Literature (Creative writing, literary arts, narrative design, poetry); (3) Performing Arts (Music, dance, theatre, performance art); (4) Environmental and Spatial Design (Architecture, interior design, landscape design, urban planning). The selected categories also correspond to vocational and tertiary academic programmes/disciplines, and hence the comparison between professional and educational practices and training allows for conceptualising interventions. The review addresses the following research question in attempting to satisfy our objectives:

1. How do professional creative practitioners in visual art and design, writing and literature, performing arts, and environmental and spatial design perceive and integrate GenAI technologies (compared to traditional creative methods)?

1.2 Expected contributions

This review makes several significant contributions. First, we attempt to map current applications and perceptions to offer valuable insights for creative industries into how practitioners are adapting, resisting, or learning from these technologies. Moreover, the findings support further research in the field of the sociology of creativity, innovation, and creative industries. Second, the study enables a comparative understanding of how GenAI is integrated into professional creative practices, so that creative degree programmes can adapt to address gaps and unmet possibilities. Third, the review identifies and synthesises existing research on the ethical and practical implications of integrating GenAI into creative practices, helping to clarify areas where further exploration is needed. Finally, we will propose a conceptual framework to support researchers for future research and practice in this rapidly evolving domain.

The findings of this review have profound implications for multiple stakeholders: creative practitioners negotiating with GenAI in their creative practices, creative educators developing curricula and teaching approaches to support graduates for industry and entrepreneurship, policymakers formulating strategies for AI use, and researchers investigating the intersection of artificial intelligence and creativity. As GenAI continues to reshape creative practices, this review provides an up-to-date understanding of these dynamics, ensuring that its integration into professional and educational contexts is effective, ethical, and forward-thinking.

2 Methodology

2.1 Protocol

Prior to conducting the scoping review, a detailed protocol was developed to ensure methodological transparency and reproducibility. The protocol mainly adapts the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for Scoping Review (PRISMA-ScR) guidelines (Tricco et al. 2018), which builds on the Joanna Briggs Institute (JBI) guidance for scoping reviews (Arksey and O'Malley 2005; Liberati et al. 2009). The framework offers systematic guidance designed explicitly for scoping reviews in educational contexts and minimum reporting guidelines, with a 9-step process for methodological rigour. The protocol outlined the search strategy, inclusion criteria, and data extraction approach, which is described below.

2.2 Eligibility criteria

Below is a table summarising the inclusion and exclusion criteria used in the scoping review, along with the rationale for key exclusions (Table 1):

To focus on papers directly related to GenAI in professional practice and their perception and applications, the following criteria and questions helped in guiding reviewers on selection:

1. *Creative domain* Does the study examine industry or practitioners in creative professions of visual art and design, writing and literature, performing arts, and environmental and spatial design? What specific creative domain or sub-domains are addressed?

Table 1 Inclusion and exclusion criteria for papers

Criteria	Inclusion	Exclusion	Rationale for key exclusions
Publication Date	Studies published from January 1, 2015, to March 31, 2025	Studies published before 2015 or after March 2025	Focuses on the critical period of GenAI advancements in creative industries, particularly after deep learning breakthroughs
Language	English-language publications	Non-English-language publications	Ensures consistency in interpretation and analysis; limited resources for translation
Publication Type	Peer-reviewed articles, preprints, conference proceedings, book chapters, trade journals	Posters, blog posts	Focuses mostly on peer-reviewed evidence or scholarly publications, with some professional journals included
Creative Domain	Studies examining visual arts, design, writing, literature, performing arts, or environmental/spatial design	Studies not focused on creative fields or that concentrate on unrelated fields (e.g., business, engineering)	Ensures relevance to the research question by focusing exclusively on creative industries
GenAI Focus	Studies examining professionals' direct experiences with GenAI tools or their integration into workflows	Studies discussing general AI implementation without a focus on generative AI	Maintains alignment with the study's focus on GenAI applications in creative processes
Professional Status	Studies generally focused on professionals earning a primary income through creative work	Studies focused on amateur practitioners, hobbyists, or solely on students and educational contexts[a]	Emphasises professional practice to ensure alignment with real-world industry implications
Empirical Evidence	Studies using qualitative, quantitative, or mixed methods, systematic reviews, and structured interviews	Purely theoretical papers or opinion pieces without empirical data or practical applications[b]	Ensures the review is grounded in evidence-based findings rather than speculative or anecdotal information

[a]While we prioritised studies involving professional creative practitioners, selected studies with undergraduate and graduate students' interactions with GenAI were added, recognising the increasingly blurred boundaries between amateur and professional creative practice

[b]We identified and pragmatically included a few conceptual papers to ensure comprehensive coverage of the field, which, while lacking empirical data, offered valuable insights grounded in systematic observation of existing practices (Arksey and O'Malley 2005)

2. *GenAI Interactions/Application* Does the research investigate practitioners' direct experiences with, integration, or perspectives on GenAI tools? Does the research focus specifically on creative practice applications of GenAI (rather than general AI implementation)? What specific GenAI tools does the research mention rather than discussing AI in general terms or speculating on its potential?
3. *Professional Status* Does the study focus on professions in creative fields or industries?
4. *Empirical Evidence* Does the study employ empirical research methods (qualitative, quantitative, mixed methods), systematic review, or structured practitioner interviews? Does the study include actual practitioner data or experiences (rather than purely speculative theoretical discussions)?

2.3 Information sources

Our initial search strategy used Find@HKUL, a literature search tool provided by the University Libraries of The University of Hong Kong. With keyword searches, 2,393 search results were identified. The search results include items from the following databases: ProQuest Central, ROAD: Directory of Open Access Scholarly Resources, SciTech Premium Collection, ACM Digital Library Complete, Research Library, ABI/INFORM Global, arXiv.org, Science Citation Index Expanded (Web of Science), EBSCOhost Academic Search Ultimate, EBSCOhost Business Source Ultimate, Factiva via CZ, Free E-Journals, Elsevier SD Complete Freedom Collection 2024, SpringerOpen, Social Sciences Citation Index (Web of Science), Arts and Humanities Citation Index (Web of Science), Medical Database, ProQuest International Newstream, Education Database. These included peer-reviewed articles, preprints, conference proceedings, book chapters, and trade journals. Search and selection of courses of evidence.

One author (a librarian) conducted the library search using Find@HKUL and the following keywords to identify papers related to GenAI in professional practice: (Generative AI in creative industries) OR (AI tools for artists and designers) OR (impact of AI on creative processes) OR (Generative design in art and media) OR (AI-driven creativity in entertainment) OR (impact of generative AI on creative sectors) OR (how is AI transforming the arts and design industries?) OR (applications of generative AI in creative fields) OR (role of artificial intelligence in creative professions) OR (benefits of using AI in creative processes and industries) OR (GenAI used in creative industries). These keyword searches yielded a preliminary set of 2,393 papers (containing duplications) (Table 2).

The titles and executive summaries/abstracts were initially screened to identify those eligible for inclusion in the full-text review. Documents were organised using Zotero reference management software. This list was further excluded based on duplicates, absence of publication date, or publication outside the scoping period between January 1, 2022, and March 31, 2025 (given recent applications of GenAI were developed post-2022), non-English language, and manually screened by three authors against the eligibility criteria and questions outlined previously. Relevant papers, ranging from January 1, 2022, to March 31, 2025, discussing AI in specific fields such as dance, performance, choreobotics, writing and literature, music, theatre, architecture, and urban design were manually supplemented (n = 95), then duplicates were excluded, yielding a total of 187 papers for analysis.

Table 2 Search results selection with keyword searches via Find@HKUL

Database name	No. of Items
ProQuest Central	488
ROAD: Directory of Open Access Scholarly Resources	357
SciTech Premium Collection	275
ACM Digital Library Complete	185
Research Library	165
ABI/INFORM Global	123
arXiv.org	107
Science Citation Index Expanded (Web of Science)	105
EBSCOhost Academic Search Ultimate	97
EBSCOhost Business Source Ultimate	94
Factiva via CZ	75
Free E-Journals	70
SpringerOpen	45
Social Sciences Citation Index (Web of Science)	42
Elsevier SD Complete Freedom Collection 2024	40
Arts and Humanities Citation Index (Web of Science)	34
Medical Database	32
Education Database	30
ProQuest International Newstream	29
Total	2,393

2.4 Data charting and quality assessment

While formal quality assessment is not mandatory for scoping reviews, we conducted a basic assessment of the included sources to understand the nature of available evidence. The 187 papers were screened by the remaining author (not involved in the initial search and review), and 130 papers were further excluded based on the following criteria: not aligned well with the creative fields, lack of transparency of methods or theoretical and speculative papers, participants of study were general rather than professional, solely focused on students or

educational contexts, and discussing more artificial intelligence broadly instead of GenAI. The resulting 57 papers (listed in Appendix A) represent a focused dataset that balanced analytical depth with timely dissemination. Given the rapid pace of publications in this emerging field, analysing a larger corpus would have substantially extended our timeline, risking the relevance of our findings upon publication (Fig. 1).

2.5 Variable extraction and data synthesis

The following variables were extracted from the included studies to ensure a comprehensive analysis (Table 3):

Given the emerging nature of GenAI research, we felt it important to capture insights across all publication venues, as cutting-edge findings often appear first in conference proceedings and preprints. This approach

Fig. 1 Literature search identification, screening, and inclusion/ exclusion process. This figure is adapted from Page et al. (2021)

Table 3 Data extracted from the selected papers

Variable	Description
Author(s) and Publication Year	Name(s) of the study authors and year of publication
Article Type	The publication format of the source (e.g., peer-reviewed journal article, book, book chapter, conference proceeding, preprint, magazine article, industry report, white paper)
Location	Geographic location where the study was conducted or participants were based (e.g., country, region, or "international" for multi-country studies)
Creative Domain	The specific creative field(s) covered (e.g., visual arts, literature, performing arts, etc.)
Method	Research approach and design employed (e.g., qualitative interviews, quantitative survey, mixed methods, case study, ethnography, experimental design, systematic review, content analysis, action research)
Sample Characteristics	Details of the participants, including sample size, professional status (e.g., emerging/established creators), years of experience, specific roles/occupations, industry sector, and any relevant demographic information
Summary of key findings	Main results, insights, and conclusions related to GenAI adoption, user perceptions, creative applications, workflow integration, ethical considerations, challenges encountered, and impacts on creative practice and outputs

is consistent with the established scoping review methodology (Arksey and O'Malley 2005), which prioritises mapping the breadth of literature over quality assessment or differential weighting of sources.

The data extraction table of the selected 57 papers is presented in Appendix A: Table 6, with the references listed in full in Appendix B. [Refer to Supplementary materials 2 and 3].

The synthesis of key findings was conducted based on the following categories/ questions:

1. *Professional Perceptions* How do creative professionals view GenAI in their field, including their attitudes, concerns, beliefs, and overall reception of the technology?
2. *Integration Patterns* How is GenAI being incorporated into creative workflows, including adoption trends, usage patterns, and the ways professionals are combining AI with traditional methods? In other words, *how* are humans and AI working together (workflow, control, collaboration styles)?
3. *Integration Level* What is the degree of GenAI adoption and implementation within different creative sub-fields, categorised as: High: Widespread adoption and regular use; Moderate: Growing adoption with mixed implementation; Low/Resistance: Limited adoption or active resistance to implementation?
4. *Domain-Specific Applications* What specific GenAI features and applications are being used within each creative field, including particular use cases and technological implementations?
5. *Impact on Creative Practice* How is GenAI integration changing or influencing creative processes, workflows, outcomes, and professional approaches within each field, including both positive and challenging effects?

3 Results

The key points of our analysis on GenAI perception and integration across four professional creative fields are presented in Table 4 for readability purposes. Following the presentation of findings, we discuss our syntheses of the similarities, differences, and nuanced insights, with references to the examined literature for each analytical categorisation.

4 Findings

4.1 Professional perceptions

The results reveal patterns of ambivalence towards GenAI across all creative fields surveyed. This mixed attitude reflects rifts in value systems (Naqvi et al. 2025)—perceptual tensions between threat and empowerment based on individual agency and control over traditional notions of creativity. The ambivalence manifests through five consistent themes across creative domains. First, career stage shapes attitudes dramatically, with enthusiasm and pragmatic acceptance among entry-level professionals, who view GenAI as a natural extension of digital tools. In contrast, senior practitioners express deep scepticism, fearing the devaluation of expertise accumulated over their careers. Beyond just technological comfort, this discrepancy represents different generational conceptions of creative practice and professional identity. Second, all fields struggle to balance pragmatic adoption with creative integrity concerns. Third, practitioners are experiencing new

Table 4 Overview of perceptions and integration of GenAI across four professional creative fields

Creative fields Categories	Visual Art and Design (Fine arts, digital arts, graphic design, visual communication)	Writing and Literature (Creative writing, literary arts, narrative design, poetry)	Performing Arts (Music, dance, theatre, performance art)	Environmental and Spatial Design (Architecture, interior design, landscape design, urban planning)
Professional perceptions	•Ambivalent attitudes, depending on career-stage– ranging from enthusiasm (entry-level/ junior) to scepticism or reservations (senior professional)– and technical expertise •Accepted in commercial contexts to remain competitive •Concerns about job displacement (especially for entry-level and specialised niches), authorship and creative ownership, overreliance and devaluation of professional expertise	•Mixed reception among professional writers, ranging from function/ pragmatic, open/ curious to cautious/ critical •Varying attitudes based on genre and market pressures •Positive view for brainstorming, productivity, specific tasks such as translation, transcription, rewriting, and feedback •Concerns about authenticity and ownership (unique voice and creative control), professional devaluation, quality limitations, and disclosure of AI-use and public perception against AI-assisted work	•Mixed but increasing positive attitudes, with differences based on experience level and disciplines •Positive reception as collaborative catalyst, source of inspiration, and exploring new movements/ sounds (surprises and glitches) •Concerns about authorship and copyright, authenticity and emotional depth, identity and privacy, job displacement, and skill preservation/ devaluation •Strong desire to maintain creative control, with preference for artist-centric development tools	•Mixed attitudes, ranging from enthusiasm to apprehension (experience-level and discipline) •Positive view on efficiency, rapid visualisation, optimisation for sustainability, new perspectives on spatial problems, including cities and buildings •Concerns about creative displacement, and AI's inability to understand aesthetic values, cultural significance, emotional impact of spaces, and design integrity and realism •Hesitancy in client-facing applications; viewed as unprofessional, more for internal use only
Integration patterns	•Workflow integration, with focus divergent phases such as early-stage conceptualisation and exploration •Accelerating/ automating processes and increasing productivity and efficiency •Hybrid approaches combined with traditional methods •Creative human-AI collaborator relationships rather than replacement	•Integration into three-stage iterative process of ideation, illumination, implementation •Genre-specific integration (poets using GenAI tools as material generators; fiction for productivity and ideation; screenwriters for development; essayist restricted for research and feedback) •Hybrid workflow and fluid relationships with AI as tool, collaborator, or muse •Complex workflows, with selective integration and decision points to maintain creative control	•Workflow integration for rapid ideation, iterative development, and prototyping •Integration into rehearsals, live/ real-time performances, and interactions/ feedback •Hybrid approaches using AI for initial material, AI-human alternation, parallel creation, and augmentation •Acts as "third collaborator" in creative process •Interdisciplinary collaborative practices, especially between artists and technologists	•Workflow integration, with heaviest use in early conceptual and representation phases. Limited in detailed design and construction documentation •Platform integration with established systems like Building Information Modelling (BIM) for documentation, code compliance, and stakeholder communication •Hybrid approach with traditional methods (sketching, modelling, manual techniques, CAD/BIM) to maintain creative control
Integration levels	•High: Visual and digital art; Graphics design; Concept art; Interaction design (VR/AR) •Moderate: UI/UX design; Industrial and fashion design; non-digital visual arts •Low/ Resistances: Traditional fine arts, specialised craft	•High: Content marketing; Editorial support; Research assistance •Moderate: Technical writing, commercial writing, genre fiction, experimental poetry •Low/resistance: Literary fiction; Personal essays (authentic voice is paramount); Traditional poetry	•High: Music (digital/electronic); Dance and choreography (experimental); Audio engineering •Moderate: Music and dance (contemporary); Theatrical technical production; Voice works and synthesis •Low/ Resistance: Dance (traditional); Dramatic theatre; Classical music	•Moderate-to-High: Architecture (general); Urban planning/ smart cities; Sustainable/Environmental design •Moderate: Interior design •Low-to-Moderate: Construction/3D concrete printing (3DCP) and robotic fabrication

Table 4 (continued)

Creative fields Categories	Visual Art and Design (Fine arts, digital arts, graphic design, visual communication)	Writing and Literature (Creative writing, literary arts, narrative design, poetry)	Performing Arts (Music, dance, theatre, performance art)	Environmental and Spatial Design (Architecture, interior design, landscape design, urban planning)
Domain-specific applications	•Digital art and graphic design such as logo creation, poster design, layout generation, UI/UX assistance •Style transfer, variation exploration, creating concept visualisations (in fashion design) •Interactive design for generating characters/ personas, scenarios, evaluation designs •Visuals and assets generation for games, films, and other media	•Screenwriting: Outline generation, episode titles, translation, transcription •Fiction writing: Scene scaffolding, dialogue insertion, world-building, plot development •Poetry: Material generation, metaphor suggestions, experimental text combination •Character development: interactive character conversations and visualisation, avatar-based exploration •Editing support: Tone, style shifts, conciseness	•Dance applications: Glitch generation, motion capture integration, real-time interaction for breaking movement patterns, improvisation prompts, choreographic ideation •Music applications: Melody/ harmony generation, style transfer, voice cloning, stem separation for composition, arrangement, mixing, mastering, collaborative creation •Theatre applications: Script generation, virtual performances, real-time adaptation for playwriting assistance, virtual character/actor creation, interactive performances	•Conceptual design for rapid visualisation, sketch-based image generation, concept-to-rendering conversion, design alternatives, enhancing client communication (at earlier stages only) •Design development, such as predesign/ space programming, environmental analysis, optimised design solutions, combinatory systems for iterative optimisation •Technical applications: automated construction documentation, code compliance, database management and retrieval, complex form generation •Optimisation in topology for structural efficiency, energy performance predictions, adaptive fabrication control
Impact on creative practice	•Workflow productivity and efficiency improvements from accelerated ideation and enhanced visualisation •Lower barriers for access to design tools •Shift from technical execution toward exploration, curation, and direction •Challenges around quality and control, aesthetics homogenisation risk, power imbalances between tool creators and end-users, and bias and cultural insensitivity •Uncertainty of ownership and concerns about training on copyrighted works	•Workflow productivity from rapid ideation, streamlined editing, and enhanced research •Bottom-up creativity and emergent discovery methods •Emergence of AI-native writing practices and skills (prompt engineering, AI evaluation) •Challenges around attribution and ownership, risk of creative homogenisation (repetitiveness, lack of nuance, predictable outcomes), quality concerns, context sensitivity, AI's inability to provide qualitative feedback on creativity	•Efficiency through rapid prototyping and ideation •Breaking creative blocks/habitual patterns and enabling new creative experimentations/ possibilities •Promoting human–human collaboration •Shifting artists' roles from creators to curators/producers •Challenges around authenticity (emotional depth), technical limitations, workflows adjustments, quality issues requiring significant human refinement, ethical dilemmas around copyright, authorship, and job displacement	•Design exploration with accelerated design iteration •Workflow efficiency via automating repetitive tasks, freeing time for conceptual and cultural work •Sustainability gains with optimisation •Accessibility via design visualisation and high-quality renderings •Smart integration for data-driven urban planning and real-time building performance optimisation •Shifting to curator and critic •Challenges in constructability gaps, cultural disconnect, control limitations, risk of design homogenisation, and 2D-biases

uncertainties while working to preserve authentic practice. Fourth, efficiency gains compete with concerns and values regarding cultural preservation. Finally, every field shares common concerns about authenticity, ownership, and both creative and job displacement (Loor Paredes 2025; Tan and Luhrs 2024; Vainikka et al. 2025) while also articulating field-specific anxieties.

While visual artists exhibit the most polarised responses based on technical expertise, Bomba et al. (2024) contended that visual artists may engage in an instrumental anthropomorphism when working with AI—psychologically assigning human-like qualities to the AI—and exploring "entangled authorship" as a form of artistic provocation. Fiction writers talk about GenAI's overly moralistic conclusions, its lack of nuance, subtext, and stylistic depth (Chakrabarty et al. 2024). In contrast, screenwriters often adopt a "functional stance" towards AI—a pragmatic acceptance for streamlining tasks (Vainikka et al. 2025). While performers worry about irreplaceable embodied presence (Hong et al. 2024), they also hold distinctly positive views toward computational unpredictability and "creative uncertainty", valuing these glitches as a generative force rather than failure (Loor Paredes 2025).

These attitudes contrast sharply with those of technical and precision-oriented professionals in environmental and spatial design. Architects' concerns extend beyond individual practice to broader cultural implications. They worry about the reinforcement of "ocularcentric" biases—an over-emphasis on visual aspects that neglect multi-sensory experience and experiential richness (e.g. tactile, auditory, spatial) of human-centred architecture (El Moussaoui 2025). Architects also express culturally specific concerns. For example, practitioners in developing countries fear "neocolonising" effects of AI dependency (Roncoroni et al. 2024), advocating for computational approaches that resist Western-centric AI systems that impose foreign aesthetic values and design approaches on local contexts. This cultural dimension positions architectural resistance as both aesthetic and political, raising potentially geopolitical questions of access, as practitioners with greater computational literacy tend to exhibit more positive attitudes. For instance, Tan and Luhrs (2024) show how digitally proficient architects perceive GenAI more as design partners—suggesting technical fluency influences acceptance more strongly in spatial design fields than in purely aesthetic disciplines.

4.2 Integration patterns

GenAI integration follows a clear pattern across creative fields: practitioners consistently position these tools in early-stage conceptualisation rather than final production. This preference for divergent over convergent phases appears to be a fundamental strategy for maintaining creative control while leveraging technological capabilities. Each field has developed distinct methodologies for this early-stage integration. Visual designers employ structured prompting for requirements elicitation (gathering user needs) and conceptual design, including persona and scenario generation (Muehlhaus and Steimle 2024). Writers follow ideation-illumination-implementation patterns, moving from idea generation through insight to execution (Wan et al. 2024). Performers utilise modular, structured movement vocabularies or compositional rules/elements ("choreographic grammars"), or sketches (Pataranutaporn et al. 2024). Architects create "closed-loop ecosystems" for iterative exploration (Mirwais et al. 2025). Despite these varied approaches, all share a common commitment to preserving human judgment and control in later-stage and final creative decisions.

This strategic positioning of GenAI necessitates hybrid working methods. Each domain develops hybrid methodologies that preserve certain traditional and manual practices alongside GenAI capabilities. The nature of integration varies significantly based on medium constraints among subfields. Visual artists such as digital fabricators use hybrid analogue–digital workarounds to resist standardisation and assert control (Roncoroni et al. 2024). For example, incorporating natural material processes as computational inputs, repurposing fabrication tools beyond their intended specifications, and interweaving traditional craft techniques with algorithmic design. Industrial designers leverage "obfuscation mechanisms" for legal "compliance" management and protection (Uusitalo et al. 2024), such as redacting sensitive elements before AI processing, substituting generic personas for proprietary data, and employing deliberate simplification strategies to navigate confidentiality boundaries. Writers develop genre-specific approaches: poets treating GenAI for raw material generation, fiction writers for scene scaffolding and productivity support, and essayists restricting use to research and feedback tasks (Guo et al. 2025). These practices reflect not only technical affordances but fundamentally different relationships to authorship, intellectual property, and the ontology of creative labour across disciplines.

Performing artists uniquely integrate computational elements into embodied practices. For example, pursuing anomalies through glitch-forward methodology (Wallace et al. 2024) that deliberately seek unpredictability and surprise that other domains might avoid. Their emphasis on kinesthetic dialogue and real-time interaction contrasts sharply with the more controlled, iterative approaches in visual design and spatial creative fields. Architecture demonstrates the most technically complex integration, merging GenAI with established systems like BIM, embedding "physics-informed simulation" (Mirwais et al. 2025) and programmable meshes (Roncoroni et al. 2024) that must satisfy real-world constraints more absent in other domains. While writers work with fluid linguistic possibilities and

performers with temporal expression, environmental and spatial designers must reconcile creative vision with structural reality—requiring deeper technical integration that extends beyond aesthetic or narrative concerns.

GenAI integration follows a concentric adoption pattern across creative fields, spreading from peripheral to core creative practices. This pattern begins with administrative and preparatory tasks—documentation, research, initial ideation—before approaching core creative works. The integration pattern follows what Thörn et al. (2020) described as "technological gradients"– zones of uneven adoption, even within single artistic practices.

4.3 Integration levels

The inverse relationship between creative proximity and integration levels reflects competing value systems: the closer a practice sits to traditional definitions of "pure" creativity, the lower its GenAI adoption. Fields closest to traditional notions of artistic creation—fine arts, literary fiction, classical music—defend authenticity and resist automation, while commercially oriented and technical domains— content marketing, technical documentation, commercial design—embrace higher adoption rates for efficiency and output. These integration levels reveal complex adoption hierarchies shaped by disciplinary histories and value systems. Jones et al. (2024) describe a "technological shock" cycle of encounter, critical pushback, adaptation, and modification that occurs when perceived threats to disciplinary identity emerge. Low-integration fields share specific characteristics: they prioritise "direct sensory engagement and texture exploration" as irreducible meaning-making processes (Hu et al. 2025). This suggests that embodied practice, rather than technical complexity, generates more substantial barriers to integration.

Furthermore, field-specific habits and traditions influence integration. Fields like electronic music and contemporary dance, with studio cultures shaped by decades of long-standing use of digital tools like audio workstations, motion-capture software, and other assistive software (Atanacković, 2024) exhibit algorithmic readiness. These creatives tend to have computational habituses that naturalise AI integration. In contrast, classical composition's resistance stems from traditional sheet music encoding intentional layers requiring human interpretation. Practitioners view this interpretive dimension as computationally irreducible (Mycka and Mańdziuk 2025), a sort of "notational sovereignty" where human judgment remains essential to translating symbols into expressive performance. Integration patterns within choreographies can emerge unexpectedly and spontaneously through swarm intelligence—interplays between observer and systems (Braccini et al. 2024)—an aesthetic distance beyond simply technological familiarity. Similarly, theatre adopts GenAI for pre-production (scriptwriting and design) while maintaining authenticity in live presentation, processes that require a performative presence, improvisation, and authenticity (Venugopal 2025).

The role of market and compliance pressures further complicates these adoption patterns. High-integration domains prioritise efficiency and output—content marketing, commercial design, technical documentation—while low-integration areas defend authenticity preservation (Guo et al. 2025). This explains why genre fiction writers adopt AI more readily than literary authors despite similar technical demands: market pressures and genre traditions can produce different tolerance levels for automation or productivity escalation thresholds. Smart city goals and sustainability mandates create adoption imperatives that traditional architectural practices need to comply with, hence the moderate-to-high integration in environmental and spatial design.

Emerging AI-native practices, as noted by Mirwais et al. (2025), are shaped by access to state-of-the-art AI models, exacerbating disparities between resource-rich and resource-constrained contexts. The relationship between open-source tool adoption and integration levels suggests that "black box" concerns influence practitioner choices (Roncoroni et al. 2024). Hence, algorithmic transparency features– open weights, training data and methodology disclosure, prompt and output logging, explainability tools, access and usage policies, governance and accountability– may strongly influence future integration trajectories across all creative fields.

4.4 Domain-specific applications

Domain-specific applications can be understood by conceptions of creativity, temporal relationships, and cultural epistemologies. First, each field's applications are expressions of discipline-specific ontologies. The visual arts employ divergent-convergent frameworks (Davis et al. 2023), treating creativity as structured navigation through possibility spaces within defined parameters, reflecting "medium-specificity", and constraint-based exploration that constitutes the creative act. Writing's human-preference alignment (Wang et al. 2024) emphasises disrupting authorial predictability through bottom-up and embodied character construction (Carrera et al. 2025; Qin et al. 2024), reflecting literature's imperative to generate unexpected connections and break narrative conventions. Music's "incongruous approaches" for creative friction, serendipity, and control (Bryan-Kinns et al. 2024), and architecture's co-evolutionary design model (Maher et al. 1996; Tan and Luhrs 2024) demonstrate how different fields embed distinct theories of creative agency into their GenAI applications.

Second, temporality creates another axis of differentiation in application design. Performing arts applications foreground embodied presence and real-time adaptation,

addressing performance's irreducible "now-ness" (Martin et al. 2024). The concept of "cross-temporal choreographic dialogue" (Hong et al. 2024) positions GenAI as a mediator between historical/ archived and real-time/ contemporary embodied ways of knowing. This temporal distance fundamentally alters the nature of creative agency itself (Bryan-Kinns et al. 2024). Environmental design applications must consider material permanence and decades-long impacts through life-cycle assessment metrics (Mirwais et al. 2025).

Third, cultural epistemologies shape implementation differently across fields. In domains such as industrial design, sculpture, and architecture, place-based knowledge, ecological thinking, and its related cultural and material goals and constraints – as "ethno-computation" (Roncoroni et al. 2024)– shape creative and technological implementations. Hence, proximity to material consequences fundamentally alters how fields imagine human-AI collaboration– sustainability imperatives can override purely aesthetic concerns.

These findings demonstrate differences in how each field positions the locus of creativity and its implications for domain-specific applications. Visual arts maintain creativity within individual vision guided by parametric possibilities, writing disrupts authorial control to enable emergent narratives, performing arts dissolve creator-audience boundaries through collaborative networks, while environmental design embeds creativity within ecological and cultural systems. Fields embody fundamentally different theories of creative agency, revealing how disciplinary ontologies shape technological possibilities in evolving dynamics of reciprocal determination.

4.5 Impact on creative practice

GenAI's impact on creative practice operates at two distinct levels: broader transformations affecting all fields and domain-specific transfigurations shaped by disciplinary values. Their responses diverge based on fundamental differences in how they conceptualise creativity, expertise, and cultural value.

At the broader level, creative fields are experiencing three fundamental shifts in the nature of creative labour. First, the transition from creation to curation or "meta-creation", moving practitioners from makers towards curators– professionals who direct, select, and refine within AI-assisted workflows rather than directly creating. Zhou and Lee (2024) describe the paradigmatic shift from mechanical skill to "ideation proficiency and refined artistic filtering". Alongside this phenomenon is an emerging tension between "delegates" and "managers" (Hu et al. 2025). Second is the emergence of new literacies. Writers develop prompt engineering as a new literary competency (Carrera et al. 2025), architects integrate prompt literacy into workflows (Onatayo et al. 2024), and the interdisciplinary calls emerge for "XAIxArts—explainable AI systems that support collaborative creativity (Hu et al. 2025). Third, the reconfiguration of expertise by GenAI's technical abilities increases the porousness and dissolution of skill hierarchies, further elevating conceptual and curatorial skills.

These broader changes manifest differently based on each field's relationship to embodiment and materiality. Performing arts experience "expertise inversion"—where technical proficiency can inhibit creative exploration as experts struggle to relinquish compositional control and adapt to the opaque generative nature of GenAI (Ford et al. 2024). This field employs "performance-as-testbed" approaches that capture somatic and affective responses (Martin et al. 2024), revealing impacts invisible to traditional metrics. The tension is between early-career artists' "digital nativity" and established practitioners' "embodied knowledge" (Loor Paredes 2025). This epistemic divide—between tacit, embodied knowing and explicit, codified instruction. In other words, GenAI finds more compatibility in domains where creativity is rule-based or representational (e.g., graphic design, architecture), and less so with those rooted in kinaesthetic intelligence, affective nuance, or improvisational flow.

While achieving measurable productivity gains, writing confronts an evaluation crisis with the growing difficulty in assessing the quality, originality, and value of AI-generated works. These include failing traditional metrics of value attribution based on time, skill, and notions of creativity, the mass production of derivative outputs, and issues of authorship and attribution. The "emergent creative discovery" approach—where ideas arise through nonlinear, associative exploration—(Carrera et al. 2025) is often constrained by LLMs' tendency towards coherence and cliché, which relies on superficial similarity that fails to capture the deeper contextual nuance needed in creative writing (Kim and Oh 2025). This pattern anticipates the bifurcation identified by Guo et al. (2025), that commercial writers embrace AI automation while literary and poetic traditions resist, seeking to preserve authenticity and craft. Fields with clear commercial/artistic divides may segment and split rather than integrate. In contrast, the augmentative paradigm in environmental and spatial design positions GenAI more as a "third collaborator" rather than a tool or replacement (Rane et al. 2023) without displacing human agency. However, the field's concern with algorithmic bias affecting vernacular practices (Saliu and Elezi 2025) and neocolonisation concerns (Roncoroni et al. 2024) through aesthetic standardisation reasserts how material consequences shape impact perception. GenAI's homogenising tendencies risk manifesting in built environments that encode cultural erasure.

Furthermore, power and ethical dynamics emerge differently across fields. Visual arts face "erasure by obscurity", where AI output volume overwhelms human creation (Jones

et al. 2024), while performing arts resist algorithmic mediation of their creative intuitions. Environmental design confronts data laundering through academic projects yielding private profits, suggesting that fields with more explicit public good mandates experience sharper ethical tensions. The call for "precautionary principles" in AI governance (Naqvi et al. 2025) manifests in field-specific forms—from preserving voice authenticity in writing to preventing cultural homogenisation in visual outputs. Resistance to quantification is witnessed through performing arts' privileging of practice-as-research paradigms (Hong et al. 2024), using thick description and reflexive thematic analysis to capture nuances of embodied co-creation. Writing attempts to develop evaluation frameworks that combine human judgment with AI analysis to better assess narrative quality, addressing current limitations in story evaluation methods. Environmental design focuses on measurable outcomes like material reduction in grappling with immeasurable cultural losses. These methodological differences reveal deeper epistemological divides about what constitutes valid knowledge in creative practice, suggesting that AI's impact extends beyond practice to challenge how fields understand and validate their creative processes fundamentally.

Beyond operational impacts, the ethical concerns of AI in perpetuating and amplifying biases embedded in training data can create feedback loops that entrench existing inequalities in creative representation with dire consequences. For example, Western art historical canons default to Eurocentric aesthetics—lighter skin tones, Western architectural styles, and Global North cultural markers—marginalising non-Western visual languages. Linguistic biases privilege standard American English and Western narrative structures and cultural flattening that discourage minority voices and experimental forms. Imposing inappropriate aesthetic and functional assumptions may paradoxically worsen sustainability by erasing vernacular building traditions adapted to local climates and cultures.

Current mitigation strategies remain inadequate. While some practitioners develop bias interruption workflows, counter-prompting to achieve diverse representation, or obfuscation techniques for privacy concerns, isolated efforts cannot address systemic training data problems. The burden of bias mitigation falls disproportionately on marginalised creatives who must constantly navigate and correct algorithmic assumptions. This suggests the need for field-specific bias auditing tools, public and situated initiatives for diverse training datasets, and educational and other imaginative interventions.

5 Conceptual frameworks

The findings and empirical evidence from the reviewed studies allow us to conceptualise creative professionals' attitudes in relation to GenAI through two primary dimensions:

i) *Knowledge codifiability* Ranging from tacit/embodied knowledge that resists formalisation to explicit/codifiable knowledge that can be systematised. The dimension draws on Polanyi's (2009) tacit-explicit knowledge spectrum, where embodied practices resist technological substitution because they encompass contextual judgments, sensory discriminations, and improvisational responses honed through sustained practice and remain relational and situated.
ii) *Output materiality* Ranges from physical/permanent artefacts to digital/ephemeral outputs. This dimension draws on the notion that physical artefacts are embedded in social relations, cultural meanings, temporal permanence, and place-based networks of significance (Benjamin 1969; Latour 2005) that digital outputs cannot replicate. This creates differential stakes for creative practices that must consider structural integrity, environmental impact, and cultural continuity.

Hence, high integration occurs where knowledge is codifiable and outputs are digital. In contrast, low integration occurs where knowledge is embodied and outputs are material (Fig. 2).

Three causal mechanisms explain our observed patterns. *Substitution threat* occurs when AI capabilities directly compete with core professional skills—for example, explaining writers' resistance to AI-generated prose, but acceptance for research tasks. *Complementary enhancement* emerges when AI augments rather than replaces human capabilities—seen in architects using AI for rapid visualisation while maintaining design control. *Identity preservation* drives selective adoption that protects professional identity—seen when performers appropriate AI for novel movement generation but reject it for emotional expression.

Adoption patterns reflect field-specific rules of art (Bourdieu 1993). Key integration factors that influenced creative professionals' attitudes and integration level towards GenAI are presented in Table 5, organised along primary resistance factors, primary adoption drivers, integration patterns, and value tensions.

These influencing factors help explain why attitudes and integration vary significantly across creative domains, subdomains, and media, and why individual practitioners may shift over time. They also explain how multiple attitudes can coexist within the same professional community, and how subjective elements influence perception and integration as much as objective commercial, compliance, and technical factors. More profoundly, professional experience and agency can modulate GenAI integration approaches. The framework can be valuable in extrapolating adoption patterns, developing integration strategies, planning educational initiatives, and designing support systems for AI integration.

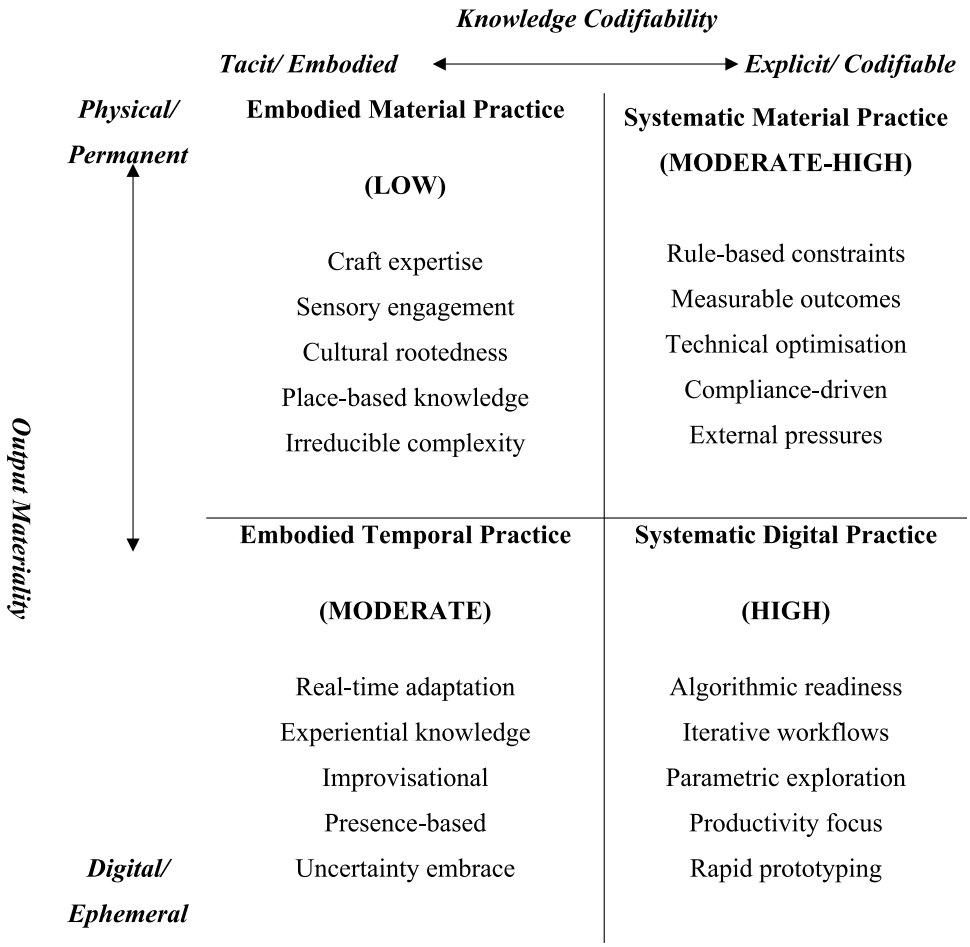

Fig. 2 Codifiability and materiality framework: GenAI adoption and resistance in creative practice

Critically, the findings may also reveal that much of what passes for creativity in professional contexts is sophisticated pattern-matching, recombination, or the formulaic nature of much of professional creative work– precisely what AI excels at. Perhaps some of these claims of embodied practices, tacit knowledge, and authenticity are rhetorical and function as professional protectionism. While practitioners cite fears of neocolonisation through AI, the already embedded colonial structures within creative industries and hegemony of Western-Northern artistic theories restrict the flow of cultural creative expressions, its power relations, and what is visible (R'boul 2022). The resistance might be less about preserving creativity than preserving outdated imaginaries of it.

6 Future research directions

Several significant research gaps emerge. Needless to say, there is a notable absence of longitudinal studies investigating the long-term impacts of AI adoption on creative skills, career trajectories, and professional identity. What will happen with traditional craft skills? How will AI-native creative professionals differ from those who learned traditional methods first? In terms of collaborative practices, how will AI capabilities restructure creative teams, mediate interpersonal and interdisciplinary dynamics, and reconfigure collective networks? What new creative disciplines are arising at field boundaries, and how does adoption in one field pressure adjacent fields? Moreover, concerns of neocolonialisation warrant comparative, cross-cultural, and Global South perspectives of creative epistemologies, issues of unequal access for global creative industries, and ways to protect Indigenous knowledge systems and other vernacular and traditional practices from algorithmic homogenisation.

While productivity impacts are noted, a deeper investigation into economic and market structure analysis is needed. How are value chain disruptions redistributing economic value across creative industries? Will we see creative labour market segmentations between AI-enhanced and "pure human" creatives? How are pricing models and compensation structures adapting to AI-assisted creations? Practical frameworks for attribution standards, consent mechanisms, and quality assurance protocols still need to be worked out. How do we assess quality when quantity is unlimited? Can we develop authenticity metrics for "genuine" human

Table 5 Integration factors for creative professionals

Primary resistance factors	
Tacit knowledge dependency	Practices that rely heavily on intuitive, experiential knowledge that cannot be easily articulated or codified show strong resistance to GenAI integration. This knowledge, accumulated through prolonged embodied practice and sensory engagement, represents an understanding that practitioners often describe as "feeling" rather than "knowing." The inability to translate these subtle judgments into computational parameters creates a fundamental barrier to meaningful GenAI assistance
Embodied practice centrality	Creative practices centred on bodily sensory engagement value the irreducible nature of corporeal experience, where meaning emerges through materials, spaces, or audience interactions that computational systems cannot adequately replicate. AI is positioned as fundamentally incompatible with the phenomenological aspects of physically-embodied creativity, such as touch, movement, and presence
Cultural significance	Practices deeply embedded in cultural traditions, vernacular knowledge, or place-based epistemologies resist AI adoption due to concerns about cultural erasure and homogenisation. These fields recognise that their work carries collective memory and indigenous ways of knowing that risk being flattened by algorithmic standardisation. The fear of "neocolonization" through technological dependency is particularly acute in contexts where cultural preservation is paramount
Expressive authenticity requirements	Fields where authenticity, unique voice, and individual expression are core values demonstrate strong resistance to GenAI tools perceived as producing generic outputs. These practices prioritise the irreplaceability of human intentionality, emotional depth, and personal narrative. The concern extends beyond mere originality to encompass questions of genuine human connection and the communicative value of struggle, imperfection, and lived experience in creative work
Primary adoption drivers	
Explicit process steps	Practices with clearly defined, sequential workflows and rule-based procedures readily adopt AI integration. These fields can easily map their creative processes onto computational frameworks, identifying specific tasks where AI can provide consistent, measurable improvements. The ability to articulate precise inputs, outputs, and quality metrics enables smooth integration without threatening core creative values
Internal productivity needs	Organisations and individual practitioners face mounting operational pressures from tightening budgets, accelerating deadlines, and expanding workloads that demand workflow optimisation regardless of aesthetic preferences. These internal pressures stem from structural changes in creative industries—clients expecting faster turnarounds, budgets shrinking while scope increases, compliance pressures, and the burnout to meet growing content demands. AI adoption becomes a pragmatic solution to prevent when human resources are stretched beyond sustainable limits
Digital nativity	Practices already centred in digital environments show affinities for AI integration, having established habitus through existing digital workflows. These fields have internalised algorithmic thinking as standardised practice and, through years of working with digital tools, have made the transition a logical evolution rather than a disruptive break. The pre-existing comfort with parametric manipulation and iterative digital processes reduces psychological barriers to adoption
Market positioning pressures	GenAI adoption by competitors creates external forces that compel defensive integration to maintain market viability, regardless of creative philosophy. This pressure manifests as clients explicitly requesting AI-enhanced services, competitors undercutting traditional pricing and the perception risk of appearing technologically obsolete. Unlike internal productivity needs, this driver operates through fear of professional extinction—practitioners report feeling forced to adopt AI not to improve their practice but to remain viable in rapidly shifting markets
Integration patterns	
Peripheral to core adoption	AI tools consistently enter creative practices through non-creative support tasks before gradually approaching core creative activities. Initial adoption focuses on documentation, research, administrative tasks, and preliminary ideation, creating comfort and familiarity before practitioners consider AI for primary creative work. This concentric pattern allows practitioners to maintain a sense of control while exploring AI capabilities, establishing trust through incremental exposure
Tool-collaborator- director	The relationship with GenAI evolves through distinct stages as practitioners develop sophistication in their integration approaches. Initial "tool" usage treats AI as a passive instrument for specific tasks, evolving into "collaborator" relationships where AI contributes creative input, ultimately reaching "director" relationships where practitioners orchestrate these systems to achieve complex creative visions. This progression reflects growing comfort with relinquishing direct control in favour of meta-creative oversight
Generation-curation shift	Integration fundamentally transforms the creative role from primary generator of content to curator and refiner of AI-generated possibilities. Practitioners report spending less time on initial creation and more time on selection, combination, and refinement of AI outputs. This shift requires developing new skills in prompt engineering, aesthetic judgment, and quality assessment, representing a fundamental change in what constitutes creative expertise

Table 5 (continued)

Primary resistance factors	
Meta-skill transition	Traditional technical skills become less valuable than higher-order abilities to conceptualise, evaluate, and direct AI systems. Practitioners are developing "meta-skills" including systems thinking, creative direction, and the ability to translate abstract creative visions into computational parameters. This transition creates generational divides within fields, as established practitioners with deep technical skills may find their expertise devalued while younger practitioners with strong conceptual but weak technical skills might gain an advantage
Value tensions	
Productivity-Meaning balance	GenAI integration decision requires practitioners to actively negotiate between enhanced output and preserving meaningful creative engagements. This ongoing calibration occurs at multiple scales—from individual project choices to career-long trajectories—as creatives determine when efficiency serves their goals versus when it undermines the very purpose of their work. The balance point shifts based on numerous factors, including project stakes, creative identity, relationship to process, and specific task characteristics, creating a complex landscape where practitioners must continuously reassess their technological boundaries against their creative values
Volume-Distinction trade-off	AI's capacity for infinite generation creates a paradox where increased creative possibilities may lead to decreased creative distinction, forcing practitioners to choose between quantity and memorability. This trade-off extends beyond simple output volume to encompass questions of creative identity in saturated markets—how to maintain recognisable style when AI can instantly generate thousands of variations. New strategies for differentiation are needed that go beyond technical execution to focus on conceptual uniqueness, curatorial vision, or hybrid approaches that GenAI cannot easily replicate
Precision-Serendipity spectrum	Integration requires practitioners to consciously position themselves along a continuum between maintaining exact technical control and embracing computational unpredictability as a creative resource. This spectrum represents a dynamic navigation where different projects, phases, or even moments within creation may call for other positions. The skills and judgement to recognise when to exercise precise control versus when to allow AI-generated surprises to redirect creative exploration can enable fluency in moving between these modes
Individual-Collective intelligence	AI's training on vast datasets raises questions about individual creative ownership versus collective cultural patrimony. The tension between personal creative vision and AI's aggregation of collective human creativity challenges traditional notions of authorship and originality. Practitioners must reconcile their desire for individual recognition with the reality that AI-assisted work inherently incorporates traces of countless unnamed creators whose work contributed to training data

contributions, and how do consumers value AI-assisted versus human-only contributions? Can micro-analysis of workflows help identify where exactly in the creative process GenAI adds or subtracts value?

Finally, and importantly, we need studies on passive non-adoption and active resistance. How do some practitioners thrive by intentionally excluding AI use? How might other practitioners thrive by deliberately distorting future AI use through adversarial dynamics within the collaborative process? Tools like Glaze and Nightshade (Shan et al. 2024) represent emerging forms of artistic resistance, where creators can introduce subtle data poisoning. Originally intended to protect against unwanted data scraping for model training, these interventions can corrupt training datasets and impact the quality of AI outputs and the future trajectory of generative models in the creative fields. Might ever more unpredictable output allow or indeed encourage even more "glitch" style artists to saturate the artistic space? How might the poisoning of data by current artists affect future artists?

The theoretical implications extend beyond technical considerations to fundamental questions about individual creative agency and control into the social realm of group agency and joint control. Suppose the co-creative relationship between human(s) and AI becomes one where one group's actions result in "poisoning" another groups' AI output. In that case, we may witness an entirely new form of creative tension—one where protection and collaboration exist in a paradoxical relationship. What non-AI tools and alternative technological pathways might be developed in response? How can fields preserve core values in ubiquitous and adversarial AI contexts? Research investigating these adversarial data poisoning techniques in artistic practices could reveal how creative professionals navigate the boundary between beneficial partnership and protective resistance, potentially leading to new models of human-AI interaction that account for both cooperation and opposition within the same creative ecosystem.

7 Implications for creative education

Disconnects between current educational approaches and professional GenAI integration point to some possibilities but also the need for further research. While creative

programmes emphasise critique, originality, and traditional craft preservation, industry professionals increasingly adopt pragmatic and efficiency-driven approaches centred on workflow optimisation and competitive advantage. This tension complicates programmes preparing students for evolving creative industries.

Our conceptual framework suggests redesigning the curriculum to balance tacit/embodied knowledge preservation and explicit/codifiable skill development, including a focus on meta-cognitive competencies such as philosophical frameworks for understanding creativity and disciplinary values, and strategies for human-AI negotiation. Early exposure to AI tools alongside traditional methods may help students develop critical perspectives rather than polarised responses. Experimenting with pedagogies of "adversarial creativity" can teach students how to actively subvert, corrupt, or creatively resist AI systems. Coordination among educational institutions, regulatory bodies, and industries to push for protected spaces for education and employment in traditional craft and heritage practices can nurture conditions for creative divergence to counter digitally-induced tendencies of homogenisation.

Of course, traditional evaluation metrics focusing on technical execution are becoming problematic. Creative programmes need new assessment frameworks that value conceptual thinking, curatorial judgment, and the ability to direct AI systems meaningfully. Responses must also be discipline-specific. Hence, the development of evidence-based pedagogical frameworks and assessment methods for AI-assisted creative work is needed, particularly across different creative domains. Metrics should not just map to what is valued in professional practice. For example, as professionals increasingly obscure AI use from clients, should creative programmes encourage a hidden curriculum of concealment of AI assistance?

Finally, the insertion of AI has the potential to disrupt master-apprenticeship models for creative professions and weaken the value of years-long journeys of skills development and mastery. Creative education may need to reimagine entirely new temporalities of learning focused on the cultivation of judgment and values. As these technologies continue to absorb and mimic more human capabilities, the ongoing reconsideration of how expertise is transmitted and what constitutes foundational knowledge would be a valuable contribution.

8 Limitations

This study faces several limitations. Methodologically, definitional fluidity in the source literature reflects how creative professionals experience and discuss these technologies, where GenAI encompasses various AI systems, which limits analytical specificity. Additionally, the reviewed studies are predominantly small-scale, short-term, and qualitative, relying on self-reported data without standardised assessment metrics for AI-assisted creative work. The cross-sectional approach captures temporal snapshots without revealing how attitudes evolve or resistance strategies develop over time. Participant representation skews toward Western/ Northern, digitally-connected practitioners, potentially missing diverse adoption patterns in the Global South and different cultural contexts. Our database selection, coding processes, and English-language restriction, given resource and expertise constraints, likely excluded relevant studies from non-Anglophone contexts.

Moreover, unclear and blurred distinctions between professional and amateur practitioners may obscure varied challenges across expertise levels. Excluding studies of more "amateur" and student creative practitioners—relatively more open to new technologies—limited some important perspectives. Technical limitations include rapid GenAI advancement, which may make findings quickly dated, and insufficient attention to infrastructure requirements and accessibility barriers. The categorical separation of creative fields, though analytically sound, may miss increasingly hybrid practices and cross-disciplinary pollination. Finally, creative industries share substantial insights through gray literature—trade magazines, institutional websites, and professional organisations—much of which remains outside our scholarly assessment scope, potentially excluding critical industry perspectives and emerging practices not yet in academic discourse.

9 Conclusion

Our scoping review of GenAI perception and integration of creative professionals across four creative domains—visual arts and design, writing and literary arts, performing arts, and environmental and spatial design– illustrates a complex landscape of professional adaptation characterised by field-specific tensions, strategic resistance, and pragmatic accommodation. Rather than a straightforward narrative of technological and market disruption, we find patterns of selective integration shaped by disciplinary epistemologies, embodied practices, cultural values, and ethical concerns—encapsulated by our conceptual models around knowledge codifiability and output materiality.

The review makes three critical contributions. First, it provides the most comprehensive mapping to date of GenAI applications across creative disciplines, identifying broader patterns of peripheral-to-core adoption and the transformation from creation to meta-creative roles. Second, our conceptual framework offers an analytical tool for understanding adoption patterns and designing field-appropriate integration

strategies, with applications for creative educators developing AI-integrated curricula and practitioners navigating technological change. Third, we identify urgent research gaps, particularly around longitudinal impacts on creative skills, the emergence of AI-native practices, and risks of cultural homogenisation—especially acute for Global South practitioners.

As creative professionals actively negotiate this technological suffusion, this review captures tensions between productivity and meaning, volume and distinction, precision and serendipity, and how notions of human creativity are evolving alongside AI advancement. The boundaries between what we consider human and machines are increasingly blurred, with advancements in physical, embodied, and contextual AI systems that will undoubtedly lead to further crises and revisions for how we conceive creativity.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s00146-025-02667-2.

Author contribution JT: Conceptualisation (lead); funding acquisition (lead); writing—original draft (lead); methodology; data curation (equal); formal analysis (lead); visualisation; writing—review and editing. CL: writing—original draft; methodology (lead); data curation; visualisation, writing—review and editing. CN: conceptualisation; writing—original draft; data curation, writing—review and editing. AW: methodology; data curation; writing—review and editing.

Data availability No datasets were generated or analysed during the current study.

Declarations

Conflict of interest The authors declare no competing interests.

References

Arksey H, O'Malley L (2005) Scoping studies: towards a methodological framework. Int J Soc Res Methodol 8(1):19–32. https://doi.org/10.1080/1364557032000119616

Atanacković D (2024) Artificial intelligence: duality in applications of generative AI and assistive AI in music. INSAM J Contemp Music Art Technol 12:12–31. https://doi.org/10.51191/issn.2637-1898.2024.7.12.12

Beaty RE (2020) The creative brain. Cerebrum Dana Forum Brain Science, 2020, cer-02–20.

Benjamin W (1969) The work of art in the age of mechanical reproduction (H. Zohn, Trans.). In: Arendt H (eds) Illuminations. Schocken Books, pp 217–251

Bomba F, Menéndez-Blanco M, Grigis P, Cremaschi M, De Angeli A (2024) The choreographer-performer continuum: a diffraction tool to illuminate authorship in more than human co-performances. ACM Trans Comp Hum Inter 31(6):1–23. https://doi.org/10.1145/3689040

Bourdieu P (1993) The field of cultural production: Essays on art and literature. Columbia University Press, Columbia

Braccini M, Filippo AD, Lombardi M, Milano M (2024) Swarm intelligence: a novel and unconventional approach to dance choreography creation. In: Proceedings of the 3rd Workshop on Artificial Intelligence and Creativity Co-Located with 27th European Conference on Artificial Intelligence (ECAI 2024), pp 162–172

Brandt A (2021) Defining creativity: a view from the arts. Creat Res J 33(2):81–95. https://doi.org/10.1080/10400419.2020.1855905

Bryan-Kinns N, Noel-Hirst A, Ford C (2024) Using incongruous genres to explore music making with AI generated content. In: Proceedings of the 16th Conference on Creativity and Cognition, pp 229–240. https://doi.org/10.1145/3635636.3656198

Carrera D, Zhao Z, Thomas A, Wigdor D (2025) Nabokov's cards: an LLM-assisted co-writing system to support bottom-up creative writing. In: Proceedings of the 2025 Conference on Creativity and Cognition, pp 546–559. https://doi.org/10.1145/3698061.372691

Chakrabarty T, Laban P, Agarwal D, Muresan S, Wu CS (2024) Art or artifice? Large language models and the false promise of creativity. In: Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems, pp 1–34. https://doi.org/10.1145/3613904.3642731

Dake DM (1991) The visual definition of visual creativity. J vis Literacy 11(1):100–104. https://doi.org/10.1080/23796529.1991.11674461

Davis RL, Wambsganss T, Jiang W, Kim KG, Käser T, Dillenbourg P (2023) Fashioning the future: unlocking the creative potential of deep generative models for design space exploration. In: Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems, pp 1–9. https://doi.org/10.1145/3544549.3585644

El Moussaoui M (2025) Architectural practice process and artificial intelligence—an evolving practice. Open Eng 15(1):20240098. https://doi.org/10.1515/eng-2024-0098

Fathoni AFCA (2023) Leveraging generative AI solutions in art and design education: Bridging sustainable creativity and fostering academic integrity for innovative society. E3S Web Confer. https://doi.org/10.1051/e3sconf/202342601102

Ford C, Noel-Hirst A, Cardinale S, Loth J, Sarmento P, Wilson E, Wolstanholme L, Worrall K, Bryan-Kinns N (2024) Reflection across AI-based music composition. In: Proceedings of the 16th Conference on Creativity and Cognition, pp 398–412. https://doi.org/10.1145/3635636.3656185

Godart F, Seong S, Phillips DJ (2020) The sociology of creativity: elements, structures, and audiences. Annu Rev Sociol 46(1):489–510. https://doi.org/10.1146/annurev-soc-121919-054833

Green AE, Beaty RE, Kenett YN, Kaufman JC (2024) The process definition of creativity. Creat Res J 36(3):544–572. https://doi.org/10.1080/10400419.2023.2254573

Guo A, Sathyanarayanan S, Wang L, Heer J, Zhang AX (2025) From pen to prompt: how creative writers integrate AI into their writing practice. In: Proceedings of the 2025 Conference on Creativity and Cognition, pp 527–545. https://doi.org/10.1145/3698061.3726910

Haase J, Pokutta S (2024) Human-AI co-creativity: exploring synergies across levels of creative collaboration (Version 2). https://doi.org/10.48550/ARXIV.2411.12527

Hong HT, Teles de Castro e Costa I, Tanguy A, Kheddar A, Chen CY (2024) A cross-temporal robotic dance performance: dancing

with a humanoid robot and artificial life. In: ISEA 2024—29th International Symposium on Electronic Art. https://hal.science/hal-04755684

Hu X, Xing Y, Cai X, Zhao Y, Cook M, Borgo R, Neate T (2025) Designing interactions with generative AI for art and creativity: A systematic review and taxonomy. In: Proceedings of the 2025 ACM Designing Interactive Systems Conference, pp 1126–1155. https://doi.org/10.1145/3715336.3735843

Jones CA, Gupta H, Ritchie M (2024) Visual artists, technological shock, and generative AI. https://doi.org/10.21428/e4baedd9.b4f754fd

Karimi P, Rezwana J, Siddiqui S, Maher ML, Dehbozorgi N (2020) Creative sketching partner: an analysis of human-AI co-creativity. In: Proceedings of the 25th International Conference on Intelligent User Interfaces, pp 221–230. https://doi.org/10.1145/3377325.3377522

Keith S (2024) Academic integrity in creative arts and media. In: Bretag T (ed) Second handbook of academic integrity. Springer Nature Switzerland, pp 523–538

Kim S, Oh D (2025) Evaluating creativity: can LLMs be good evaluators in creative writing tasks? Appl Sci 15(6):2971. https://doi.org/10.3390/app15062971

Latour B (2005) Reassembling the social: an introduction to actor-network-theory. Oxford University Press. https://doi.org/10.1093/oso/9780199256044.001.0001

Liberati A, Altman DG, Tetzlaff J, Mulrow C, Gøtzsche PC, Ioannidis JPA, Clarke M, Devereaux PJ, Kleijnen J, Moher D (2009) The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. PLoS Med 6(7):e1000100. https://doi.org/10.1371/journal.pmed.1000100

Liu L (2024) Academic integrity in digital media art education in the AI era. J High Vocat Educ 1(2):15–21. https://doi.org/10.62517/jhve.202416203

Loor Paredes M (2025) Emerging paradigms in music technology: valuing mistakes, glitches and uncertainty in the age of generative AI and automation. AI Soc. https://doi.org/10.1007/s00146-025-02209-w

Maher ML, Poon J, Boulanger S (1996) Formalising design exploration as co-evolution. In: Gero JS, Sudweeks F (eds) Advances in formal design methods for CAD. Springer, Berlin, pp 3–30. https://doi.org/10.1007/978-0-387-34925-1_1

Martin PJ, Sicchio K, Chang G, Dietzel C (2024) A prototype platform for live human-robot choreography. In: Proceedings of the 9th International Conference on Movement and Computing, pp 1–8. https://doi.org/10.1145/3658852.3659071

Mirwais M, Adeel M, Rahmani AW, Rahmani AN (2025) Ai-driven generative design for next-generation 3D concrete printing in architecture: state of the art. Eur J Appl Sci Eng Technol 3(2):225–232. https://doi.org/10.59324/ejaset.2025.3(2).19

Muehlhaus M, Steimle J (2024) Interaction design with generative AI: an empirical study of emerging strategies across the four phases of design. https://doi.org/10.48550/arXiv.2411.02662

Mycka J, Mańdziuk J (2025) Artificial intelligence in music: recent trends and challenges. Neural Comput Appl 37(2):801–839. https://doi.org/10.1007/s00521-024-10555-x

Naqvi SM, He R, Kaur H (2025) Catalyst for creativity or a hollow trend?: A cross-level perspective on the role of generative AI in design. In: Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems, pp 1–16. https://doi.org/10.1145/3706598.3713233

Novak-Leonard JL, Skaggs R, Robinson M (2022) Innovative and artistic: conceptions of creativity among the American public. Poetics 90:101599. https://doi.org/10.1016/j.poetic.2021.101599

Onatayo D, Onososen A, Oyediran AO, Oyediran H, Arowoiya V, Onatayo E (2024) Generative AI applications in architecture, engineering, and construction: trends, implications for practice, education and imperatives for upskilling—a review. Architecture 4(4):877–902. https://doi.org/10.3390/architecture4040046

Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, Shamseer L, Tetzlaff JM, Akl EA, Brennan SE, Chou R, Glanville J, Grimshaw JM, Hróbjartsson A, Lalu MM, Li T, Loder EW, Mayo-Wilson E, McDonald S et al (2021) The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. https://doi.org/10.1136/bmj.n71

Pataranutaporn P, Mano P, Bhongse-Tong P, Chongchadklang T, Archiwaranguprok C, Hantrakul L, Eaimsa-ard J, Maes P, Klunchun P (2024) Human-AI co-dancing: Evolving cultural heritage through collaborative choreography with generative virtual characters. In: Proceedings of the 9th International Conference on Movement and Computing, pp 1–10. https://doi.org/10.1145/3658852.3661317

Pelowski M, Markey PS, Forster M, Gerger G, Leder H (2017) Move me, astonish me… delight my eyes and brain: the Vienna integrated model of top-down and bottom-up processes in art perception (VIMAP) and corresponding affective, evaluative, and neurophysiological correlates. Phys Life Rev 21:80–125. https://doi.org/10.1016/j.plrev.2017.02.003

Polanyi M (2009) *The tacit dimension* (Reproduction en fac-similé). University of Chicago Press

Puryear JS, Lamb KN (2020) Defining creativity: how far have we come since Plucker, Beghetto, and Dow? Creat Res J 32(3):206–214. https://doi.org/10.1080/10400419.2020.1821552

Qian P, Hu Q (2024) AI-based English writing quality assessment model and its applications. In: Proceedings of the 5th International Conference on Computer Information and Big Data Applications, pp 809–813. https://doi.org/10.1145/3671151.3671293

Qin HX, Jin S, Gao Z, Fan M, Hui P (2024) CharacterMeet: supporting creative writers' entire story character construction processes through conversation with LLM-powered chatbot avatars. In: Proceedings of the CHI Conference on Human Factors in Computing Systems, pp 1–19. https://doi.org/10.1145/3613904.3642105

R'boul H (2022) Communicating creativities: interculturality, postcoloniality and power relations. Third World Q 43(6):1478–1494. https://doi.org/10.1080/01436597.2022.2059462

Rane NL, Choudhary SP, Rane J (2023) Integrating ChatGPT, Bard, and leading-edge generative artificial intelligence in architectural design and engineering: applications, framework, and challenges. Int J Archit Plann 3(2):92–124. https://doi.org/10.51483/IJARP.3.2.2023.92-124

Roncoroni UL, Crousse De Vallongue V, Centurion Bolaños O (2024) Computational creativity issues in generative design and digital fabrication of complex 3D meshes. Int J Archit Comput 23(2):582–600. https://doi.org/10.1177/14780771241260850

Runco MA (2023) AI can only produce artificial creativity. J Creat 33(3):100063. https://doi.org/10.1016/j.yjoc.2023.100063

Saliu N, Elezi K (2025) The transformative integration of artificial intelligence in architectural practice: from generative design to sustainable building performance. Eur Chronicle 10(1):66–73. https://doi.org/10.59214/euch/1.2025.66

Shan S, Ding W, Passananti J, Wu S, Zheng H, Zhao BY (2024) Nightshade: prompt-specific poisoning attacks on text-to-image generative models. IEEE Sympos Secur Privacy (SP) 2024:807–825. https://doi.org/10.1109/SP54263.2024.00207

Sternberg RJ, Lubart TI (1999) The concept of creativity: prospects and paradigms. Handbook of creativity. Cambridge University Press, Cambridge, pp 3–15

Tan L, Luhrs M (2024) Using generative AI Midjourney to enhance divergent and convergent thinking in an architect's creative design process. Des J 27(4):677–699. https://doi.org/10.1080/14606925.2024.2353479

Thörn O, Knudsen P, Saffiotti A (2020) Human-robot artistic co-creation: a study in improvised robot dance. In: 2020 29th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN), pp 845–850. https://doi.org/10.1109/RO-MAN47096.2020.9223446

Tricco A, Lillie E, Zarin W, O'Brien K, Colquhoun H, Levac D, Moher D, Peters M, Horsley T, Weeks L, Hempel S et al (2018) PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. Ann Internal Med 169(7):467–473. https://doi.org/10.7326/M18-0850

Uusitalo S, Salovaara A, Jokela T, Salmimaa M (2024) "Clay to play with": generative AI tools in UX and industrial design practice. Design Interact Syst Confer DOI. https://doi.org/10.1145/3643834.3661624

Vainikka E, Soronen A, Kallio S-M (2025) Is prompt engineering the future of screenwriting? Views of professional screenwriters and commissioners about the impact of AI technologies on their profession. Crit Stud Telev 20(1):54–72. https://doi.org/10.1177/17496020241269277

Venugopal RK (2025) Theatre in the digital age: Modern performance challenges and the influence of AI. Acad Int J Multidiscip Res 3(3):1367–1376. https://doi.org/10.5281/ZENODO.15225346

Walia C (2019) A dynamic definition of creativity. Creat Res J 31(3):237–247. https://doi.org/10.1080/10400419.2019.1641787

Wallace B, Nymoen K, Torresen J, Martin CP (2024) Breaking from realism: exploring the potential of glitch in AI-generated dance. Digit Creat 35(2):125–142. https://doi.org/10.1080/14626268.2024.2327006

Wan Q, Hu S, Zhang Y, Wang P, Wen B, Lu Z (2024) 'It felt like having a second mind': Investigating human-AI co-creativity in prewriting with large language models. Proc ACM Hum-Comput Interact 8(CSCW1):84:1–84:26. https://doi.org/10.1145/3637361

Wang T, Chen J, Jia Q, Wang S, Fang R, Wang H, Gao Z, Xie C, Xu C, Dai J, Liu Y, Wu J, Ding S, Li L, Huang Z, Deng X, Yu T, Ma G, Xiao H et al (2024) Weaver: foundation models for creative writing (No. arXiv:2401.17268). https://doi.org/10.48550/arXiv.2401.17268

Wingström R, Hautala J, Lundman R (2022) Redefining creativity in the era of AI? Perspectives of computer scientists and new media artists. Creat Res J 36(2):177–193. https://doi.org/10.1080/10400419.2022.2107850

Zhou E, Lee D (2024) Generative artificial intelligence, human creativity, and art. PNAS Nexus 3(3):pgae052. https://doi.org/10.1093/pnasnexus/pgae052

Tsao J, Nogues C (2024) Beyond the author: Artificial intelligence, creative writing and intellectual emancipation. Poetics, 102, 101865. https://doi.org/10.1016/j.poetic.2024.101865