

Figure 1. Aberrant Creativity Exhibition poster artwork (made with Adobe Firefly)

# **Aberrant Creativity**

Al Art Exhibition Catalyzing Conversations Among Artists, Educators, and Professionals

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#### Introduction

Generative Artificial Intelligence (GenAI) has revolutionized art creation, enabling machines to produce intricate artworks through algorithms and neural networks (Goodfellow, 2014). Accessible tools such as DALL·E 2 (2024), Stable Diffusion (2024), and Midjourney (2024) have made the process easier for both artists and laymen to express themselves creatively and experiment with new artistic elements. When the public was just becoming aware of these tools, the techniques of using GenAl for art creation were guite limited, and there was little social understanding of the implications that using AI would have on creative processes. As GenAI continued to pop up in public discourse, it often sparked social debates and controversies, leading to negative sentiment around the use of AI for creative purposes; for example, in 2022, an Al-generated artwork won the Colorado State Art Fair's competition in the "Emerging Digital Artists" category (Kuta, 2022). This winning piece by Jason Allen demonstrated the incredible advancements in Al-generated art over just a few years. Trained on billions of internet images, these GenAl systems have significantly pushed the boundaries of what computers can create. However, it also ignited a sizable debate over the meaning of art, with Allen facing accusations of deception for using a machine to create artwork that competed against human artists (Wenzel, 2023). In addition, there were ethical concerns about the unauthorized use of artists' works in training the AI databases. These issues highlighted the need for clearer quidelines and regulations to ensure that artists' rights are respected and protected in the age of Al-generated art.

Responding to these rapid developments during the early GenAl movement, a faculty group consisting of artists and educators in the College of Performance, Visualization &

Fine Arts from Texas A&M University began testing publicly available GenAI tools to explore their feasibility for education in digital art courses. These faculty had a vested interest in this emerging field, as such a disruptive technology trend would inevitably upend the process of their student's schoolwork and impact their readiness for careers post-college. More recently, this faculty group narrowed their focus to investigating how contemporary artists were incorporating GenAl into their own creative processes, and exploring the relationships that already exist between AI and human artists. To begin their investigation, they developed an art exhibition, called Aberrant Creativity, that invited practicing artists to present their works that were made with GenAI. With a curatorial theme that emphasized the creation process with a variety of mediums and techniques, the exhibition served as a vehicle for the faculty group to learn more about this subject area of human-computer co-creativity. The show not only displayed a diverse collection of inspiring work to the public, but also opened up space for a broader discussion on the implications and potential of this technology on the arts. The exhibition also facilitated dialogue among artists, educators, students, and the public, fostering a deeper understanding of the evolving relationship between technology and creativity. By displaying AI-generated artworks, the exhibition highlighted both the artistic possibilities afforded by GenAI and brought to the forefront the ethical, cultural, and societal questions surrounding the use of AI in art.

There are varied perspectives on how AI can be used in artistic practices, particularly concerning generative AI systems (Chang, 2023). One perspective is that AI can be a creative tool to support and augment human creativity, providing new avenues for artistic expression (Frich et al., 2019; Hwang, 2022). Hwang (2022) categorizes AI tools used in the creative process as either editors, transformers, blenders, or generators. According to his definition, "editors" facilitate execution processes, making content editing easier for users. For example, Adobe Photoshop's Content-Aware Fill uses AI to seamlessly remove and replace unwanted objects in an image. "Transformers" alter and convert content from one form to another, such as transforming hand-drawn sketches into digital images (e.g., *Uizard*) and converting wireframe sketches into fully designed UI prototypes (e.g., Figma's AI feature). "Blenders" combine two or more creative elements to generate new outputs, often using GANs (generative adversarial networks). One example would be Artbreeder, which allows users to merge different images to create unique, blended artworks by combining various features from each input image. "Generators" produce ready-to-use creative outputs based on userprovided guidance and constraints. Looka, for instance, allows users to input details about their brand, such as industry, style preferences, and key symbols, to automatically generate a variety of logo designs that represent the brand's identity based on those inputs. This perspective (viewing AI as a creative tool) is supported by multiple artist groups, such as the International Alliance of Theatrical State Employees (IATSE) (Maddaus, 2024).

Another perspective is that AI systems can be viewed as creative collaborators themselves by generating initial works that human artists can then modify, build upon, or apply to different media. Research in the related field of Human-AI Co-Creation (Yannakakis, Liapis & Alexopoulos, 2014) is highly relevant in this regard. For example, an AI system trained on artistic imagery could generate sketches, drafts, or renderings that capture the core concept of the artist's work and add variety or detail to the initial idea. The artists could then refine, develop, and iterate on those initial drafts to reach their final creative works. The outputs

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could be evaluated by human artists and applied to traditional or digital art media/practices as starting points, references, underlays, overlays, etc., and then further iterated on using the artist's creative practices.

# Aberrant Creativity Exhibition

The Aberrant Creativity exhibition was hosted in November 2023 at an art community center, the Arts Council of Brazos Valley, in the city of College Station, Texas. The event featured 38 pieces from 23 artists (20 jury selected and 3 invited artists), showcasing a wide array of creative and innovative approaches to art-making.



Figure 2. The Opening of the Aberrant Creativity Exhibition

The curation and planning committee, made up of members of the aforementioned faculty group, began work on the exhibition in January 2023, spending the semester evaluating the qualifications for the show, establishing acceptance criteria, and developing a project timeline. In May, they put out the call for submissions and then reviewed the applications over the next three months, completing the process by August. The submission responses exceeded the group's expectations, with over 200 applications coming in from around the world. Given the spatial constraints of the gallery and the committee's commitment to maintaining a high-quality standard for the show, the curators carefully narrowed down a selection of 20 artists from 12 states within the US and five different countries.

#### Selection Process

Given the core theme of the show was centered on the creative partnerships between AI and human artists, the committee sought out submissions that leveraged both the benefits and foibles of GenAI in unique ways to enhance the artists' creative process. Applicants were required to submit an artist statement, a description of the work and its medium, and, most importantly, an explanation of how GenAI was used in the creation of said work. This documentary component was eventually displayed as text and image cards next to the artwork in the gallery, giving the audience context to how GenAI contributed to the piece's creation. This emphasis on transparency allowed the committee and viewers to gain valuable insights into the collaborative dynamics between human artists and AI systems.

The curation team's selection criteria favored artwork that demonstrated a novel, unexpected, or thoughtful approach to using GenAl, especially in a back-and-forth collaborative process with the model. The aesthetic qualities of the final artifact were considered but not the focus of the selection process. Pieces that did not tell a compelling story of how Al was used in the art-making process, or did not embrace the transformative spirit of changing material from an Al output to a curated and purposeful end, were rejected. The curation team also tried to capture as broad and varied a selection of art media as possible, as they believed it would expose the audience and organizers to an abundance of perspectives. The final exhibition included digital printing, sculpture, taxidermy, video, sound, generative artwork, performance, interactive website, slide projection, and interactive installation.

### **Curation Challenges**

The selection process wasn't without its challenges, and there are ways that it could be improved upon in the future. Ideally, the exhibition would have had even more documentary material from the artists to work with; this would have made the lessons that viewers gleaned from the experience even richer, as well as added more trust and confidence in how ethically AI was used in the creation of the work. Some of the more critical responses to the exhibition wanted evidence of how the AI models were trained and if their training corpus was sourced with consent or respecting copyright concerns.

However, the organizers faced a dilemma, as requesting more auxiliary material from the artists might throw up too many barriers that discouraged participation. Additionally, given the wide range of media and practices that the exhibition sought to collect, verifying all of the training processes the applicants had used would have had too high a labor cost for the small team of faculty volunteers that made up the curation committee. A greater budget to support assistants who could investigate each work would be necessary.

Instead, the committee found a middle road by asking the artists to create a narrative statement that described the tools they used and how AI was utilized and to confirm through the application process that the artwork contains no copyright or stolen material. While adequate, an improvement to this process would have been to disallow some of the publicly

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available GenAl tools from being submitted (like those that have been proven to scrape online content without creators' permission). Another solution would have been to work with the accepted artists to collect more process documentation based on their individual piece as one of the requirements for their participation. This could narrow down the amount of content the organizers would have to sift through, as well as create a more personalized experience for each artwork.

#### Selected Works & Invited Artists

The approaches to using AI in the making of the artwork in the exhibition were diverse. By bringing together artists from distinct backgrounds and artistic disciplines, the exhibition fostered cross-cultural exchange and innovative dialogues at the intersection of art and technology. An example artist featured in the show was Arne Eigenfeldt, a composer and researcher into intelligent Generative music systems. His project, <u>A Walk to Meryton</u>, is a music and video piece that uses "musebots", systems trained on harmonic progressions and melodies, to create music that is then performed by real musicians and a poet.

Another featured artist, Clodagh Molly Delahunty-Forrest, a Feminist body performance artist, staged a "seance" in her performance piece *Raising My Body*, where the performer speaks with the risen images of her past and future selves to discuss the female body and womanhood (Figure 3). Her simple-yet-effective use of accessible Snapchat Al filters allowed her to generate aged performers of herself for her to interact with on stage.



Figure 3. Raising My Body by Clodagh Molly Delahunty-Forrest

Another key feature of the exhibition was to invite internationally renowned artists' works to the local community. The organizers of the exhibition carefully selected three professional artists, each utilizing AI in their creative processes that dovetailed with the exhibition's thesis statement. These artists captured diverse takes on AI's role in art, with the goal of inspiring the local community with inventive and challenging works. The artists chosen for this purpose were Lev Manovich, Steve DiPaola, and Eunsu Kang.

Lev Manovich, a pioneer in the field of digital art theory and cultural analytics, is known for his innovative use of AI to analyze and create visual art. His work often explores the intersection of technology, culture, and society, offering a critical perspective on the digital age. His AI-integrated artworks expand on his early fine art practices. For the Aberrant Creativity exhibition, selected images from his <u>Terra Sovietica Series</u> and <u>Drawing Rooms Series</u> were featured, which exemplify his approach to combining AI with cultural and historical themes.

Steve DiPaola is a renowned artist and scholar in AI-based computational creativity and 3D facial expression systems. The exhibition showcased images (Figure 4) from his <u>Abstract Series</u>, <u>Trees Series</u>, and <u>Triptychs Series</u>. DiPaola has a unique approach to blending artistic expression with scientific inquiry, developing his own AI systems to explore intricate emotional and cognitive landscapes. His contributions added a rich, multi-dimensional aspect to the exhibition, demonstrating the ways in which AI can augment human creativity.



Figure 4. Steve DiPaola's Projects: Two pieces from the Abstract Series (on the left) and two from the Tree Series (on the right)

Eunsu Kang, an interdisciplinary artist, utilizes AI to create interactive installations and performances that engage audiences. Her work often challenges traditional notions of art and technology, pushing the boundaries of what is possible with AI. The show featured *Aural Fauna*, her interactive installation. *Aural Fauna* (Figure 5) presents an imagined family of organisms brought to life by AI, which responds to sound or touch from gallery participants. The visual and audio elements of the installation were created using AI algorithms, such as NSynth and WaveGAN, developed by Kang's team. Her work brought a playful and reactive dimension to the exhibition, highlighting the evolving relationship between the audience, art, and technology.



Figure 5. An Exhibition Visitor Plays with Aural Fauna

By featuring the works of Manovich, DiPaola, and Kang, the exhibition not only showcased the various applications of AI in art but also highlighted the profound impact AI is having on contemporary, professional artistic practices. Their contributions provided invaluable insights into the collaborative potential between humans and machines, and enriched the audience's understanding and appreciation of AI-driven art.

## Outcomes of the Exhibition

The Aberrant Creativity exhibition achieved remarkable success, yielding several significant outcomes and experiences.

#### Emphasis on the Creative Process

The exhibition was not only intended to showcase the final artworks but also to reveal the creative processes behind them. Artists provided detailed documentation of their art creation methods, offering informative insights into their process. Many artists submitted comprehensive write-ups, while others presented documentation photos and videos to illustrate the progression of their work. This allowed reviewers and curators to gain a deeper appreciation for the iterative nature of the creative process and the collaborative dynamics between human artists tools they used. To further enhance the viewer experience, summaries of the artists' processes were displayed alongside their works in the gallery. These concise yet informative descriptions provided audiences with a behind-the-scenes glimpse into their journey, shedding light on the synergistic interplay between human creativity and Al technology.

#### Diverse Approaches to Al Utilization

A diverse range of AI approaches was observed among the artists.

Many artists leveraged popular text-to-image AI models like Midjourney, Stable Diffusion, and DALL-E 2 as a starting point, using the AI's ability to generate images based on text prompts as a way to launch new concepts and ideas. It was evident from the work on display that there was a wide range of skill and familiarity with GenAI from the artists. Either way, the displayed work did not merely use the AI's outputs as-is, but combined and refined them using other art techniques, integrating the AI's outputs into the artists' own creative vision.

Other artists took a more complex, transformative approach: these artists generated images using AI and applied them to different media, such as painting or sculpture, creating unique hybrid works that went beyond the digital format. In this case, AI-assisted them in finding new approaches in the early design stages that they may not have discovered on their own.

Some artists even went a step further, developing their own algorithms and computational models to guide how the AI could make creative decisions in tandem with the human partner. Each approach allowed the artists to have increasingly greater levels of creative control and customization in how the AI behaved based on the artist's predilections and experience. Across the exhibition, one trend was clear - the artists were not simply using AI as a means to an end, but were treating it as some form of collaborator in their practice.

#### Social Media Response

The exhibition prompted unexpectedly tense exchanges on social media. The audience on these platforms is mostly alumni from Texas A&M University, as well as friends and acquaintances with the organizing faculty's own program. Before the opening, the College marketed the event extensively on Facebook and Instagram, which inadvertently sparked contentious conversations in the comment sections of both platforms. Notably, some responders were critical of the University providing a platform for Al Art, perceiving Al as

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antithetical to creativity and human expression. They expressed disappointment in exposing the students to AI Art. While much of this critique was understandable and expected given the ongoing debates surrounding AI and art, some comments were simply statements of outright protest, such as, verbatim, "I am in the AI art hate club" or "Booooo AI." Unfortunately, few of the users made any comments on the actual content of the show, which would have provided some meaningful feedback on the show.

The curation committee responded to the comments in order to provide some context of the show's intent in the hopes of focusing any discussion, even negative discussion, towards the content and theme of the show itself. In creating the show, the organizers had anticipated some contention, as the integration of AI and art is often met (justly) with distrust in online communities. While the negative social media responses were discouraging, they served as a valuable counterpoint to the show's positive in-person experiences, reminding the exhibition creators of the contrasting, often polarized, viewpoints surrounding this emerging field. It also taught the organizers how to present the message of their work accurately, especially online.

There were also sympathetic voices in the comments, acknowledging the importance of the College using events like this exhibition to expose students to critical topics like Al Art. These perspectives recognized the value of fostering dialogue and understanding around the intersection of technology and art.

#### University Community Engagement

The exhibition gained substantial attention from the community within the University. Artists, researchers, musicians, and art historians from the College of Performance, Visualization, & Fine Arts visited the show. They engaged in rich dialogues over the work and the exhibition's overarching themes. Furthermore, the exhibition served as an invaluable educational experience for students from the University, broadening their understanding of how these powerful, cutting-edge tools can be harnessed for artistic self-expression and experimentation. It is the hope of the faculty group that created the *Aberrant Creativity* exhibition that this exposure may have ignited a newfound passion in the younger visitors and will inspire them to experiment with these tools themselves.

#### Impact on the Local Community

The exhibition had a significant impact on the local community in the Brazos Valley, fostering public engagement and raising awareness about the profound influence of AI on the arts. By strategically hosting the exhibition off-campus, the organizers sought to engage the broader population, including those who might be less familiar with the nuances of this evolving field. This timely event provided an excellent opportunity to strengthen the connection between the university and the local community. By bringing these avant-garde artworks to a public space, the exhibition helped demystify AI in artmaking, making it accessible to a wider audience.

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The local community's reception of the exhibition was overwhelmingly positive, with residents expressing their appreciation for the opportunity to engage with such innovative and boundary-pushing artistic expressions. Some visitors expressed curiosity, posing inquisitive questions such as "Is this created from AI? I would like to know how," eager to understand the creative processes behind the pieces. Others were struck by the quality of the individual artworks, offering comments like "I didn't know that AI could make this kind of artwork. This is better than what I thought." Some visitors attended multiple times and brought their children to the show to introduce them to AI. They also appreciated the event being accessible to outsiders, as the gallery spaces on campus can be hard to reach for non-students. Many attendees expressed their enjoyment of seeing new and innovative types of art on display in their local art center, highlighting the exhibition's success in engaging and inspiring the community.

# Discussion & Takeaways

The Aberrant Creativity exhibition served as a catalyst for important conversations surrounding the use of AI in art practices. While the exhibition's organizers did not come away from the event with a clear framework on how AI can and should be used for creative pursuits, the exhibition did expose them to a diverse array of approaches adopted by individuals, underscoring how fluid and multifaceted the area is. The show, in the eyes of the organizers, was a success in adding to a growing body of knowledge in the area of AI and creativity.

A key takeaway from the exhibition was an evident need for some guidelines and best practices in order to help artists and educators navigate the ethical, technical, and conceptual complexities of art made using GenAl. Young artists, students, and even experienced professionals have all displayed conflicting views of excitement and distrust for Al Art. Some fear the backlash they would receive from their audience, do not want to participate in the devaluation of human authorship, or do not trust the security of the processes involved. This anxiety was evident from the social media comments that the show received, as well as the challenges the curators faced during the application process. Fostering a connected artistic and academic community that promotes knowledge-sharing, transparency, and accountability in Al Art practices would be crucial to empower creatives to confidently tread into this field, and it would encourage safe and responsible practices.

Additionally, the exhibition highlighted the necessity of providing contextual education and facilitating open dialogue in order to bridge the knowledge gap between the artists, the audience, and the broader public. Most visitors to the exhibition displayed open curiosity, but many still felt very much out of their depth when it came to the technology involved. Hosting informational workshops, artist talks, and other avenues for direct engagement with the public could open up a deeper understanding and appreciation for the artistic possibilities and ethical considerations inherent in the merging of AI with art practices.

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Along that line, the organizers regret not collecting more formal feedback from both artists and visitors on their experiences with the show. Few of the artists were able to attend the show in person given the relatively small town the show was located in, but it would have been beneficial to share with them video documentation of the exhibit over email, and to gather their opinions on the final show (as well as the submission process). Similarly, the organizers were able to obtain verbal feedback from visitors during the exhibition, but it would have been helpful to conduct written surveys or leave visitor cards with specific questions in the space for the public to fill out at their leisure.

The organizers of the show hold the opinion that the negative social media messages were reflections of the "disturbation" of art, a concept introduced by Arthur C. Danto in 1985. This provides some insight into examining the social media responses the exhibition received and the broader impact of the show. Danto suggests that disturbational artworks create spaces of instability and uncertainty, containing or promising a degree of risk for both the artist and the audience (Oketch, 2013). The social media comments emphasized the exhibition's disturbational nature and underscored the ambivalence that the field of AI Art finds itself at this moment.

It also suggests the importance of effective marketing strategies in navigating uncertain, online spaces. An oversimplified message like "Texas A&M students make AI Art" that was used by certain media outlets may have triggered the negative reactions and drawn comparisons to controversial events like the Colorado State Fair digital arts winner in 2022 (Kuta, 2022). This reductive framing did a disservice to the participating artists, whose works thoughtfully engaged with the collaborative interplay between Machine Learning, Generative AI, and human creativity. Furthermore, this oversimplification flattened the online conversation into a binary debate, with discussions rarely diving into the exhibition's structure or the artists' intentions. Instead, the talking points tangentially argued over whether a university should support such an event, reflecting the underlying tensions and uncertainties surrounding the integration of AI into artistic practices. Embracing Danto's concept of disturbation, the organizers acknowledge that the Aberrant Creativity exhibition was not merely a showcase of artworks but a provocation - a disruption of traditional boundaries and assumptions. The social media responses, while challenging, highlighted the exhibition's ability to ignite crucial dialogues about the role of AI in artistic expression, fulfilling its disturbational potential.

The emphasis that the exhibition organizers placed on comprehensive process documentation proved invaluable to the success of the show, providing a window into the artists' creative journeys and maintaining transparency between human authorship and machine collaboration. This transparency has the potential to mitigate conflicts and misunderstandings surrounding Al's role in an artist's work. The organizers suggest that other institutions encourage visible and thorough documentation of the art-making process as a helpful access point for audiences to understand the technology while also maintaining a certain degree of trust between the viewers and the creators.

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Overall, the *Aberrant Creativity* exhibition provided invaluable lessons that will shape future endeavors at the art and technology intersection. By fostering open dialogues, encouraging transparency, and emphasizing the collaborative process between human artists and Al, we aim to continue pushing artistic expression boundaries while promoting a deeper understanding and appreciation of these emerging creative practices.

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