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Blue Marbles

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Blue Marbles is a speculative short film about rare earth materials, tech labor, shifting geological landscapes, and modern neural network surveillance systems. It focuses on the seemingly "mundane" aspects of data collection, self-surveillance and examines the acceleration of the building of large surveillance networks in conjunction with advances in computer vision and neural networks in the context of modern China. The quick integration and digitization of large-scale national databases have developed in conjunction with a barrage of public relations media framing the acceleration of surveillance technology in the name of public security, personal safety, national identity, and societal stability. Public opinion and lack of discussion /options around surveillance and political participation produce numbing and silencing effects on the individual psyche. *Blue Marbles* looks at how modern Chinese surveillance hardware and software companies brand their products, the influence of Silicon Valley developments in surveillance capitalism, and how surveillance tropes are reassembled and packaged for public consumption. *Blue Marbles* repurposes these symbols of modern surveillance (the common images of the camera lens, the earth, symbols of prediction, the sounds of online hardware infomercials) as found footage to be used, sampled, trained on, and reassembled into a meditation on the complex intertwined nature of global and state-sponsored surveillance networks.

Description

Blue Marbles is interested in the seemingly “mundane and common” aspects of surveillance culture in the use of communication/social media apps to document and collect data on everyday life. It is an investigation of this feeling of inevitability and numbness that it produces while thinking broadly about the connections between labor and the extraction of physical materials involved in the production of surveillance camera hardware, data cleaning, and the rituals of documentation.

Although surveillance is not confined to representations of any specific space or form, I have decided to use common symbols and tropes found in Chinese surveillance hardware commercials as the basis for this film for the main purpose of creating a direct engagement with largely abstracted and hidden processes. In loosely analyzing commercials released by Chinese surveillance companies, Hikvision,¹ Da Hua, and Sensetime circa 2016-2019, some common symbols that appear are round spherical objects: the camera lens, the eyeball, the earth, crystal balls, etc. In addition to the symbols, the sounds and narration of these commercials were used, sliced, stretched, manipulated, and ripped apart to create a new sonic space where the tropes can exist in a limbo disconnected from the original sources. In addition, I specifically wanted to explore mass surveillance in China, a country often perceived in Western media as an alien or orientalized Other and make connections to the developments of surveillance capitalism in the US. Common interfaces of surveillance capitalism such as online gaming platforms, online shopping, and data collecting lifestyle apps integrate all of us in these vast networks across geopolitical boundaries and yet create vastly different conditions on how various demographics are being surveilled. Mainstream media Orwellian depictions of the Chinese surveillance state often brings a sense of disconnection from the way democratic countries see their own surveillance networks. It is easy to revert to Cold War metaphors and see China as an Other, an extreme edge case and yet it is perhaps the largest experiment of globally integrated mass surveillance known in history involving the cognitive labor and technology of multiple countries.

In China, the ubiquity of surveillance is everywhere; from the community apartment complexes where people live to UNESCO protected natural mountain scenery. As an outsider coming to visit, the feeling of being watched is everywhere and yet for the average Chinese citizen, the external gaze of surveillance has long been internalized. The camera lens is so commonplace that its physical presence is forgotten. Yet, the specter that hovers and floats over everything is

1. 2019 Hikvision Brand
Video: Beyond Just Seeing
<https://www.youtube.com/watch?v=ZH6ltPzvKHc&t=5s>

felt like dead relatives. Walking on Chang An Ave in Beijing for the first time can feel like walking under a screen of a million artificial eyes and yet eventually the cameras meld into the landscape as birds perched on metal poles. The disconnection between the everyday workings of the surveillance state and the lives of a population with access to inexpensive smartphones, screens, and CCTV devices often create an unreal sense of distance. This detachment hides, rather than reminds, the interconnected nature of globalized surveillance technologies.

Rather than aiming at sensationalizing surveillance, I hope to highlight the numbing effects of a surveilled networked life. The data becomes mundane through sheer volume, a constant barrage of pixel values and double taps. Yet behind this barrage of data is a vast network of labor. Whole village economies became reliant on work categorizing images for machine learning datasets.² Entire towns mine Lanthanum to produce spherical camera lenses. Organic chickens tracked with blockchain.³ The repetitive labor that produces a hazy mechanical gaze repeats itself in the way we watch, track, and digitally interact with even ourselves. According to Franco Berardi, the effects of cyberspace on cyber-time extends to the psycho-sphere creating a feeling of numbness and a lack of horizon or futurability (Berardi 2009). In the film, this lack of solid ground is represented by the NASA blue marble 3D simulation being fed into Pix2Pix next frame prediction generating the next frame of video based on what the model has learned from the input. This produces a strange “prediction” of the future of a projected earth being stretched and pulled apart. The original Blue Marble photograph of the earth was taken by the crew of the Apollo 17 spacecraft on December 7th, 1972. It showed an illuminated earth at 29,000 kilometers from the earth’s surface. Perhaps one of the places where the image of Blue Marble was most viewed unknowingly was on the splash screen of the Chinese communication app WeChat, which has over a billion active daily users. Each time the app was opened from 2011-2017, one would see the famous Blue Marble image of the earth cropped behind a silhouette of a person in front of the earth. WeChat has over 1 billion active users who daily generate 45 billion messages, 410 million audio and video calls, and over a billion commercial payment transactions (Graziani 2019). The monitoring for blacklisted content in WeChat is constantly undergoing daily updates and shifting with what is happening locally and abroad. These shifts in data collection outpace the ability for us to process. We are forced to update with these changes. The way words are typed in chats, voice inflections and tones in the language are changed, and abstract symbols stand in place of content.

2. “AI Farms’ Are at the Forefront of China’s Global Ambitions.” Time, <https://time.com/5518339/china-ai-farm-artificial-intelligence-cybersecurity/>.

3. Wang, Xiaowei. *Blockchain Chicken Farm: And Other Stories of Tech in China’s Countryside*. FSG Originals, October 2020.

These constant technological changes accelerate a feeling of constantly having to mentally renew. This constant process of updating ensures that the surveillance subject is never finished changing and is continually assembled and reassembled with no definite goal. It is a shapeshifting mass contained in a perpetual feedback loop. As we incorporate more of the data in our bodies, the surveillance system becomes parasitic, living off of the objects it surveils. Our memories and thoughts have migrated outside our bodies into data-flows. What are the psychological effects of melding our bodies and memories with the surveillance network which seems to expand with no end or horizon in sight?

It is this feeling of detachment and numbness towards surveillance that I attempt to explore in this film. Our repetition of actions has been completely integrated into the surveillance network as labor. The constant tectonic technological shifts happening at a speed that our bodies can no longer keep up with. What are these effects of repetition within the context of constantly shifting terrain? How does the body react when policies can no longer keep up with technological change? How does one find a stable ground to stand on? *Blue Marbles* is made as a meditation and reflection on these ideas using the tropes of traditional surveillance. It uses the language of surveillance as input to either be processed or analyzed as data and reprocessed as new images. The film is composed of image sequences created from datasets of surveillance camera products, Nasa Blue Marble images of the earth, rare minerals particularly Lanthanum (used to produce camera lenses among other things), Chinese Shanshui landscape paintings, and processed snippets of existing brand commercials. The datasets were then prepared and trained using StyleGAN ADA and Pix2Pix Next frame prediction models to create new images that make up the basis of the film. It is an experiment in using neural networks to create new hallucinations on the current state of global surveillance.

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