Art History in the Age of Artificial Image Generation

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Motivation

- To bring together art historians and technologists to discuss how art history, with its deep reservoir of knowledge about how images are created and operate in society, can contribute to the discussion of images generated by artificial intelligence (i.e. Dall-E 2, Midjourney, Stable Diffusion, etc.).

Project Description

- We convened a one-day workshop with 8 participants. Each participant gave a formal presentation responding to a "provocation" provided by the organizers.
- We then discussed these presentations together as a group.

Context

- In 2022, several website for "artificial" or "synthetic" image generation were released to the public.
- Alongside ChatGPT, these have initiated a broad conversation about human creativity.
- Art history should be part of these conversations

In response to rapid advances in computing, we convened a group of scholars for a day-long workshop in to discuss how art history can participate in culture-critical conversations about artificial image generation and the humanities.

Aditya Singh, "How Does DALL·E 2 Work?" *Medium*, April 27, 2022
https://medium.com/augmented-startups/how-does-dall-e-2-work-e6d492a2667f

Understanding *how* artificial intelligence generates images helped us better see the ways that art history can productively engage with technological questions.
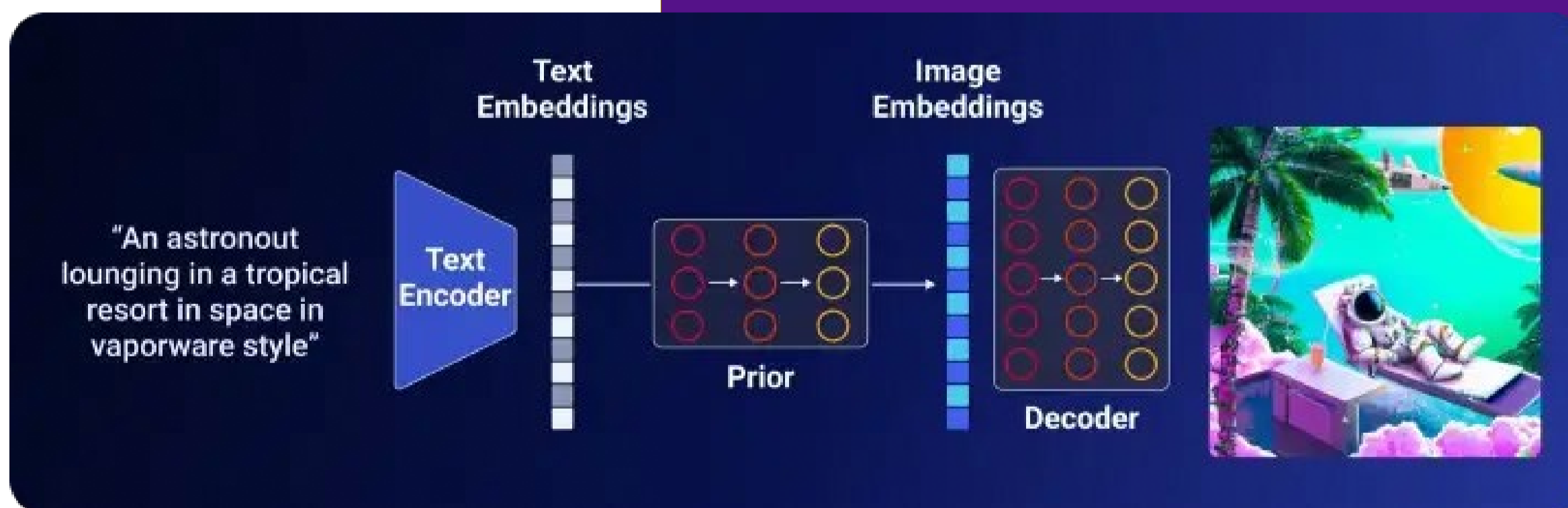
Project Deliverables

- We have a proposal on the table to develop a lexicon of "false friends" – i.e. words that are used by both art historians (and humanists more broadly) and computer scientists, but which have *very different meanings* in each discipline.
  - For instance, the word "**style**"
  - **Vision** is another term used in radically divergent ways
  - **Similarity, Complexity,** and **Formal** are other terms that seem to have very different valences across the disciplines in question.
- Participants are also working together to gauge the feasibility of various co-authored articles. One will investigate the aesthetics of computer chip design, while another will offer high-level reflections on the role of artificial intelligence in art historical inquiry.

Potential Impact

- The role of artificial image-generation is generally undertheorized in our society. This workshop enabled leading practitioners in art history and technology to begin formulating a compelling and ethically-informed vision for how art history, and our wider society, can respond to the ubiquity of artificially-generated images.

Workshop Participants (alphabetical order)

- Kale Doyen, PhD Student, University of Pittsburgh
- Sonja Drimmer, Associate Professor, Umass, Amherst
- Paul Jaskot, Professor, Duke University
- John Ladd, Assistant Professor, Washington & Jefferson University
- Elizabeth (Cassie) Mansfield, Professor, Penn State
- David Newbury, Assistant Director, Software and UX at J. Paul Getty Trust

University of Pittsburgh