SHOWSTUDIO EXHIBITION

SURFACE TENSION / KARYN NAKAMURA

Whether a security camera capturing a specific incident, the image of illuminated gases around a black hole, or a set of stills from 1907 documenting a sea urchin egg splitting during fertilisation, visual media serves as a critical interface to reality, at times functioning as an intermediary to a phenomena that would otherwise be inaccessible. When we rely on such technology as an intermediary for vision, how do we validate its interpretations? The gaze of a machine is constructed through algorithms, datasets, and the intentions of those who design it but who controls these systems and whose views do they privilege?

Asking these questions, Karyn Nakamura and Nick Knight are proud to announce *Surface Tension*, an ambitious multi-channel installation that is the culmination of a 17-day live studio residency with Nakamura, premiering at SHOWstudio's Bermondsey-based gallery on 20 February, 2025.

Featuring a composition of five interconnected screens, the exhibition explores the intricate relationship between visual media, power, and truth via a series of vignettes. As each screen dives into layered microscopic footage, a new world we wouldn't normally be able to see is stitched together, helping us to understand not only how technology exposes a truth we wouldn't normally be privy to, but also how we then validate its interpretations against our own. At the centre of *Surface Tension* is the exhibition's kernel of truth; raw footage from a bright-field microscope. The footage on show captures Nakamura's process of meticulously animating individual neurons (cellular matter in human brains) on a glass slide, as shown to the viewer in a series of short vignettes. Using the technology of optical tweezers (essentially a laser beam to manipulate small matter) the kinetic energy of light - a crucial component in observing the world - lifts and moves these 10-micron sized neurons around the surface of the slide. This meticulous process orchestrates the neurons in such a way that they appear to swim and dance in and out of forming letters across all five screens. When assembled together in the installation, they attempt to spell out the word 'THOUGHT' all while using the very neurons in our brains that help us think.

Over the course of each vignette presented, the raw microscope footage is abstracted as it undergoes transformations through a variety of computational filters and body-like textures generated with diffusion models (generative AI models), with every very visual shift revealing a new facet of the original footage. As the artificial textures cycle through, layering and transforming the footage, each film itself begins to act as the 'skin' of the neurons, sometimes concealing, sometimes revealing, embodying the tension between authenticity and technological reconstruction.

By probing the tensions between visibility, invisibility, and authority, *Surface Tension* examines how images can simultaneously expose and obscure, empower and control, challenging viewers to contemplate the power of visual media in shaping our realities.

20 FEBRUARY - 12 MARCH 2025

SHOWSTUDIO GALLERY, 22D EBURY STREET, SW1W 0LU

Whether a security camera capturing a specific incident, the image of illuminated gases around a black hole, or a set of stills from 1907 documenting a sea urchin egg splitting during fertilisation, visual media serves as a critical interface to reality, at times functioning as an intermediary to a phenomena that would otherwise be inaccessible. When we rely on such technology as an intermediary for vision, how do we validate its interpretations? The gaze of a machine is constructed through algorithms, datasets, and the intentions of those who design it but who controls these systems and whose views do they privilege?

Asking these questions, Karyn Nakamura and Nick Knight are proud to announce *Surface Tension*, an ambitious multi-channel installation that is the culmination of a 17-day livestudio residency with Nakamura, premiering at SHOWstudio's Belgravia-based gallery on 20 February, 2025.

Featuring a composition of five interconnected screens, the exhibition explores the intricate relationship between visual media, power, and truth via a series of vignettes. As each screen dives into layered microscopic footage, a new world we wouldn't normally be able to see is stitched together, helping us to understand not only how technology exposes a truth we wouldn't normally be privy to, but also how we then validate its interpretations against our own. At the centre of *Surface Tension* is the exhibition's kernel of truth; raw footage from a bright-field microscope. The footage on show captures Nakamura's process of meticulously animating individual neurons (cellular matter in human brains) on a glass slide, as shown to the viewer in a series of short vignettes. Using the technology of optical tweezers (essentially a tractor beam to manipulate small matter) the kinetic energy of light - a critical component in observing the world - lifts and moves these 10-micron sized neurons around the surface of the slide. This meticulous process orchestrates the neurons in such a way that they appear to swim and dance in and out of forming letters across all five screens. When assembled together in the installation, they attempt to spell out the word 'THOUGHT' all while using the very neurons in our brains that help us think.

Over the course of each vignette presented, the raw microscope footage is abstracted as it undergoes transformations through a variety of computational filters and body-like textures generated with diffusion models (generative AI models), with every very visual shift revealing a new facet of the original footage. As the artificial textures cycle through, layering and transforming the footage, each film itself begins to act as the 'skin' of the neurons, sometimes concealing, sometimes revealing, embodying the tension between authenticity and technological reconstruction.

By probing the tensions between visibility, invisibility, and authority, *Surface Tension* examines how images can simultaneously expose and obscure, empower and control, challenging viewers to contemplate the power of visual media in shaping our realities.

SHOWSTUDIO EXHIBITION

SURFACE TENSION / KARYN NAKAMURA

Karyn Nakamura, also known as @frog_spit_simulation, is a Tokyo-born, New York-based artist and visual forensics researcher. Her art explores the interplay between media, technology, and human agency by working with social and technical infrastructures that shape communication.

Nakamura started her career studying physics at Massachusetts Institute of Technology, before graduating with a BS in art and design. She is a recipient of the Schnitzer Prize, Wiesner Award, and Everingham Award and in 2024, was named a Steve Jobs Archive Fellow which has helped her pursue her discipline-defying creativity which has seen her produce several large-scale works including a 400-foot-wide, 10-story building projection installation and a 20-channel video sculpture in an abandoned two-story Frank Gehry Pub. Exhibiting in galleries worldwide, her work has appeared at mother's tankstation (London), Foreign&Domestic (New York), lower_cavity (Massachusetts), MAPP (Montreal), and Domicile Tokyo. In parallel with her artistic practice, she has worked on AI generated image detection research with the Human AI Collaboration Lab as well as studied computer vision in the analysis of human rights violations with SITU Research. Nakamura was previously part of the Civic Data Design Lab.

SHOWstudio Gallery is an extension of Nick Knight's award-winning platform SHOWstudio.com, renowned for consistently pushing the boundaries of communicating fashion **online.**

Running as both a physical gallery space located in Belgravia as well as an online shop, our gallery has provided a unique focus on platforming emerging talent worldwide while showcasing the best of fashion illustration since its inception. Guided by SHOWstudio's founding beliefs in showing the studio, SHOWstudio Gallery regularly offers up its space to artists for LiveStudios, allowing everyone to not only witness the creative process, but to respond and contribute creatively, documenting, communicating and evaluating the results.

SHOWSTUDIO GALLERY, 22D EBURY STREET, SW1W 0LU

20 FEBRUARY - 12 MARCH 2025