Them

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This work consists of a series of positive film slides placed on a slide projector. The film that loops on the slide show is a series of fictional portraits of people. The photographs were synthesised by artificial intelligence, with the artist organising his family albums before curating and selecting the pictures to form an original dataset. The artist then used different AI models to process them, creating images that appear to be based on the artist's memories but which are nonetheless ambiguous, difficult to recognize. *Them* illustrates how memory is mediated and transformed through technology. In order to explore how family photographs are based on personal memories, our individual memory can here be interpreted and reconstructed through the eyes of a machine. Family portraits are the most common and mundane photographic subject matter. The artist collected his datasets from a group of family pictures captured using a film camera, which were then processed digitally by machine learning and recreated using a text-to-image conversion process, turning these familiar family portraits into fictional figures. The portraits of ordinary family members are thus turned into unrecognisable digital figures and then printed back into the medium of analog film. The past private memory has been estranged through technology. In this way, the work explores the reconstruction of human memory by machines, and imagines the potential relationship between photography and artificial intelligence.

Keywords: Artificial Intelligence, GANs, Text-to-Image, Photography, Memory, Media Archeology.

Description

Memories are preserved through different media. Photo albums are a record possessed by almost every family — a visual archive of family members' past experiences, locations visited together, moments shared, all captured when the shutter is pressed. In Henri Cartier-Bresson's classic statement, "the decisive moment" (Cartier-Bresson 1952), the instant when a family member presses the shutter, the camera records the memory. Before digitization, people believed in the authentic, documentary quality of film photography; it recalled the places they visited, the pictures of their friends, the joy of family celebrations. For decades, all of the precious moments of lives were recorded with portable film cameras. Documenting and capturing reality was the primary function of family photographs.

Family photography is the medium through which intimate memories are presented. I had the opportunity to return to my hometown last year, where I unearthed my parents' photo albums from the 1970s to the early 2000s. As I was going through them, there were souvenir photos taken by my parents when they were young and travelling around the world. There were also some photos of my parents with relatives and friends. Because they were people close to me, I could feel my family's emotional and intimate connection with a specific time and place in the past, even though these events occurred prior to my own participation. And this emotional resonance provoked me to think about the creative potential of the medium of family photos, which hold personal memories, and can be transformed into collective, shared memories that a wider group of people can perceive. Suppose these are not people I am familiar with but instead some fictional people. Must the meaning of these images be limited to the family members themselves, or can they evoke a broader shared imaginary experience?

The authentic and intimate characteristics of these family photographs was the original inspiration for this work. I have attempted to invert these two characteristics of family photographs, both technically and conceptually, to review and reconstruct the private experience based on the photographic medium from the perspective of artificial intelligence.

After first scanning nearly one thousand film photographs, I classified them for use as a dataset for machine learning, then fed the images into StyleGAN. I selected some of the images that were synthesised in latent Space. These StyleGAN synthesised images do not accurately show the images' details, and I used the contours and colours of these synthesised images as the basis for reprocessing these images using the Img-to-Img function in the text-to-image model Stable Diffusion.

Figure 1: Installation of *Them*, celluloid films are played by the slide projector.

Since Img-to-Img requires a prompt to generate its final image, I entered the same prompt, "Them" for all images in this process. I minimised the intervention of different prompts in the final image composition. The word "*Them*" in the work's title is the only prompt I used to synthesise the final image, which echoes the work's title.

Figure 2: Film slide.

Through experimentation with machine learning and text-to-image models, *Them* attempts to technically engage one in thinking about the connection between photography and artificial intelligence. The medium of photography becomes a real-world record through a combination of light and lens shutter. At the same time, the machine synthesises its own memories of what it sees by learning from the visual archives of the real world. In this process, GAN synthesises the contours, colours and lines of scenes and people based on the source material, while the Text-to-Image model unfolds its imagination under the guidance of the artist and synthesises fictional portraits in its database. In addition, the composite images are printed and shown on slides. The new technology is demonstrated in the forgotten medium of celluloid film, echoing the media archaeology paradigm of thinking about the parallels between old and new technologies (Parikka 2012).

Figure 3: Image training and generating process.

Original Pictures   StyleGAN Images   Image From Stable Diffusion with prompt: "Them"

Demonstration Video
https://youtu.be/65I4A7vVa6o

References

Cartier-Bresson, Henri. 1952. *The Decisive Moment; Photography by Henri Cartier-Bresson*. New York: Simon and Schuster

Parikka, Jussi. 2012. *What Is Media Archaeology?* Cambridge, UK: Polity Press