Generative AI Arts: **A Synthetic Future Foretold Editorial**

By Drew Hemment

Image: *The Zizi Show by Jake Elwes © Victoria and Albert Museum, London, 2023*

In this, the first edition of The New Real Magazine, we present a guide to working with Generative AI Arts by practitioners at the forefront of the creative wave in AI today, and discover how our present moment was foretold by artists who had already been working with, and on, AI for a decade.

Long before the explosion of Generative AI in 2022 and 2023, a community of artists were changing the way we think of AI, combining prescient insight, powerful activism and inventive exploration.

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Join us in looking at artworks, both dazzling and deeply political, and the configuration of artistic, technological, social and environmental themes in each. Hear from philosophers, designers and curators on the way AI shapes and is, in turn, shaped, by our social reality in reflective essays, conversations, and informational pieces.

"I love this moment for us as artists because we get to see what anyone and everyone would use this tool for. It was hard to be in this space until this moment occurred because it felt too rarefied – I love that the floodgates have been opened." – Amelia Winger-Bearskin, speaking in our artists' roundtable

The present and future for AI Arts

AI has given us capabilities that would have been unimaginable only a few years ago. Conversational agents, virtual characters and other autonomous technologies increasingly become part of creative content, as can be seen in the new generation of chatbots or highly realistic non-playable characters in games.

At the same time, current AI brings major challenges. Widely available generative models we see today have been trained on massive datasets scraped from the Internet, without informed consent, acknowledgement, or

fair pay for the original creators. We have to contend with deep fakes and misinformation. AI is energy intensive and can amplify harmful bias in the historic data on which it is trained.

"We need a multiplicity of alternative ways to experiment with AI to explore the full potential of this emergent intelligence." – Eva Jäger, Strategies section

It's never been easier to generate an image or text, but current tools offer limited creative control and agency. We can't see how they are working, nor easily modify them. The outputs appear as if by magic, and we can't see why or how our input led to one and not another.

"I had to learn how to be a good prompt engineer. You don't have the control you might want to have; you have to learn how the machine understands a prompt or how it sees an image." – Lex Fefegha, Artists' roundtable

Before the release of the current tools, artists worked in imaginative ways with an earlier generation of Generative AI technologies, such as Generative Adversarial Networks, or GANs. We present a manifesto for a new generation of tools and intelligent experiences that can surprise and delight us, are culturally enriching, and are inclusive, fair and environmentally sound.

"We want tools that go beyond the text prompt ... where there's a real richness applied to the input that better reflects how we as artists – and as humans – engage with the world." – Eoghan O'Keeffe, Strategies section

Back to a future foretold

To move forward, we first must look back, so we return to what AI artists were saying, doing, and making in the period 2019 to 2021.

The insights and strategies from this community of artists over this period remain deeply prescient, and as the wave of Generative AI continues to break they can be applied to newer, emerging issues.

The artists we hear from point us to promising directions for arts and technology, and call out the real and still present danger, that current practices and models will deepen inequality, degrade the natural world, and undermine systems of governance and knowledge founded in our capacity to tell the truth.

"[O]ur field has always been about challenging the ethics of what technology is doing, positively and negatively in our field." – Amelia Winger-Bearskin, Artists' roundtable

They help us read and make sense of the future we are living in today, illuminating the current opportunities and challenges in AI.

The main difference is these are no longer fringe issues; what was a niche has become mainstream.

Hello synthetic culture

Our journey with and as artists lead us to think of the coming era – that has now so spectacularly arrived – as the "new real". Machine reasoning is fundamentally different to the everyday ways in which a human thinks. The more culture is generated by or with machine learning algorithms, so it becomes unfamiliar, estranged, unknowable. We pass another threshold when AI models are trained on the outputs of other models. When synthetic media becomes synthetic training data and is used to train new models, we get a feedback loop amplifying those features. This is a multiplier for everything we have discussed.

"I'm interested in how creative professionals can push these ideas in another direction, in really looking at how AI can help us think about non-human intelligence, experience, interaction and narratives." – Irini Papadimitriou, Strategies section

AI is culture - it is of our history - so we shouldn't reduce it to just productivity. The arts give us the opportunity to ask big questions and reach for the sublime. What does it mean? How is it different to what went before? What can collaboration between humans and AI inspire?

Let's reflect, and make the society and culture we want to see.

Artists in the lead

The arts offer a space to imagine, design, contest, and

reclaim sovereignty over technology. Just as culture is being turned inside out by Generative AI, so the arts give us a set of tools, communities of impassioned people, and the perceptivity and imagination, with which to contest and shape AI. Artists devise alternative futures, and champion ethical and community-led approaches to Generative AI.

At this critical juncture for AI in the Arts, it is important to reflect on who and how is included and excluded from its development, and champion the voices of artists in informing the public conversation. Artists are a vital source of collective and distributed sense-making in this transformative moment, and yet these voices do not always reach policymakers, commercial developers, or scientists in the lab.

"[L]ooking towards artists in this way also requires looking towards the institutions and frameworks that platform, promote and engage with them, considering how and with what impact cultural output diffuses into its wider environment." – Catherine Troiano, Reflections

What to expect in this edition

We open with a guide or roadmap for cultural professionals that explores the extraordinary potential, and the pitfalls, of artificially intelligent technologies used in creative and artistic contexts.

Our manifesto urges us to look beyond the impressive capabilities of current AI tools, to envision intelligent experiences that foster diverse interpretations and interactions, provoking us to search for meaning and come to new interpretations of cultural works and ultimately of ourselves. Our roundtable looks at the changing nature of creativity, the ways artists work creatively with AI, and how artists approach working with tools they may not fully endorse.

"If you're making work ... you're intentionally biasing datasets, and you can twist those biases." – Eryk Salvaggio, Artists' roundtable

We also invited key figures to develop actionable strategies and signposts for practitioners. They describe how to create – or support – inspiring cultural experiences fuelled by AI, what artists want to see from a new generation of tools, and how we can work with AI in ways that are ethical and fair, and respond to the emerging practices and interests of artists.

"Since data is valuable only in relation to other data or in collections of data ... from the entangled and relational point of view of ... collectives, coops, daos, trusts ... forming around specific kinds of data, we can start to see that those kinds of organisational forms might have a lot more power." – Eva Jäger, Strategies section

In our Art section, we read about Anna Ridler and Caroline Sinders, who highlighted the hidden human labour in AI. Their work was a premonition of the way that the large foundation models powering many of today's AI tools are built on the labour of artists who are not credited or rewarded.

Turning to Jake Elwes, we discuss how their project, Zizi, gives us an image for our emerging synthetic culture, one that exposes its multi-layered, uncanny nature. Zizi shows us the Janus-faced nature of AI, it is beautiful and empowering, and in opening AI up as culture, it opens it up to struggle and contest too.

The art projects are more than commentary in themselves; they are points of departure for the rest of us. And so we have included in our Reflections section critical takes from leading thinkers in dialogue with the commissioned work.

"[T]he premise of photography itself has been exponentially expanded, altered and reconfigured..." – Catherine Troiano, Reflections

Shannon Vallor asks profound questions on how we live with the contradictions of AI, with hope and integrity.

"The future of AI ... could be the story of ... a relentless army of angry ghosts that keep haunting us ... until we finally reckon more fully with ourselves ... with what we have been, with what we have failed to be, and with what we can finally be free to become." – Shannon Vallor, Reflections

In Spotlights, we bring together insights from research interactions with artists over this period. We found that

works by this creative community help us understand the ways systems make use of our data, and how truth and experience are constructed online.

We round out the edition with conversations to hear in the artists' own words about the topics that drive their practice, and some informative interjections, including a piece on the joys of improvising in real-time with AI.

"Imagine a music performance with multiple AI and human musicians, but also AI audience members and critics – an evolving, dynamic, interactive, co-creative system. What will emerge? What are the feedback loops that guide its progress?" – David de Roure, Interjections

One of the biggest challenges we face is the inflated hopes, the inflated fears, and the outright untruths told about AI. We close with a 'myth-buster' in which we identify and then detonate six common myths about AI.

"[W]e have to recognise that we are still in the imagination space of AIs development…" – Eva Jäger, Strategies section

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