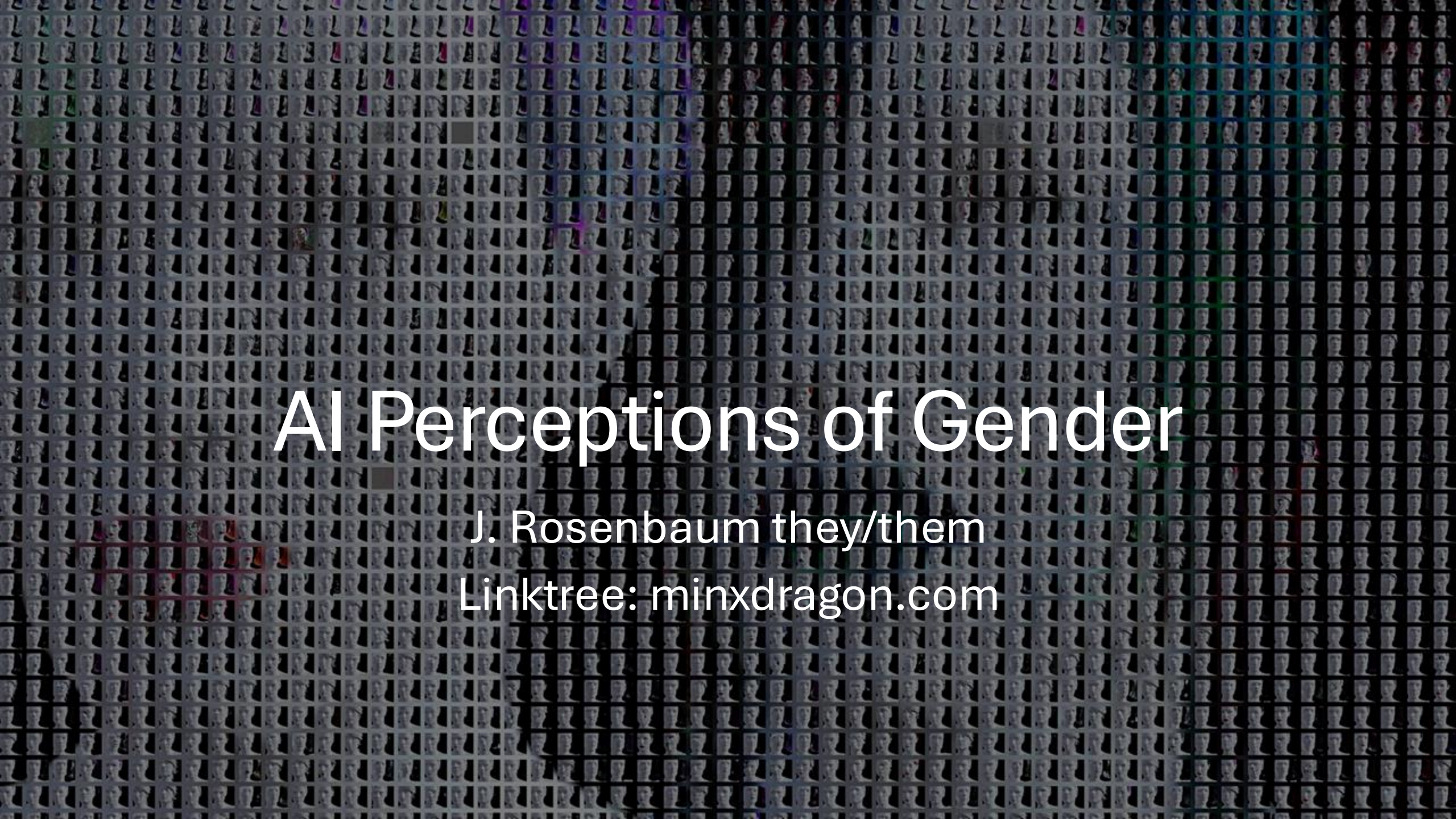


AI Perceptions of Gender

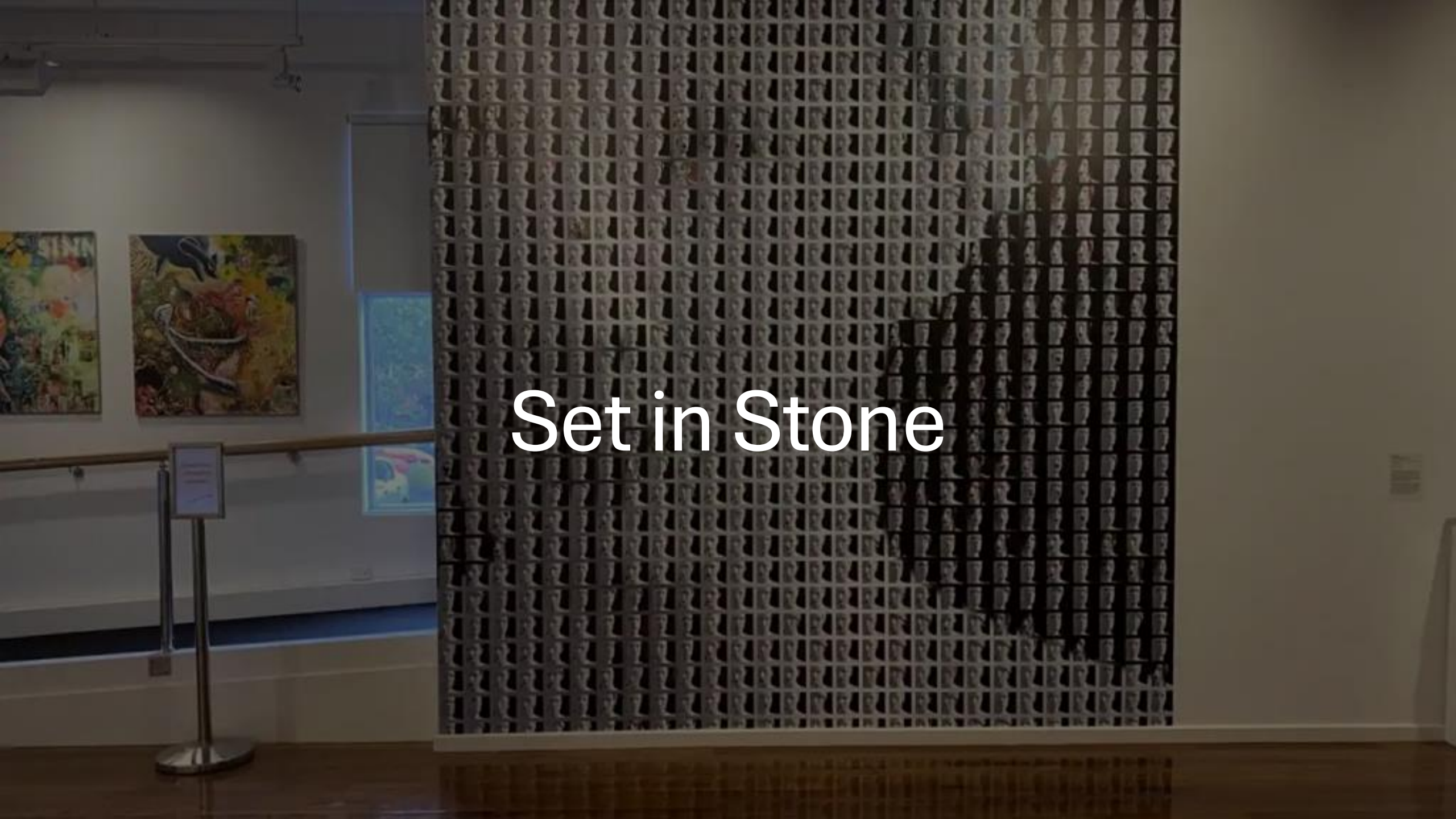
J. Rosenbaum they/them
Linktree: minxdragon.com

Research Questions

1. Why do AI systems perceive gender and how do they qualify gender in the images they generate?
2. If we create a biased dataset and slowly debias it by introducing new data, how will the generated images be affected? Is it possible to debias datasets?
3. What are the implications for the visual representation present in generative images of people?

Three artworks

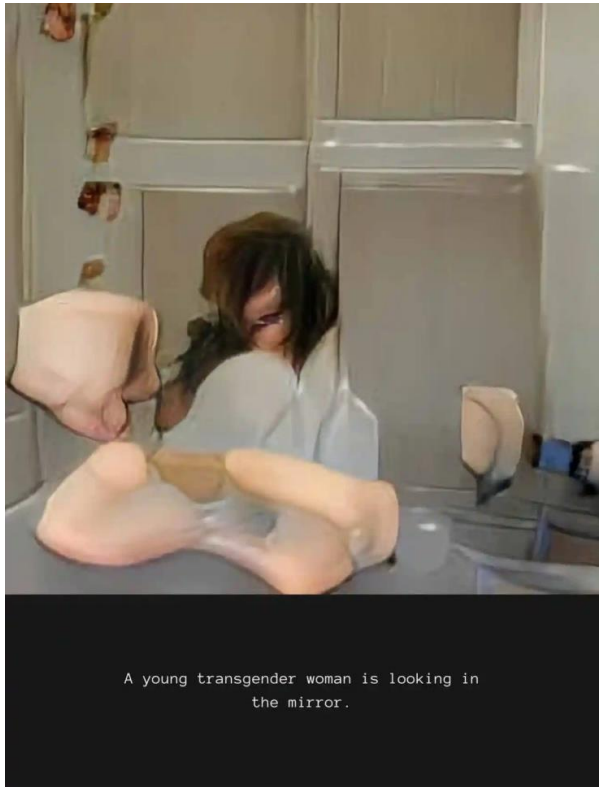
- Set in Stone
- Frankenstein’s Telephone
- Gender Tapestry

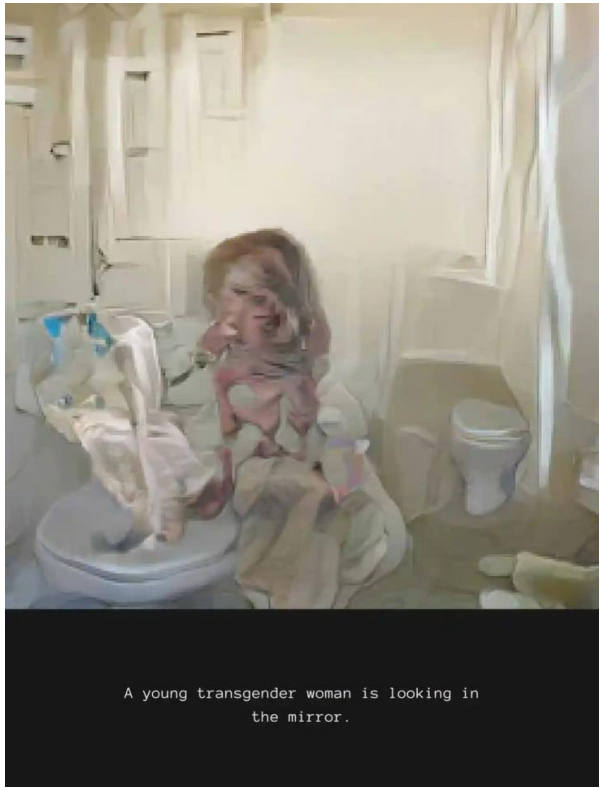

Set in Stone

Dataset Images

- 3D rendered
- Animated as stills
- Racially diverse

Frankenstein’s Telephone

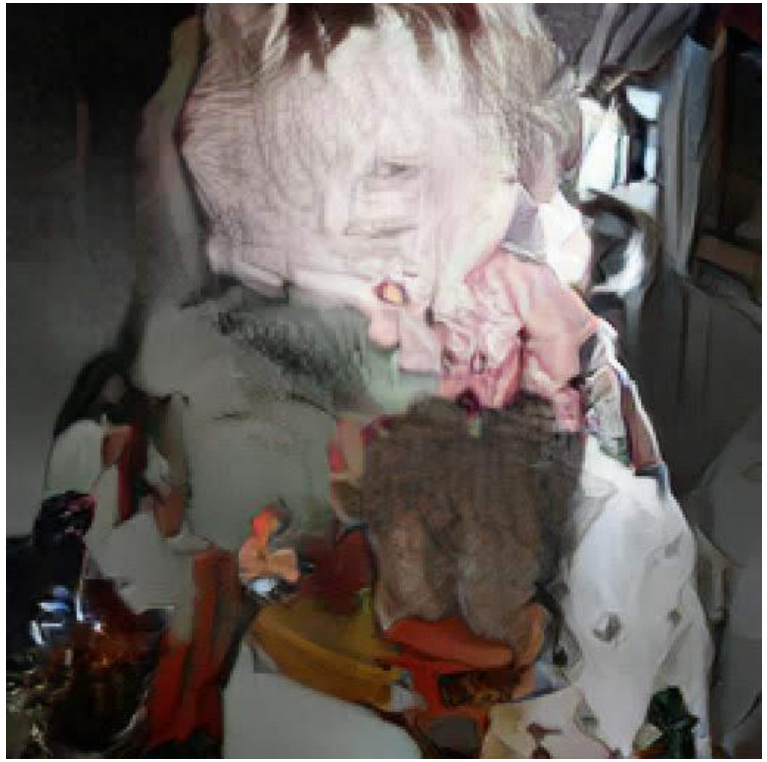




Original Prompt:
A woman with a dog on a leash.

Im2Txt Caption:
A man riding a skateboard down a street..

A “young girl” apparently!



a man at the beach

a woman at the beach

a non-binary person at the beach

Further Explorations: ATTNGAN

a man at the beach

a woman at the beach

a non-binary person at the beach

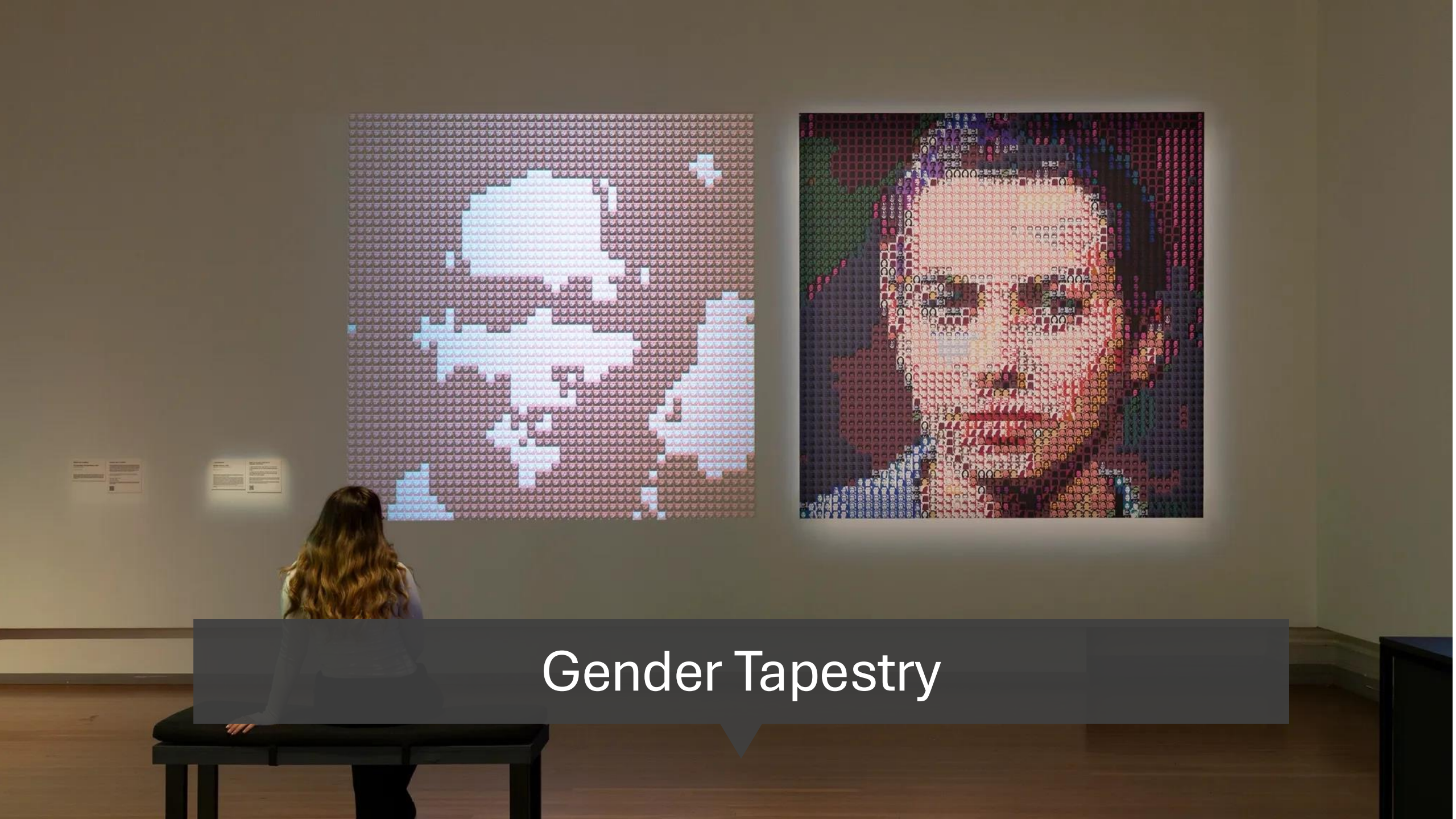
Further Explorations: Clip+VQGAN

Midjourney non-binary people from version 1-6

- Thin
- Young
- Pale
- Fairy hair

Pixelated explorations

From Pixelated image to Caption to Generated image



Gender Tapestry

Generated dataset images

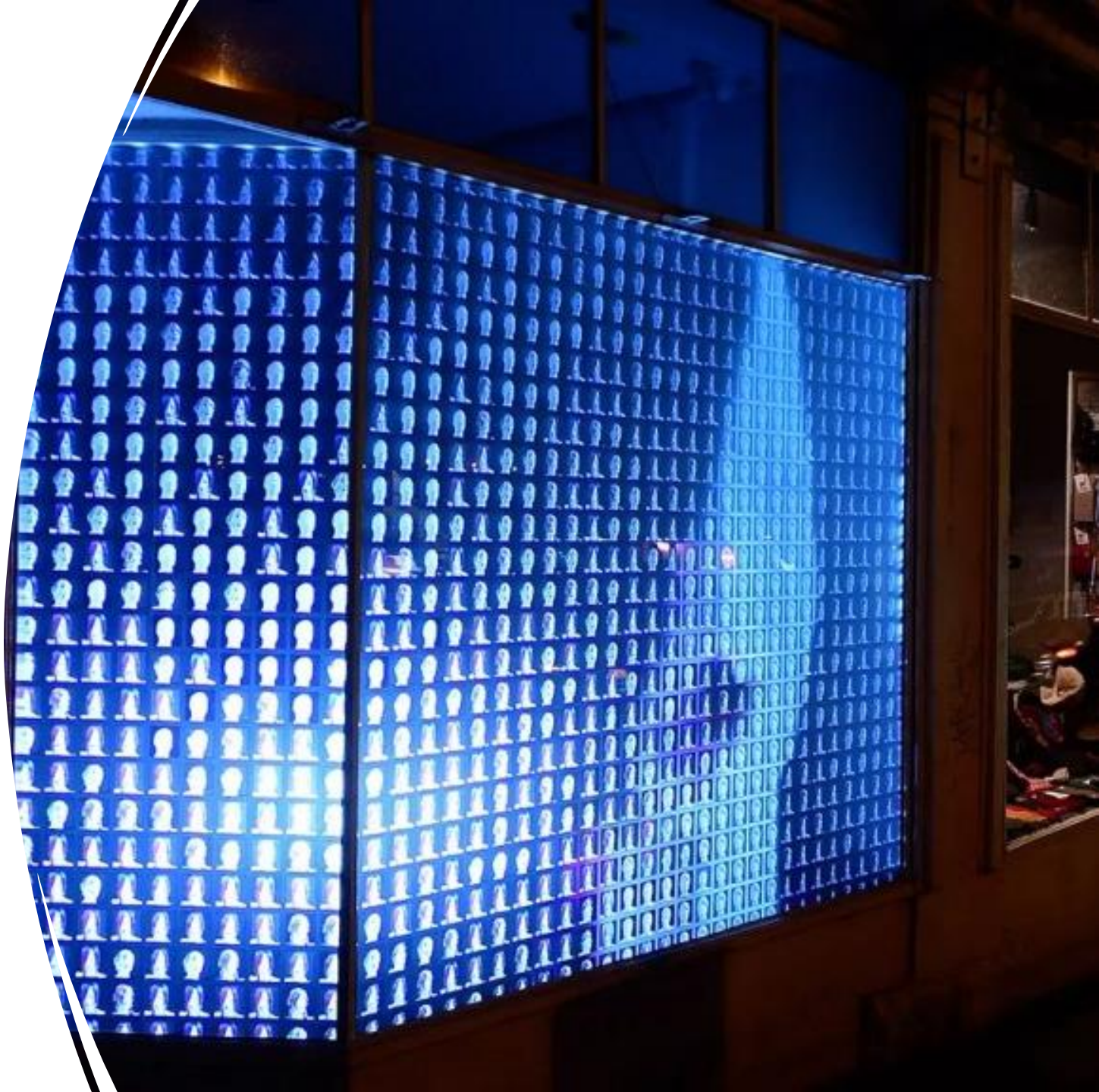
Custom assigned color

- Multi Label Classifier trained in 6 Pronoun sets
- Percentages added together and turned into RGB
- Modulo operator introduced randomness

Live at ACMI

Findings

- Bias is deeply embedded in datasets
- AI can evolve, but not perfectly
- Representation matters
- The best time to start is yesterday. The next best time is now



Gender Tapestry
J. Rosenbaum

Thankyou

- Social media links: www.minxdragon.com
- Website: www.jrosenbaum.com.au