

Introduction: Navigating Generative AI in Turbulent Technological Seas

An Introduction to this Edition's Feature Section, by The New Real's Editor, Gemma Milne.



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The simple fact that it's uncool to have an AI-enhanced profile picture now says a lot about the state of generative AI.

No longer a technology hinted at by AI evangelists or confined to particular techno-explorative corners of the internet, generative AI is now a staple of popular culture and front-page news. From the hilarity of the pope in a puffer jacket¹, to huge concerns about an algorithmically-driven 'fog of war'² in the Israel-Hamas conflict, generative AI has breached the dinner-table conversations, anecdotes and fully-fledged arguments.

And, of course, there are trends in what's fashionable in the everyday use of generative AI. Using ChatGPT to find that bug in your code you've been searching for for hours? Hot. Changing your profile photo to that Midjourney or Lensa superhero-esque version of you? Absolutely not. Culture has well and truly captured this technology.

Thinking about things economically, though, what does this look like? It looks like University of Cambridge researchers advising government³ that the “UK should pursue becoming a global leader in applying generative AI to the economy”. It looks like McKinsey claiming that⁴ “generative AI features stand to add up to \$4.4 trillion to the global economy—annually”. It looks like Google Deepmind evaluating the social safety⁵ of these systems (which they helped create), in a bid to ensure responsible usage⁶ of a technology already arguably beyond current modes of control.

This broad cultural exposure to, mass adoption of and political and industrial interest in generative AI means now is the time when it’s particularly crucial to empower and support artists in their work exploring, critiquing, democratising and building those key uses, narratives and interactive artefacts surrounding the technology.

How does the art ecosystem engage?

But what are those in the arts ecosystem to do with such an ever-changing, ethically ambiguous, arguably-beyond-control technology? What does it mean to meaningfully engage with something that is overwhelming to dive into? What are those who are already immersed telling us that we must listen to?

This featured section of Edition One of The New Real Editions is here to provide a guide or a roadmap, of sorts, providing helpful information and pathways for cultural professionals to engage with generative AI.

It’s aimed at novices (whether that be funders, arts organisations, or artists) who want to develop policy or projects. It’s also aimed at those AI engineers and policymakers who want to understand the voice of artists. And even the most experienced AI artists who want to develop new dimensions in their practice may have something to learn from our explorations.

Generative Creativity?

In the creative economy, the potential of generative AI is becoming ever clearer, and with that, there are debates on how generative AI can bring about new creative horizons in fair, ethical and sustainable ways.

Looking at image generators, we’re seeing tools such as Midjourney⁷ and Stable Diffusion⁸ which take text prompts to generate visuals in various different styles. Responding to the demand⁹ from users wanting to better control the GAN’s (Generative Adversarial Network) outputs, Hugging Face released DraGAN¹⁰, which allows users to manipulate the generated images – perhaps to make the lion look left instead of right, or make the rocket bigger or smaller. This may sound trivial, but changing poses, shapes, expressions and layouts really opens up the tools’ ability to create ‘on demand’ more precisely what is being sought.

In music, there’s tools to prompt inspiration, such as AI Duet¹¹, that has a computer respond to your musical experimentation and play. Then there’s production tools like Sounds.Studio¹², with features such as stem-splitting and generation of entirely new sounds. Jukebox¹³ is perhaps the most well-known generative sample maker; and let’s not forget the impact of voice generation and deepfakes which can play into next generation vocals, such as tools from companies such as Dreamtonics¹⁴.

In gaming, there’s a huge focus on using generative AI to aid in creating even vaster worlds¹⁵, narratives which branch even further, and even more realistic terrains and effects. Rapid prototyping powered by AI – using something like ChatGPT which can remember previous prompts and build a game outline iteratively – could have a real commercial impact¹⁶ for game-makers. There’s also the inspiration element, with AI-generated character design, game sound and mission rules.

The list of tools that artists have access to is growing all the time – so much so, that the Serpentine’s Creative AI lab has commissioned and maintains a searchable database¹⁷.

All of this ‘generative creativity’ opens up profound questions related to intellectual property¹⁸, both concerning the rights holders of the content on which the models are trained, and also creative work generated using AI, where rights or attribution may be unclear. Conversations also go further, as seen in contributions to The New Real, and elsewhere, with questions including what art ‘really’ is¹⁹ in an era of generative AI.

An offering

This featured section dives into these topics - so, what can you expect?

We open with an exploration of the concept of 'Intelligent Experiences' – this piece presents a vision for the future of the arts following the generative AI turn. It tells a story about what we would like to see and is close to a manifesto. This can in a sense be the 'destination' that those seeking something to aim towards may take inspiration from.

We then move on to diving deep into the artists' take on generative AI, where we eavesdrop on a roundtable discussion between four world-leading AI artists. We listen in on the things that are important to artists, their issues and interests when it comes to developing art using these tools, as well as what worries and excites them about the future.

Following this, we have chosen three pertinent topics and have asked three relevant experts to gift their recommendations and actionable strategies for those in the broader art ecosystem.

To advise us on 'Creating meaningful cultural experiences fuelled by AI', we invited Irimi Papadimitriou, Creative Director of FutureEverything, to explore what makes art 'intelligent', what questions artists need to ask, and how institutions can play a role in bringing to fruition impactful work.

To advise us on 'AI artist's tools', we invited AI artist Eoghan O'Keefe to give us insights into what creatives are looking for from the tools they use, what it means for artists to have more agency in their work, and what developers could provide to make their tools even more usable, transparent and desirable.

To advise us on 'ethical AI systems and organisations to empower artists', we invited Eva Jäger, Curator of Arts Technologies at the Serpentine to advise on viable alternatives to current capitalistic industry models, what the central issues are at the heart of these debates, and how to rethink what attribution and creation means in our current AI era.

Writing the Roadmap

A quick note on our methods, because as much as we're an unconventional band of researchers, finding things out is at the core of what we're about.

We believe strongly in collective sense-making and distributed, bottom-up leadership, hence why we looked to those at the forefront using these tools 'at the coal face' to help inform not just the advice, but the direction of travel for our research. We look to lived experiences of artists for data, and we explore topics in conversational and relational formats to enhance collaboration.

We are guided in our explorations by our 'four A's': Aspect (the themes or issues of concern, and how to place social values first in AI design); Algorithm (the system and technology design we would like to see implemented, how can this be more legible and accessible); Affect (The quality and character of a work or experience for an audience and AI can bring to that); and Apprehension (the learning and other outcomes we hope to see, what the 'moon shot' is).

And we are keen to ensure that our knowledge-creation has action at the core. This magazine as a whole deliberately mixes academic research, journalism, 'edutainment' and policy recommendations, and that is mirrored in this Featured section in the hope that we can provide an essential reference point and source of inspiration for policymakers, commercial developers, or scientists in the lab to create a better environment in which artists alongside generative AI can flourish.

So on that note – it's time to dive in.

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