dis/connected IEEE Vis Surface Tension

By Caitlin & Misha

Captions

Surface Tension (Mississippi Flooding), 2019–ongoing, custom browser-based software and graphics, responsive design (dimensions variable)

Surface Tension (Midwest Events), 2019–ongoing, custom browser-based software and graphics, responsive design (dimensions variable)

Surface Tension at the iPearl Immersive Theater at NC State University in Raleigh NC USA, 2019–ongoing, custom browser-based software and graphics, responsive design (dimensions variable)

Artwork Description

50 word

This is an artistic visualization driven by water data from the USA. Water supports life but can also drown and destroy. Because Earth's surface water is interconnected, the disturbances at the specific points ripple out and interfere with each other, influencing one another and combining into a pattern of interdependence.

300 word

Surface Tension is an artistic visualization driven by fresh daily streamflow data from the United States Geological Survey (USGS). Water supports life but can also drown and destroy. People are mostly water, but the melting ice caps threaten our very existence. Harnessing this elemental force requires a balancing act and this artwork is a reflection on humanity's fraught relationship with freshwater.

Water is often depicted as blue and beautiful, and the project problematizes this metaphor by delving into the human relationship to water and how we impact the water we need to live. As an element that is constantly in a state of flux, water is shared among people and this visualization is a response to how intrinsically linked we are to water and to each other via water. We decided to focus on freshwater, which people drink and interact with every day. All of the surface water on Earth is interconnected, and the disturbances at the specific points ripple

out and interfere with each other, influencing one another and combining into an aggregate pattern of interdependence. The open source project uses publicly accessible (FAIR) data, was commissioned by NC State University, and funded by the Andrew W. Mellon Foundation.

The mapped “blobs” are the percentile data from 11K sensor stations which specifies a 'percentile' of streamflow (each site’s value compares current water level/movement to historical data for that site). Since the project caches government data you can visually compare the current and past days. For example here is June 19 2021 (during the ongoing western USA drought): https://tinyurl.com/556hvsz8
Compare that to a past day or record flooding (May 3 2019): https://tinyurl.com/8c4t9zz4
Otherwise going here shows it for the current day you visit it:
http://surface-tension.caitlinandmisha.com/

About: https://caitlinandmisha.com/surface-tension

Bio

Artist duo Caitlin & Misha find inspiration in naturally occurring systems such as rhizomatic networks of mycelium, the microbiome ecology, and emergent pink noise for the shared experiences they construct in their collaborative art practice. Among other things they create installations, games, data visualizations, and happenings. They aim to create artworks that provide unique opportunities for shared experiences.

Caitlin Foley and Misha Rabinovich began working collaboratively in 2010 as part of a group of artists called the DS Institute at Syracuse University where they received MFAs. They have held residencies at places such as Flux Factory, ARoS Aarhus Kunstmuseum in Denmark, and Andrea Zittell’s Wagon Station Encampment which have helped shape their creative network and interest in social practice. They are full time faculty in the Department of Art & Design at UMass Lowell where Caitlin is a Visiting Faculty Lecturer in Foundations and Misha is an Associate Professor of Interactive Media. They are recipients of the Andrew W. Mellon Foundation Immersive Scholar Award, NEFA Creative City Grant, and exhibited at such venues as the Science Gallery (London), EFA Project Space (NYC), the New Museum’s Ideas City Festival (NYC), Boston Cyberarts (Boston), Montserrat College of Art (Beverley, MA), Machine Project (LA), Torrance Art Museum in (LA). They are currently working on a commission for the Science Gallery London to create a series of participatory workshops and an animated film for the King’s College Fecal Microbiota Transplantation PROMISE study.

https://caitlinandmisha.com