Generative AI and the Role of Educators in the Creative Arts

Editorial for Part 2 of AI and Possible Futures for the Arts

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Educators have always had a hand in our future; influencing and nurturing those who will make that future. There is no doubt that AI will also have an influence, but AI is still in its formative years. These early years are precious because they allow experimentation before AI becomes entrenched in our society.

The three projects in this second part of the AI issue of *Tradition-Innovations in Art, Design, and Media Higher Education* are focused on leading that experimentation. The brave educators who submitted these projects have not built walls around their classrooms, hoping the traditional methods of art & design education will thrive within while blocking new developments out. Instead, they have allowed themselves to be vulnerable by testing generative AI alongside their students, simultaneously guiding their experiments and building a shared framework for understanding.

And how is that experimentation best conducted? I would argue that, in the case of generative AI, it is through creative use. As Sam Keene and Benjamin Aranda conclude in their article, *Generative Algorithms for Art and Architecture: A collaborative interdisciplinary course structure nurturing transdisciplinary GenAI-supported design*, "creative applications of AI reveal much about the technology that would be unobserved otherwise." In other words, creative approaches to using generative AI reveal the limitations and biases built into these systems, just as artists have used creative expression to reveal biases in the systems of society itself.

Philosopher Andrew Feenberg and his co-authors Schmidt-Gleim, and Pérez López (Schmidt-Gleim, et al., 2019) argue that modern societies distance skilled experts who have the formal knowledge to develop technical systems from users who have an informal, but no less valid knowledge, based on interacting with those systems. The user knowledge that students gain through creative use of technical systems - here specifically generative AI - is no less valid than the knowledge of the developers. In fact, creative uses can reveal specific limitations. One example, which students participating in Keene and Aranda's course discovered, is that AI more accurately identifies the age, gender, and emotional state of white males while misgendering or misidentifying others. These results can be interpreted as pointing to a biased algorithm, limited data set, or both.

In Teaching Creatives to be Provocateurs: Establishing a Digital Humanist Approach for

<u>Tradition-Innovations in Art, Design, and Media Higher Education</u>, Volume 1, Issue 1 2023 Special Issue on Artificial Intelligence and Possible Future for the Arts.

Generative AI in the Classroom, Joshua A. Fisher writes that "choosing, accepting, and rejecting different prompts can help students understand the underlying computational models generating the content." Students become experts in the technology they are working with when putting it to creative use; finding bugs, limitations, and implementing hacks that developers never considered. As educators, we should encourage students to critically examine AI-generated outputs, rather than accepting them as presented; asking what assumptions have been made, why they have been made, and what conclusions can be drawn from the way an AI has responded to a specific prompt. In this way, students who act as provocateurs learn to work with AI while exerting their own controls over the creative process and its outputs.

With critical and iterative use, AI becomes part of the creative process, reflective of a series of choices which, taken together, become both research and production. These choices integrate conscious decision-making into the generative process and accomplish something which AI cannot.

While AI can replicate our artifacts, it cannot live our lives. AI voice generators and deep fake technologies are increasingly difficult to differentiate from the "real thing." Students who would make their living in the fields of art and design need to be aware of their competition. This competition now includes AI voice generation. Adam Paul states in his podcast essay *The Voice Actor and their Double*: "Since the ancient Greeks discovered theater and Thespis played someone other than themselves, audiences have needed performers to perform a uniquely human task: tap into our shared experiences and redefine them for the greater good." It is important for educators to ask students to consider what sets them apart from their robotic competitors. Are AI voice generators or deep fake impersonations a true substitute for human performers, or are they incapable of contextualizing the human experience?

There is a fear, and it is a legitimate one, that generative AI, which has been trained on artists' intellectual property, will then cut creators out of their economic niche. Digital artist Greg Rutkowski, whose name is a popular prompt for DALL-E, Midjourney, and Stable Diffusion, has said that AI has the potential to put him out of a job. The large amount of high-resolution works, which he has posted on the ArtStation website, and the fact that each work has alt text, has made it easy for AI models to data mine his work (Heikkilä, 2022). With this data, image generators recreate Rutkowski's style with a nearly flawless accuracy.

The use of AI carries a moral weight. But instead of banning it outright in the classroom, the ethical dilemma that its use presents is an opportunity to engage students with critical thinking and discussion.

Students at my university, the Willem de Kooning Academy, are using Al in a variety of ways. Simple use scenarios include asking Chat GPT to create a prompt for an illustration, or using Al-enhanced editing tools in Adobe Premiere Pro. More complex investigations of Al's strengths and weaknesses as a creative collaborator can be seen in the graduation work of Christiaan Grit, whose project, *The I in Al*, is an experiment in "exploring the realm of artificial

<u>Tradition-Innovations in Art, Design, and Media Higher Education</u>, Volume 1, Issue 1 2023 Special Issue on Artificial Intelligence and Possible Future for the Arts. intelligence (AI) and the intricacies of self-image" (Grit, 2023). In the project, Grit asked AI to create self-representative images, and like the students of Keene and Aranda, revealed flaws of perception related to bias, ethics, and society were revealed.

As students apply AI to their creative processes and outputs across subjects from audiovisual design to fine arts, educators in these areas can help them contextualize their processes. We can do this by exploring interdisciplinary collaborations which pair technical and creative thinkers, as in the work of Keene and Aranda. We can ask students to critique or expand upon AI outputs, rather than merely accepting them at face value, as Fisher recommends in his piece. And as Paul advises, we can use AI as a tool for learning to distinguish and delineate artificially generated content from human lived experience. Humanity has always pushed at the boundaries of what is possible, just as the educators, who have presented their work here, push at the boundaries of what we think of as autonomy, or collaboration, or creative practice.

Working from this perspective, I will keep experimenting with new tools, including AI, in my teaching. I invite you to do the same. I look forward to learning from you.

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