

AI ART - LESSON 1 - FEB 23, 2023

INTRODUCTION TO AI ART

Benjamin Meadows | @TheBenMeadows



"Astronauts from Earth 0342" by @Riabovitchev

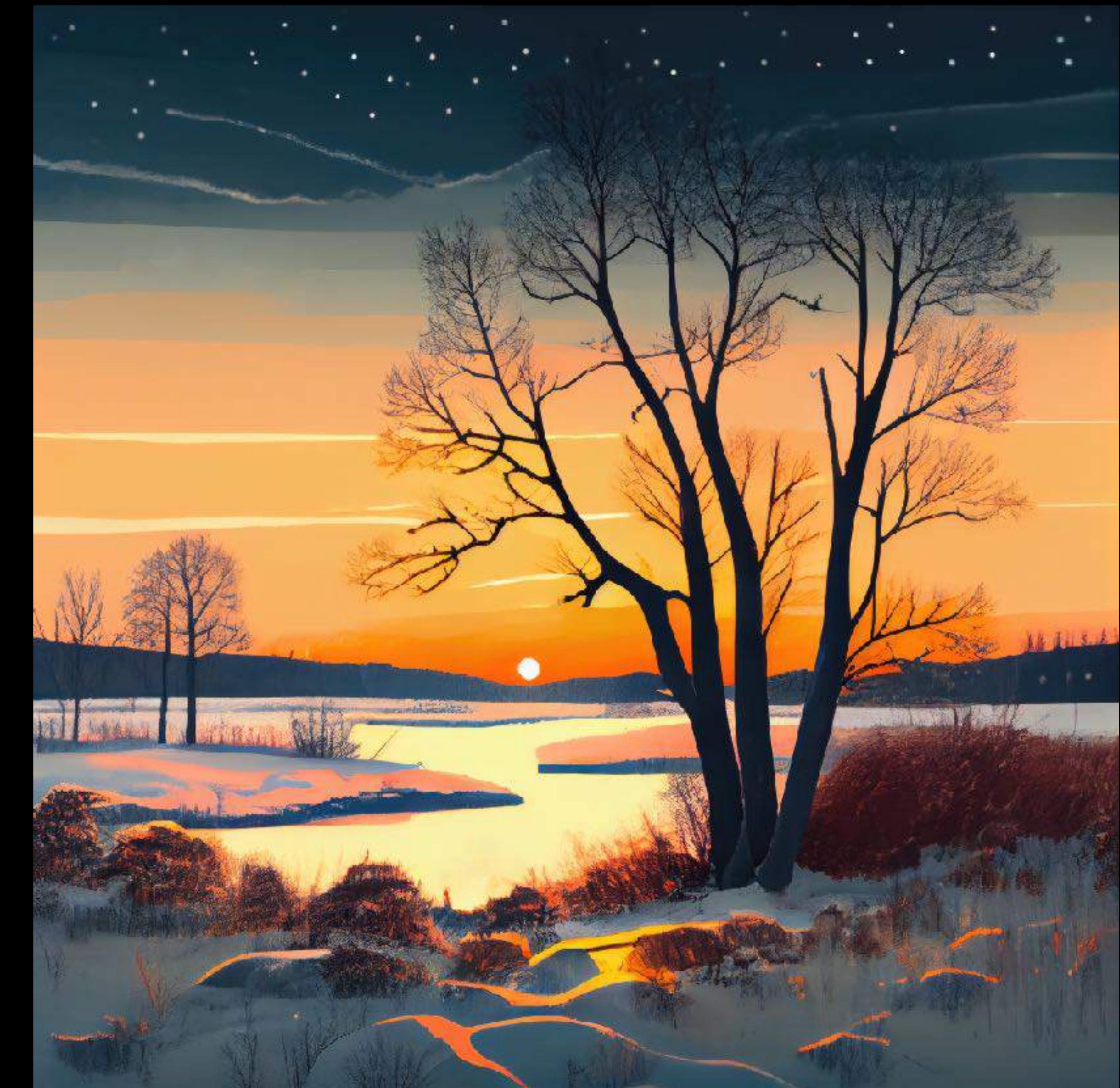
WHY AM I HERE?

- Goals
- Review the history of AI art from its earliest beginnings to present.
- Discuss different types and genres of AI art. Define terms.
- Review significant art and artists in the space.
- Discuss current controversies around the use of AI in art.

WHAT'S NEXT?

- Lesson 1 - Introduction to AI Art
- Lesson 2 - Basic Tools for Creating AI Art
- Lesson 3 - Tools & Workflows for AI Art (Part 1)
- Lesson 4 - Tools & Workflows for AI Art (Part 2)
- Lesson 5 - Getting Familiar with GAN
- Lesson 6 - How to Create Basic Generative Art

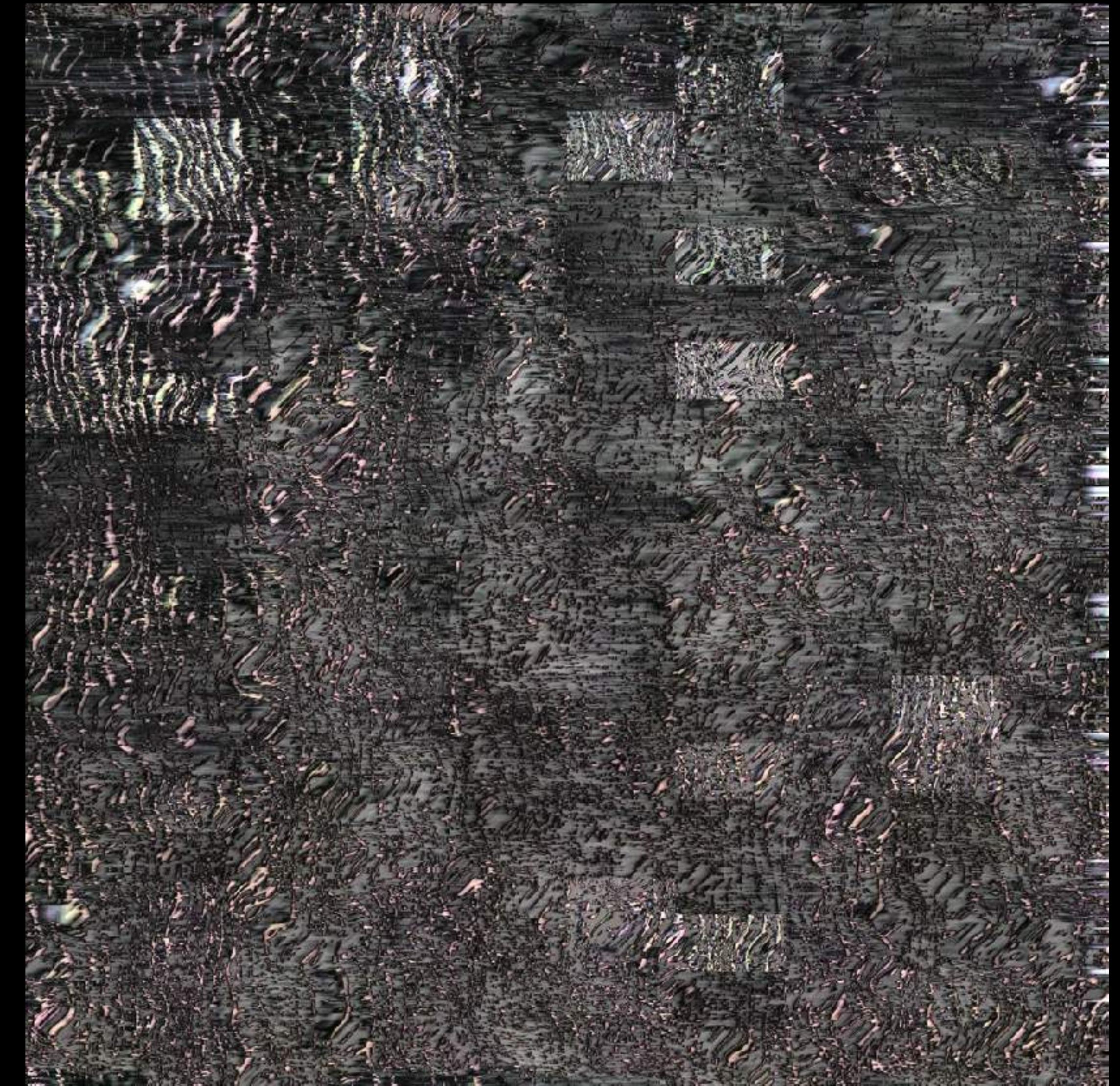
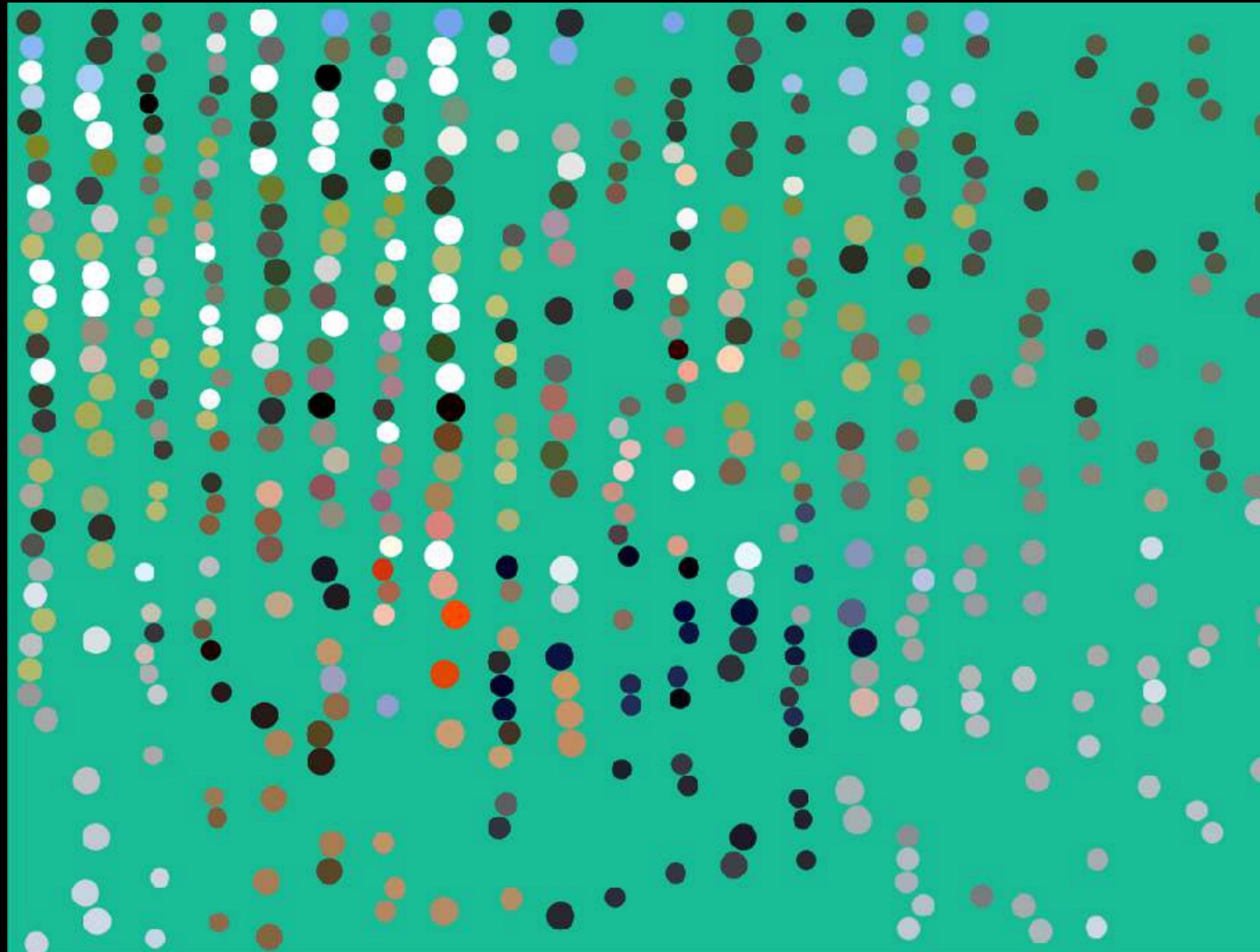
WHAT IS AI ART?



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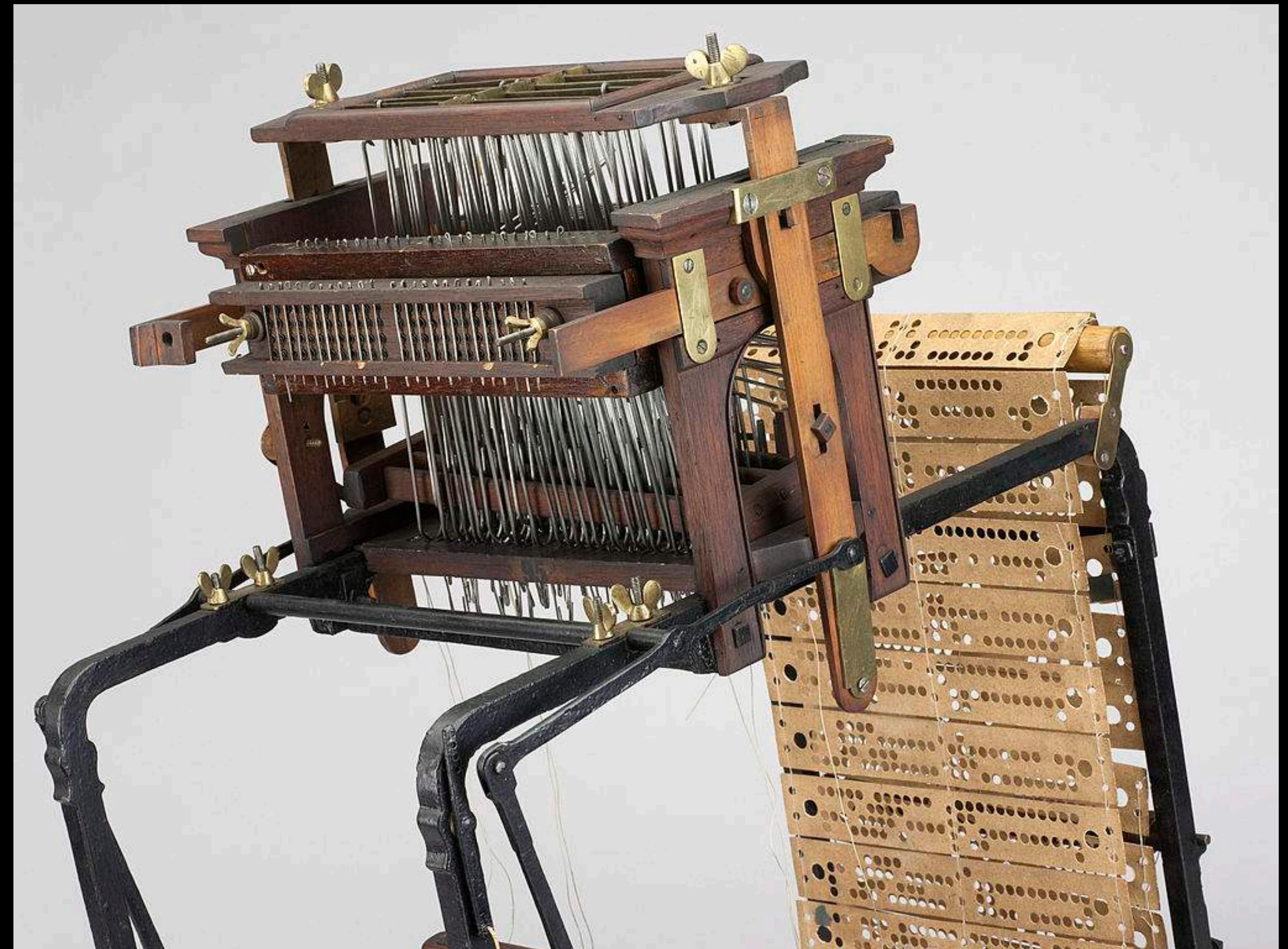


WHAT IS AI ART?



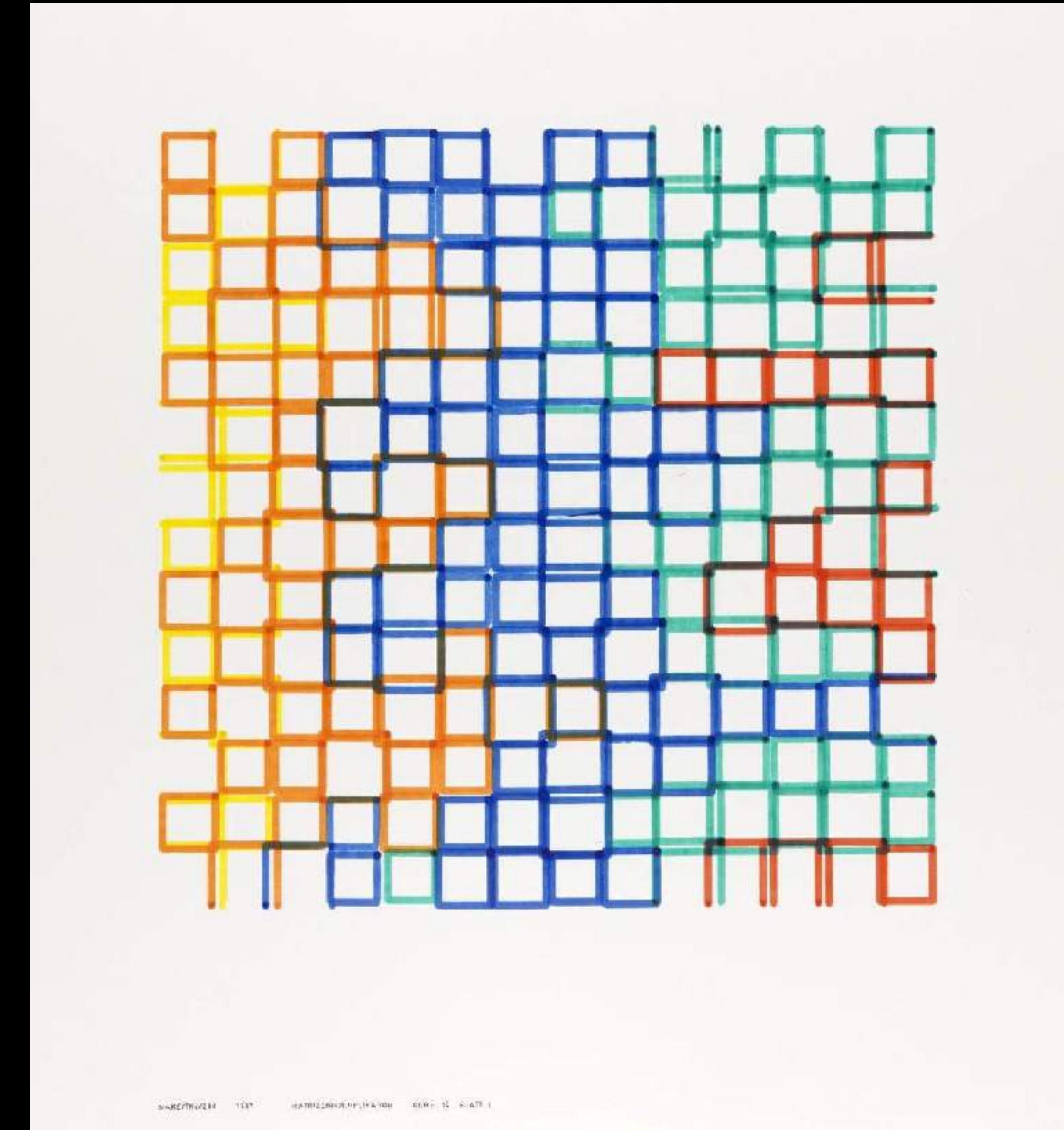
HISTORY OF AI ART - EARLY HISTORY

- 3000 BCE - Talking Knots
- 1763 - Thomas Bayes
- 1842 - Ada Lovelace
- 1929 - A Seeing Machine
- 1950 - Alan Turing
- 1953 - Reactive Machines



HISTORY OF AI ART - EARLY HISTORY

- Late 1950s - Max Bense's Lab
- 1959 - "Machine learning"
- 1968 - Cybernetic Serendipity
- 1973 - Cohen's AARON



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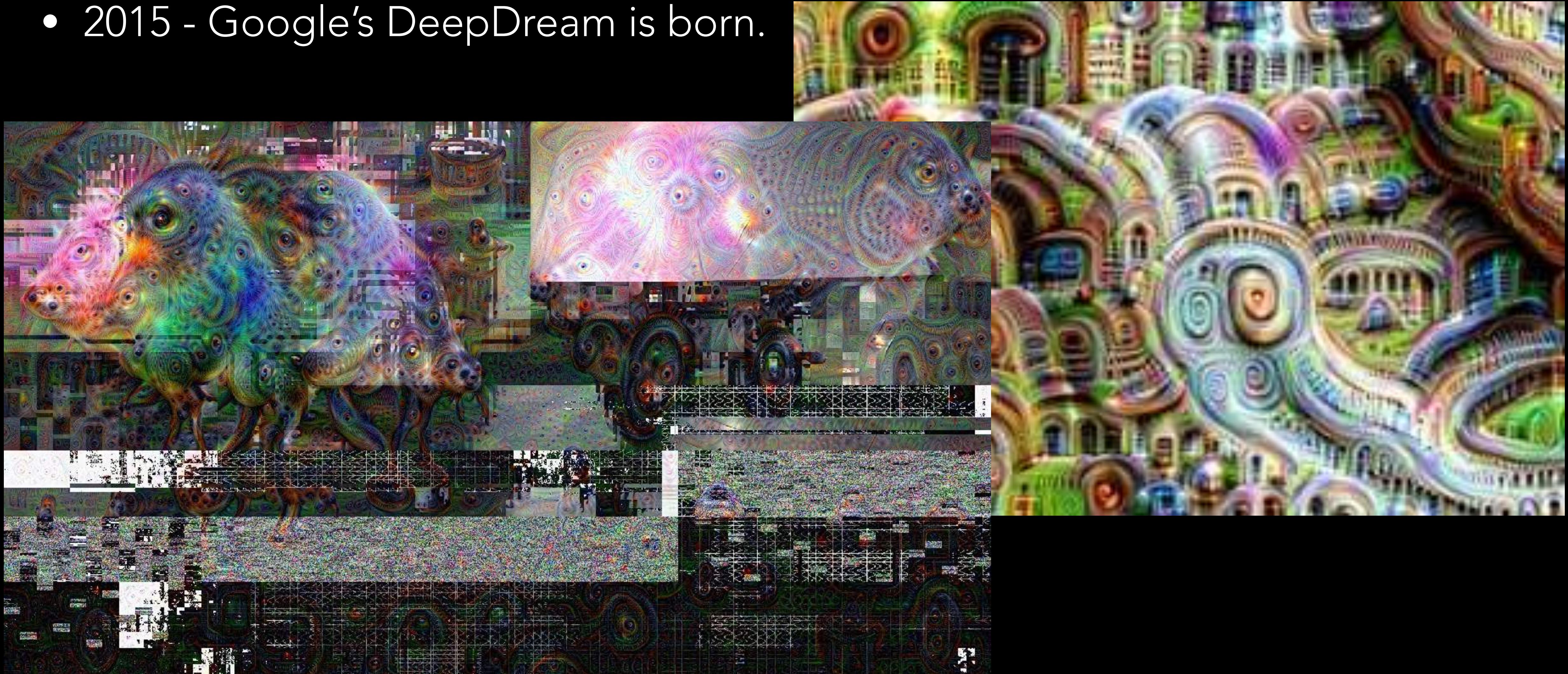
HISTORY OF AI ART - FIRST WAVE

- 2014 - GANs (Generative Adversarial Networks) are developed.



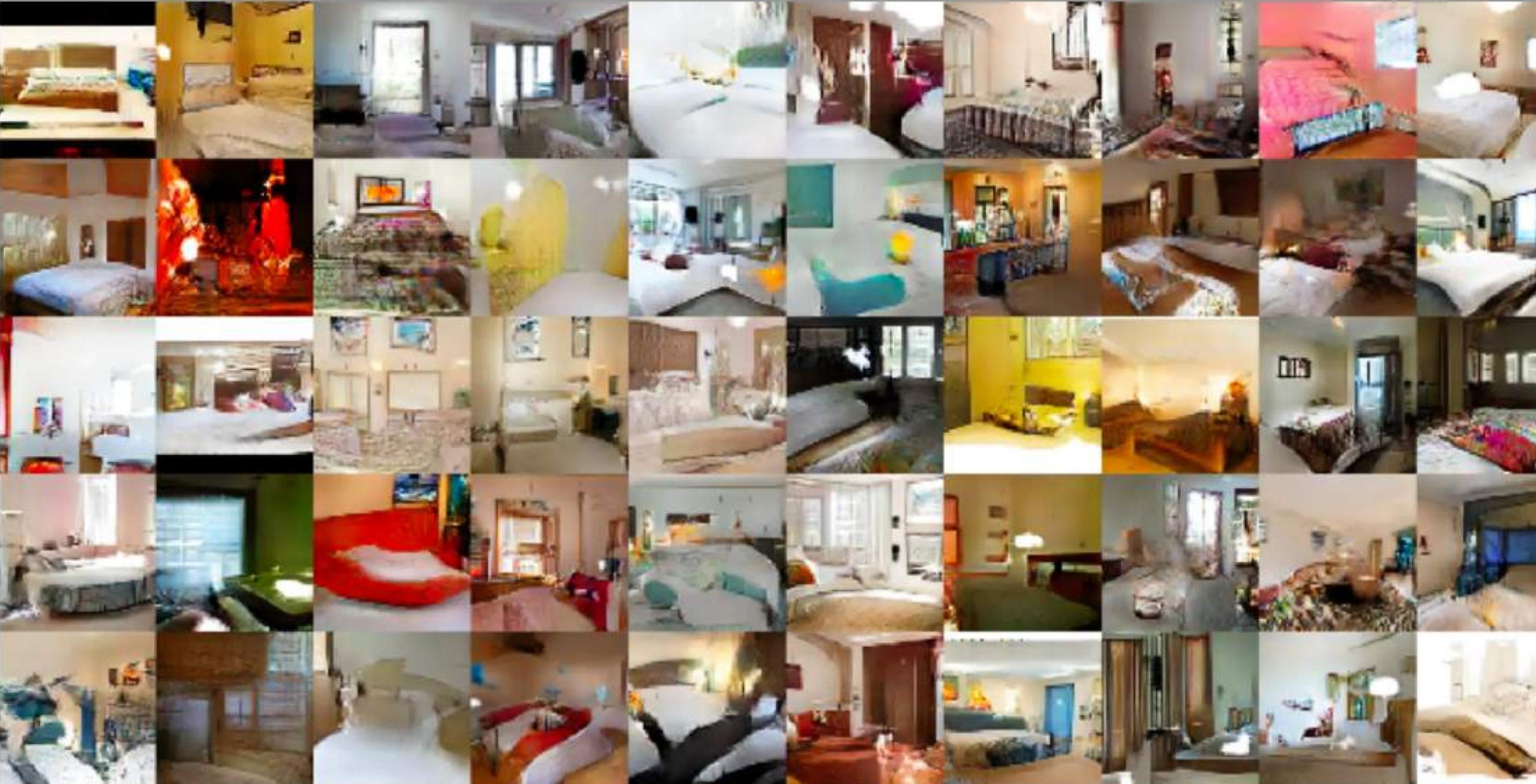
HISTORY OF AI ART - FIRST WAVE

- 2015 - Google's DeepDream is born.



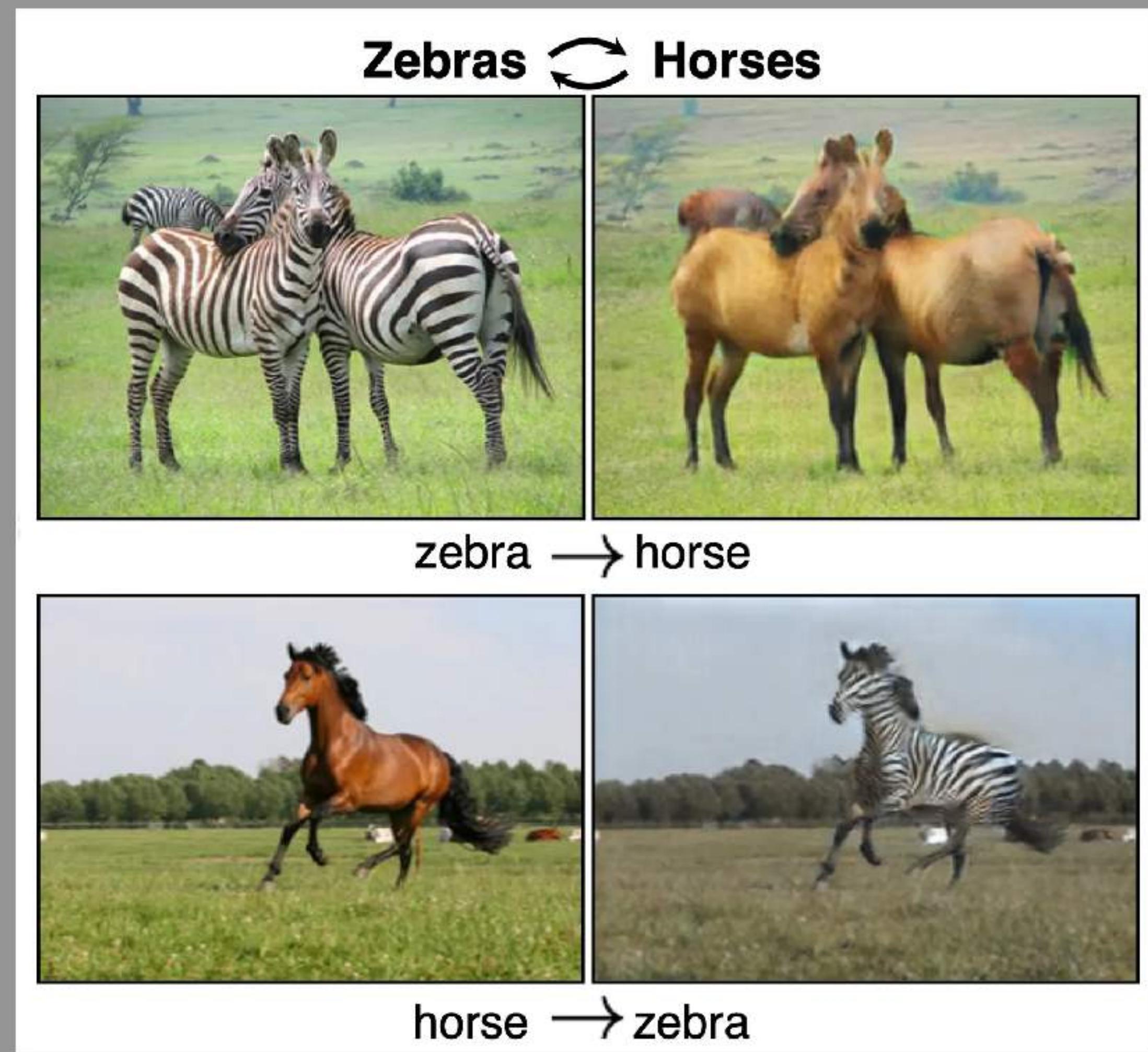
HISTORY OF AI ART - FIRST WAVE

- 2016 - GANs improve.



HISTORY OF AI ART - FIRST WAVE

- 2017 - GANs learn how to remix.



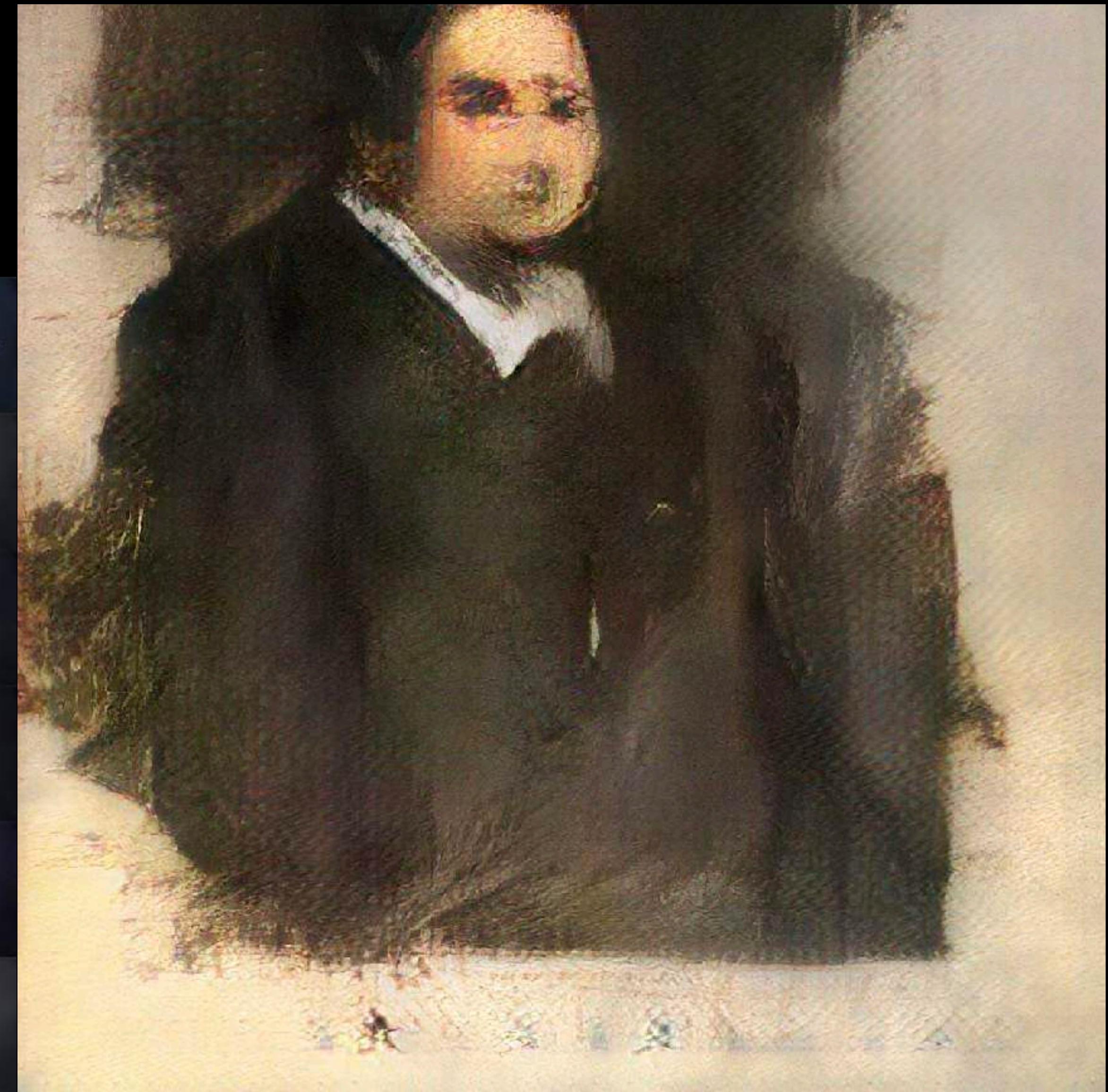
HISTORY OF AI ART - FIRST WAVE

- 2017 - 2018 - The rise of GANism.



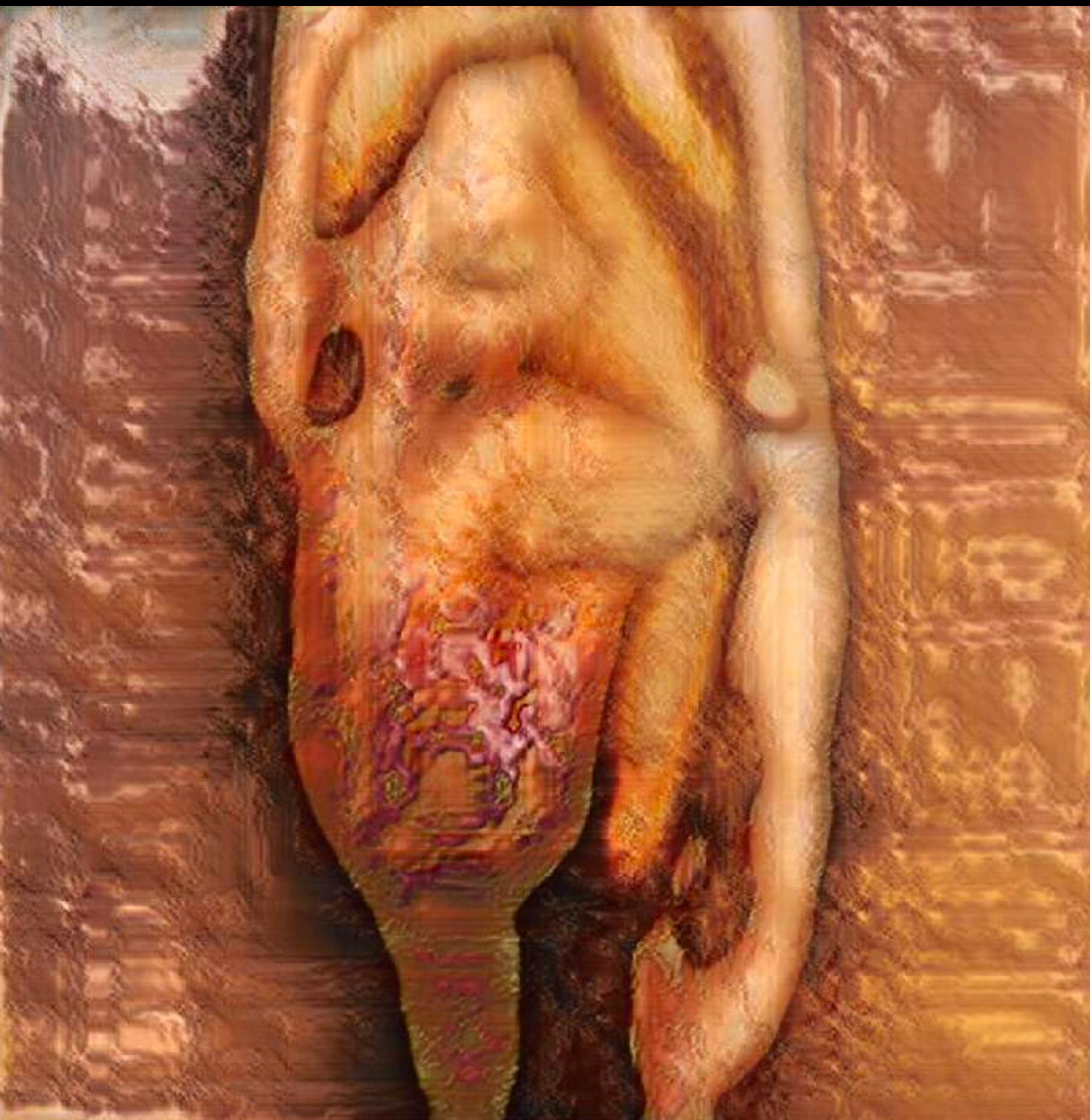
HISTORY OF AI ART - FIRST WAVE

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HISTORY OF AI ART -

- 2017 - 2018 - The rise of GANism.



HISTORY OF AI ART - FIRST WAVE



Robbie Barrat
@videodrome

...

left: the "AI generated" portrait Christie's is auctioning off right now

right: outputs from a neural network I trained and put online *over a year ago*.

Does anyone else care about this? Am I crazy for thinking that they really just used my network and are selling the results?



HISTORY OF AI ART - WAVE 1.5?



HISTORY OF AI ART - DALL-E

- “An armchair in the shape of an avocado”



DALL-E 1



A hedgehog using a calculator

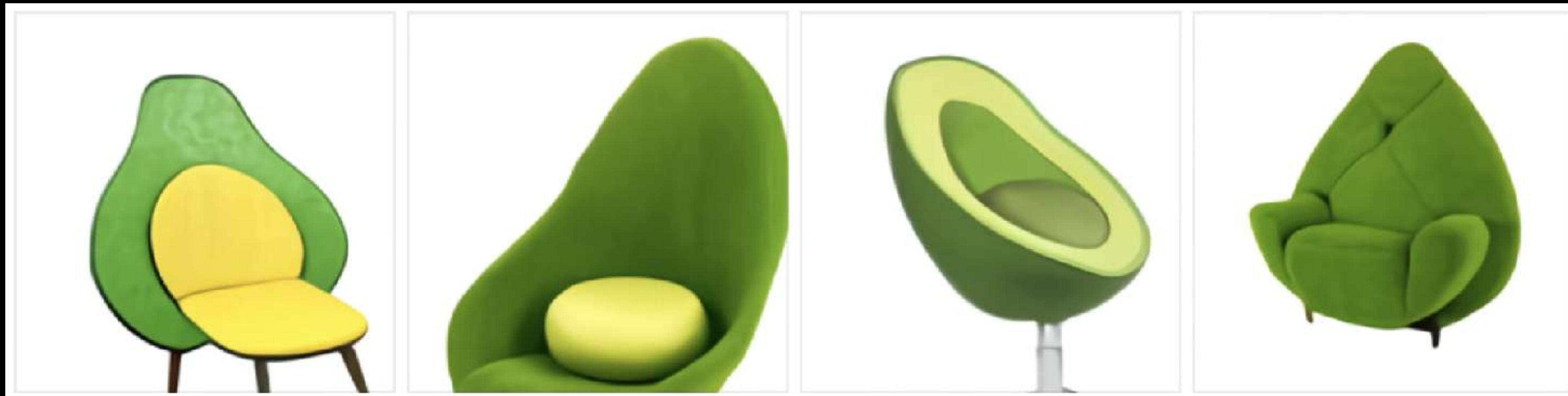
DALL-E 2



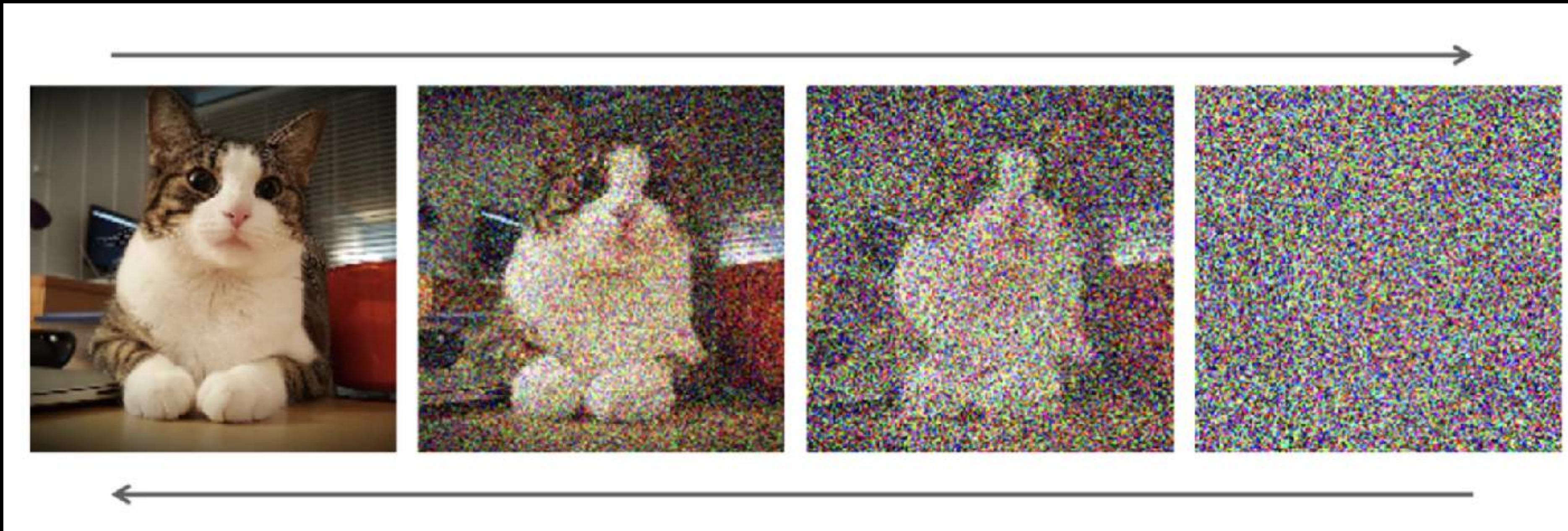
A hedgehog using a calculator

HISTORY OF AI ART - SECOND WAVE

- Second Wave = Latent Diffusion Models



HISTORY OF AI ART - SECOND WAVE



HISTORY OF AI ART - SECOND WAVE

- 2022
 - March - Midjourney private beta.
 - April - DALL-E 2 beta (no commercial rights).
 - July - DALL-E 2 includes commercial rights.
 - July - Stable Diffusion private beta.
 - August - SD 1.4 model is “open-sourced.”

HISTORY OF AI ART - SECOND WAVE



HISTORY OF AI ART - SECOND WAVE

SuperRare

RarePass Explore Resources Magazine Shop Sign in



3730 16

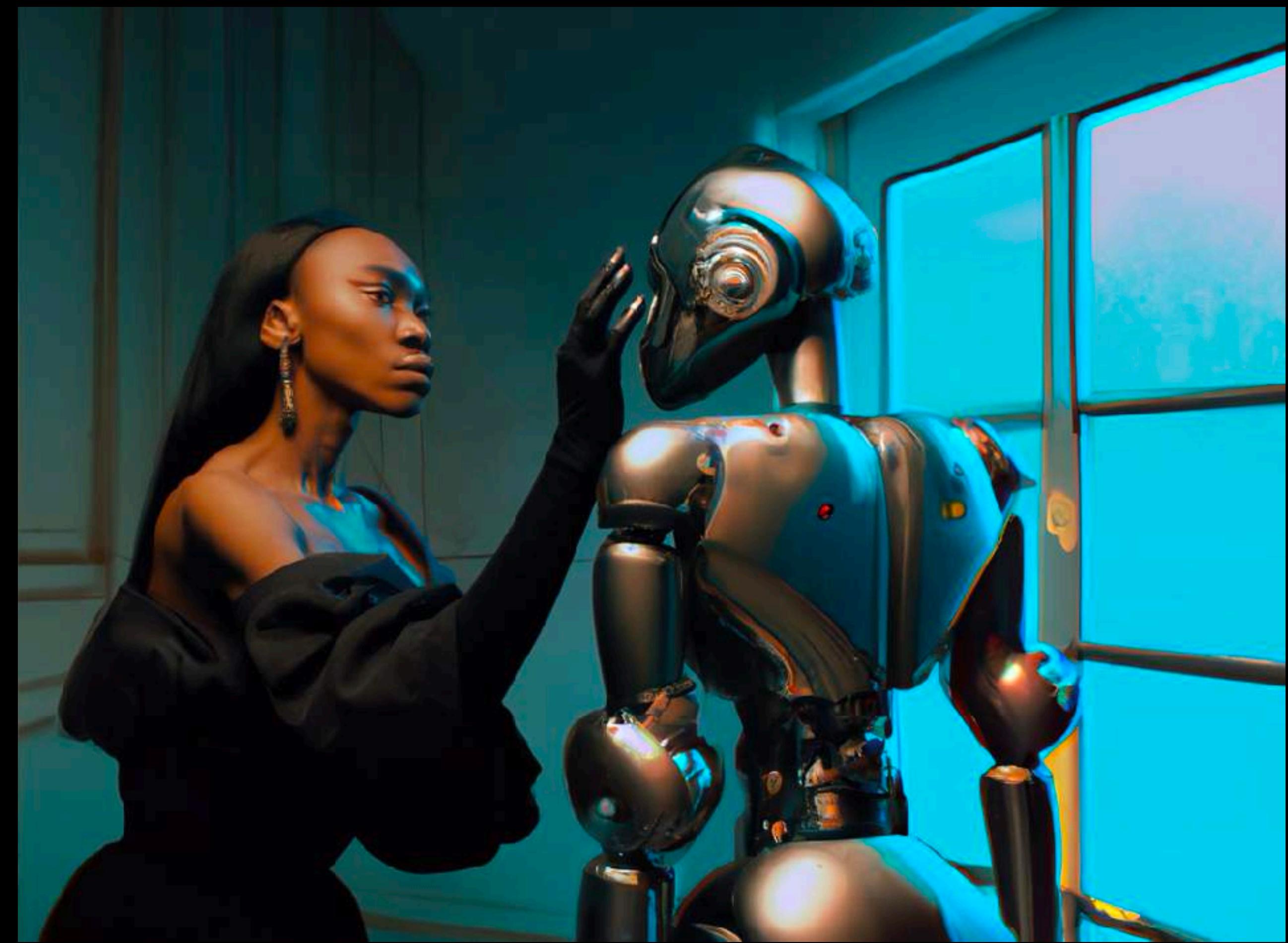
Pieces

Artist clairesilver12 Owner clairesilver12

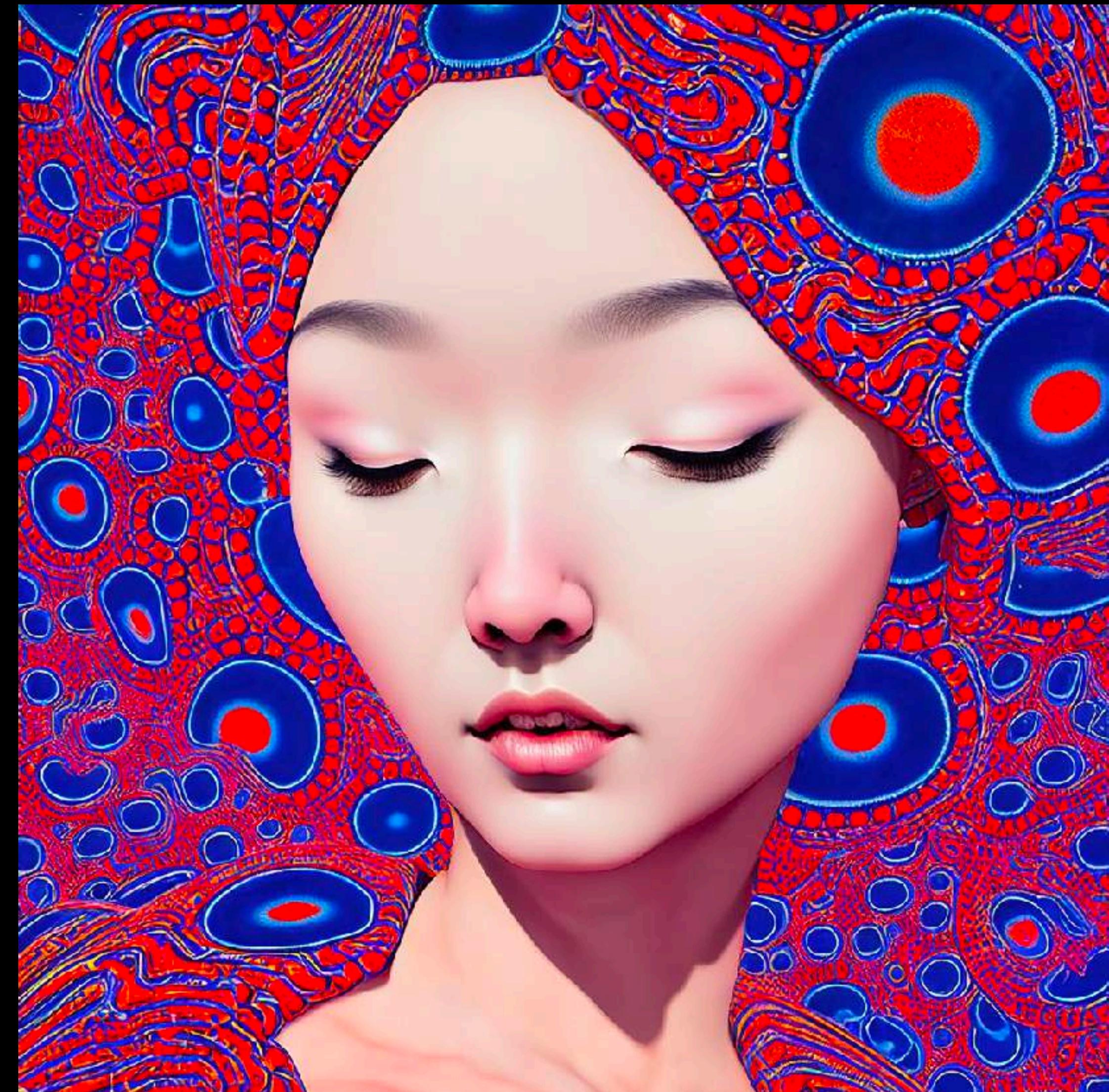
Reserve price **35 ETH (\$53.8k)** Place a bid

This artwork is configured for a Reserve auction. Once the reserve is met, a 24-hour timed auction will begin.

HISTORY OF AI ART - SECOND WAVE



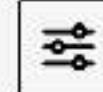
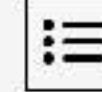
HISTORY OF AI ART - SECOND WAVE





Artists of iconic generative works...

Uniting the body of works for each artist, across platforms.

[CODE](#)[A.I.](#)[CURATED SORTING ▾](#) Search project or artist 

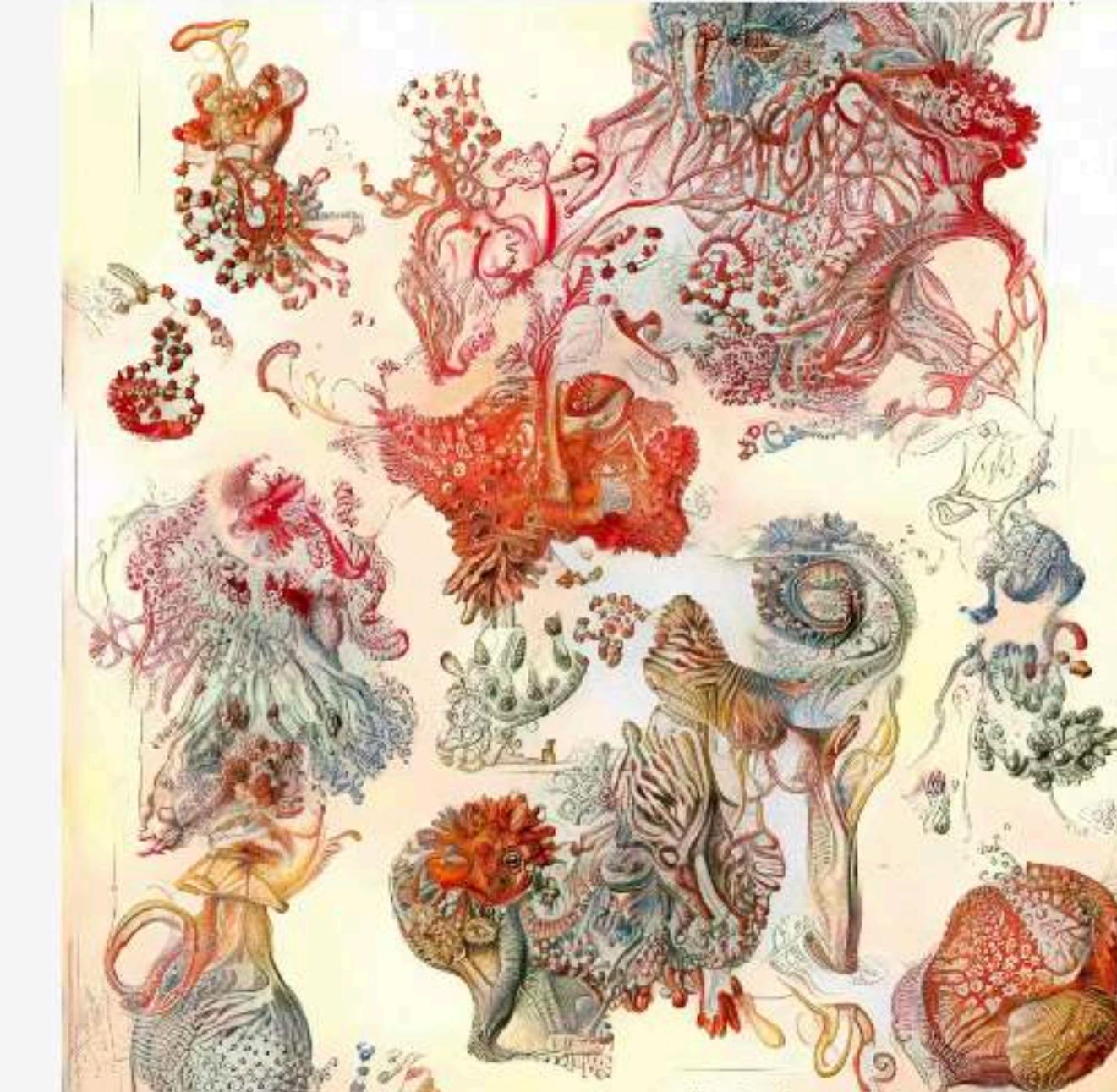
Claire Silver



Bas Uterwijk (Ganbrood)



Sofia Crespo & Feileacan
McCormick (Entangled Others)



CURRENT EVENTS



SELECTED WORKS

February 13, 2023



Yam Karkai, *Woman n°001*



Larva Labs, *CryptoPunk #3831*



Dmitri Cherniak, *Ringers #962*



Claire Silver, *a feeling i can't put my finger on*



Pindar Van Arman, *AI Imagined Portrait Painted by a Robot #2*



Monica Rizzoli, *Fragments of an Infinite Field #972*

CURRENT EVENTS

IN THE AI OF THE BEHOLDER —

Viral Instagram photographer has a confession: His photos are AI-generated

Artist wants to "come clean" and highlight a new media process.

BENJ EDWARDS - 2/21/2023, 5:30 AM



[Enlarge](#) / Jos Avery uses Midjourney, an AI image synthesis model, to create images that he then retouches and posts on Instagram as "photos."

With over 26,000 followers and growing, Jos Avery's [Instagram account](#) has a trick up its sleeve. While it may appear to showcase stunning photo portraits of people, they are not actually people at all. Avery has been posting AI-generated portraits for the past few months, and as more fans praise his apparently masterful photography skills, he has grown nervous about telling the truth.

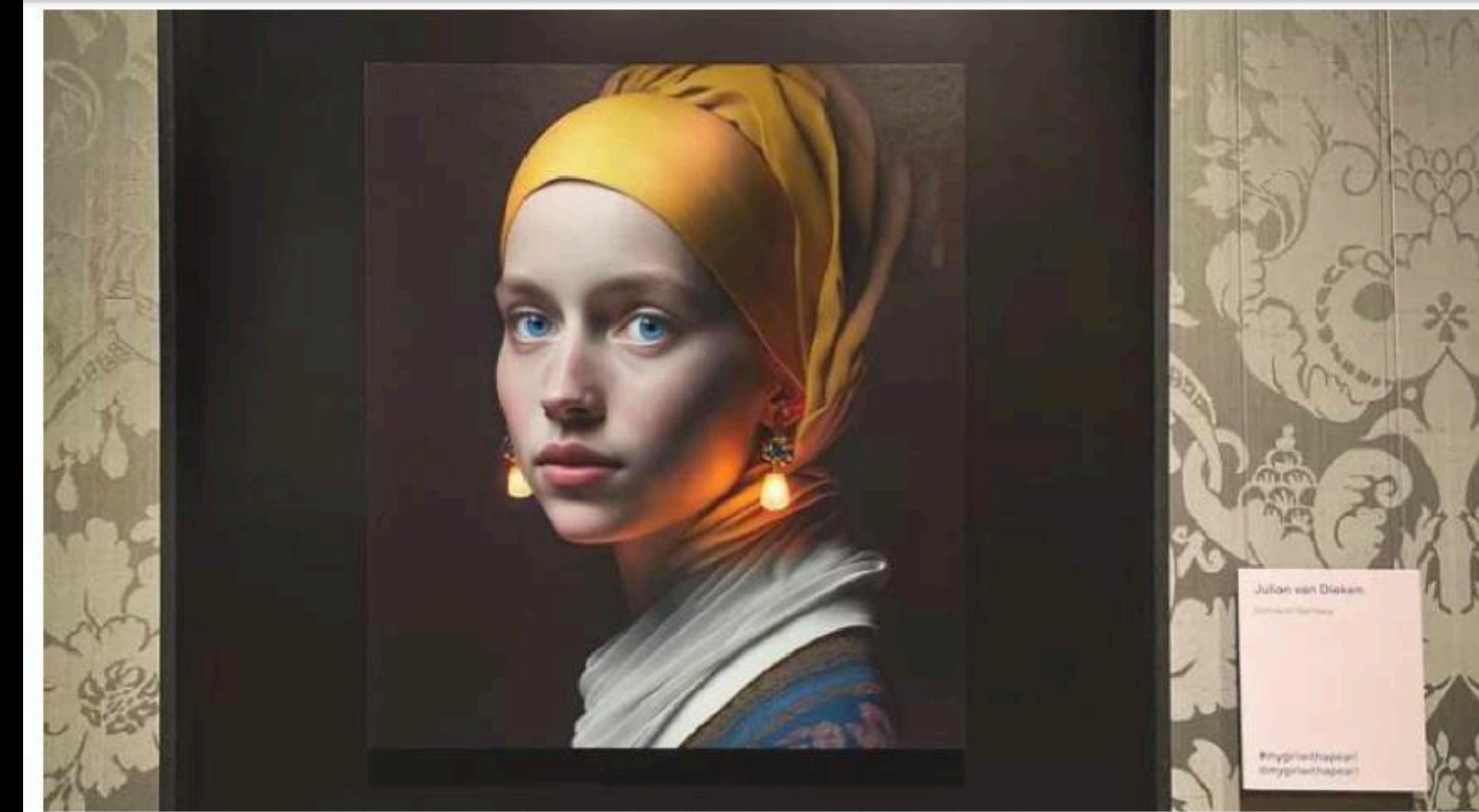
"[My Instagram account] has blown up to nearly 12K followers since October, more than I expected," wrote Avery when he first reached out to Ars Technica in January. "Because it is where I post AI-generated, human-finished portraits. Probably 95%+ of the followers don't realize. I'd like to come clean."



FURTHER READING

"Too easy"—Midjourney tests dramatic new version of its AI image generator

CURRENT EVENTS



A Girl With Glowing Earrings by Julian van Dieken, using AI generator Midjourney and Photoshop, in the Mauritshuis - Credit: [Julian AI art, julian_ai_art / Instagram](#) - License: All Rights Reserved

TECH INNOVATION CULTURE ART MAURITSHUIS AI » MORE TAGS

WEDNESDAY, 22 FEBRUARY 2023 - 11:10

Mauritshuis hangs artwork created by AI in place of loaned-out Vermeer

The Mauritshuis caused some controversy by hanging an artwork created with artificial intelligence in the spot usually occupied by Johannes Vermeer's Girl with a Pearl Earring.

The Vermeer masterpiece is currently on loan to the [Rijksmuseum for its Vermeer exhibition](#). In its absence, the Mauritshuis called on the public to create "your own girl," inspired by the Vermeer painting, to hang in its place.

According to the museum, the call sparked an explosion of creativity. It received 3,482 entries, including photographs, sculptures, crochet pieces, paintings, and even one composed of vegetables. A jury of judges chose five to hang in the museum. The entries and winners can be seen on the museum's website [here](#).

One of the chosen art pieces is A Girl With Glowing Earrings, by Julian van Dieken. He used the AI Midjourney to help create it and then Photoshop to fine-tune the result.

CURRENT EVENTS

U.S. Copyright Office Rules A.I. Art Can't Be Copyrighted

An image generated through artificial intelligence lacked the "human authorship" necessary for protection



Jane Recker

Daily Correspondent

March 24, 2022



Stephen Thaler's AI creation, *A Recent Entrance to Paradise*, has been denied copyright protection by the US Copyright Office. Stephen Thaler

MOST POPULAR

1.  The Real History Behind 'The Woman King'
2.  What Is Paczki Day?
3.  Medieval Pantry Stocked With Spices Found in 500-Year-Old Shipwreck
4.  Scientists Accidentally Bred a School of 'Sturddlefish'
5.  Scientists Are Injecting Alligator Genes Into Catfish

CURRENT EVENTS

A mixed decision from the US Copyright Office

By VanL • Feb 22nd 2023 •



We received the [decision](#) today relative to [Kristina Kashtanova's case](#) about the comic book [Zarya of the Dawn](#). Kris will keep the copyright registration, but it will be limited to the text and the whole work as a compilation.

In one sense this is a success, in that the registration is still valid and active. However, it is the most limited a copyright registration can be and it doesn't resolve the core questions about copyright in AI-assisted works. Those works may be copyrightable, but the USCO did not find them so in this case.

CONTROVERSY

- Recent Headlines
 - “Is A.I. Art Stealing from Artists?” - The New Yorker - 2/10/2023
 - “AI-art isn't art” - The Intrinsic Perspective - 5/18/2022
 - “The scary truth about AI copyright” - The Verge - 11/15/2022
 - “Have AI image generators assimilated your art?” - Ars Technica - 9/15/2022

CONTROVERSY

- Arguments Against AI Art
- 1. AI is stealing artists works (and is infringing and derivative).
- 2. The machine is doing all of the work.
 - a. It requires no skill.
 - b. It is unpredictable.
- 3. People naturally prefer art made by a human.

CONTROVERSY

- Arguments For AI Art
- 1. “Taste is the new skill” - Claire Silver
 - a. It's not just about generation (it's about curation).

CONTROVERSY

- Arguments For AI Art
- 2. It's a lot harder than it looks.



CONTROVERSY

- Arguments For AI Art
- 3. AI is simply a tool.



CONTROVERSY

- Arguments For AI Art
- 3. AI is simply a tool.

When creating art...



Real artists use real
materials like
paint and canvas



Digital "artists"
use **pixels**



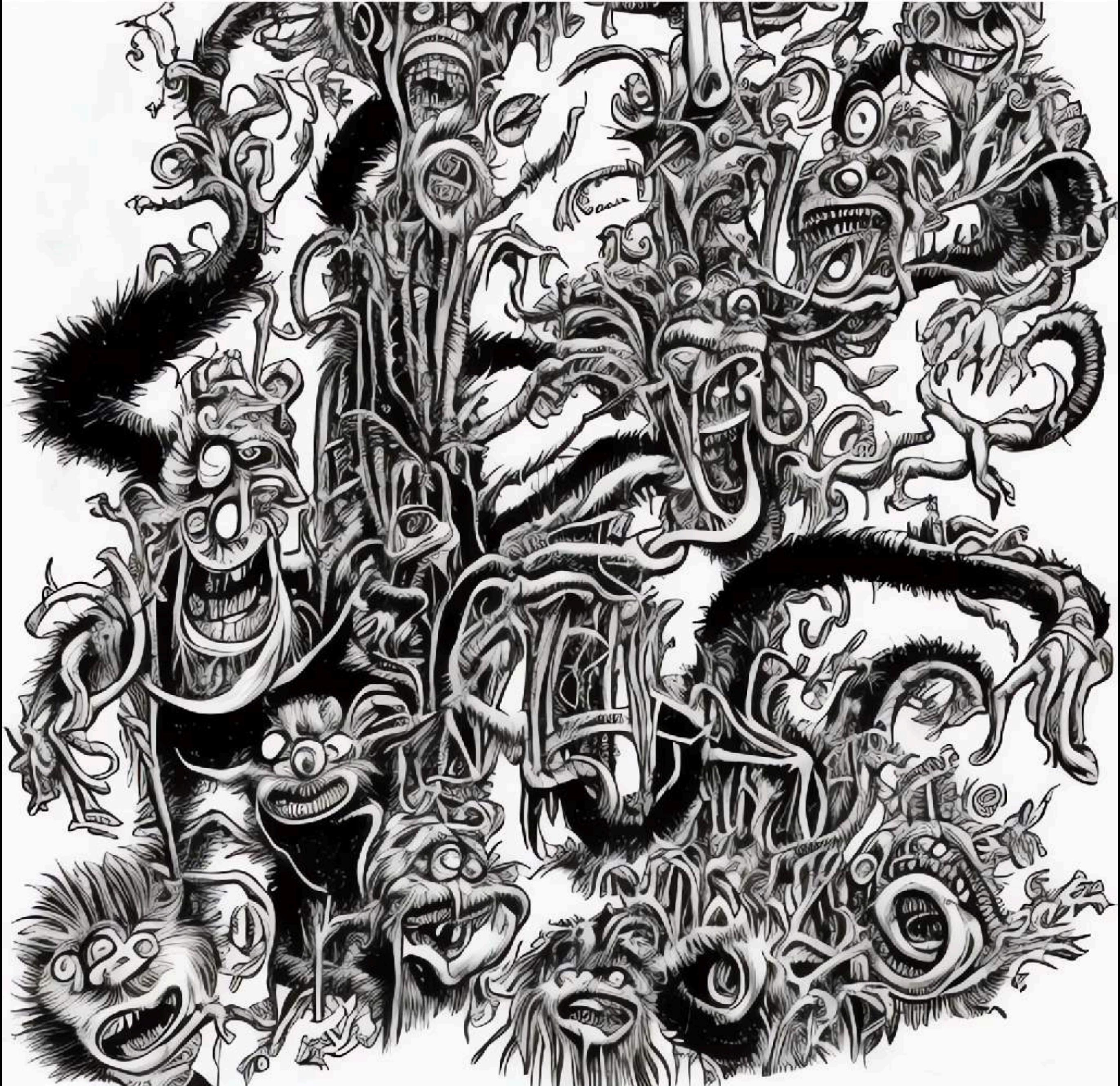
Without a computer and google images, real artists
can still create things, but fake digital artists cannot.

Both benefit from technology, but digital artists
depend on it.

Digital artists don't "create" art, they use software to
manipulate pixels as a deception to appear as real artists.
Without **physical materials** and **blood, sweat, and tears**,
digital art is fraud.

CONTROVERSY

- Arguments For AI Art
- 4. It's a social good.



QUESTIONS?

- “If you could say it in words, there would be no reason to paint.”
- Edward Hopper



NEXT LESSON

- AI Art - Lesson 2 - March 9, 2023

Basic Tools for Creating AI Art:

DALL-E, Midjourney & Stable Diffusion

- References: bmeadows.xyz/inpeak

Lesson 1 - An Introduction to AI Art

Summary - In this lesson, we will look at the history of AI art from the 1950s to present. We will discuss different genres and types of AI art. We will touch on famous art and artists, as well as discuss some of the controversies surrounding AI art today.

References

- History of AI Art
 - [Timeline of AI Art | AIArtists.org](#)
 - [How Did A.I. Art Evolve? | Artnet](#)
 - [The Past, Present, and Future of AI Art | The Gradient](#)
 - [Where the AI Art Boom Came From | Wired](#)
- Twitter Posts
 - [Creation Process | @TheBenMeadows](#)
 - [AI Art Tutorials | @ClaireSilver12](#)
 - [Historic AI Art | @ClownVamp](#)
 - [Second Wave AI Art | @ClownVamp](#)
 - [The AI Artists List | @tender_art](#)
 - [Notable AI Artists | @CxWatkins](#)
 - [AI Behind The Scenes | @ClownVamp](#)
- Controversy
 - [AI Art Panic | Opinionated Guides](#)
 - [The AI Art At Christie's Is Not What You Think | Artnome](#)
 - [AI Is Blurring the Definition of Artist | American Scientist](#)
 - [AI won't make artists redundant - thanks to information theory](#)
 - [Is A.I. Art Stealing from Artists? | The New Yorker](#)
 - [AI or No, It's Always Too Soon to Sound the Death Knell of Art | Wired](#)
 - [AI-art isn't art | The Intrinsic Perspective](#)
 - [Have AI image generators assimilated your art? | Ars Technica](#)
 - [The scary truth about AI copyright is nobody knows what will happen next | The Verge](#)
- Artist Profiles
 - [PROOF Podcast - AI Art is Not Art, with Best-Selling AI Artist Claire Silver](#)
 - [Four Artists Open Up About AI](#)