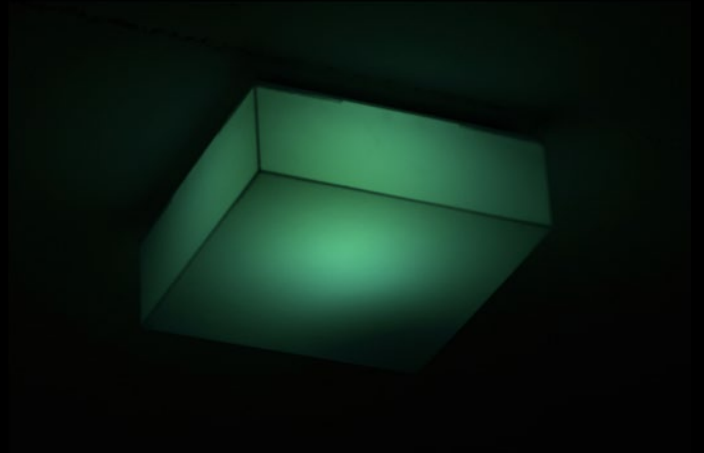GARY ZHEXI ZHANG/

WATCH HERE

METAMERS (2024), EPFL Pavilions
Film with 5.1 audio (15min), commissioned by Enter the Hyperscientific @ EPFL (Swiss Institute of Technology), Lausanne

How real is a hallucination? Metamers are different states of physical reality which produce the same phenomenal experience. It is generally believed that what appears as mental representation corresponds, via the sensory apparatus of the body, to the reality of an external world. Upon waking, the ancient philosopher Zhuangzi wondered: was he Zhuangzi dreaming he was a butterfly, or a butterfly dreaming it was Zhuangzi? The founder of psychophysics, Gustav Fechner, theorised mind and body—which he extended to the inanimate world—as a curve which is convex from one view and concave from another, and sought to scientifically measure their duality. Contemporary neurological evidence demonstrates that far more of our reality is made in the mind than we may like to believe: we live in a world that dreams of us, far more than we can dream of it.

In dialogue with the Laboratory of Psychophysics, EPFL, Lausanne. Curator: Giulia Bini.

MORE IMAGES HERE

Ocean Briefings (2023)
Public sculpture, outdoor LED panel on supports.

Part cosmic weather report, part geo-strategic briefing, part romantic novella, Ocean Briefings is a series of daily transmissions taking place over the course of the Sea Art Festival. Telling tales of logistical breakdown, geopolitical scrambling, meteorological anxiety and erotic intrigue, it serves as a "subtitle" to Ilgwang Beach. In a series of texts changing three times daily over the course of the festival, he suggests poetic, humorous, and more nefarious underlying context to the world than the beach before the viewer.

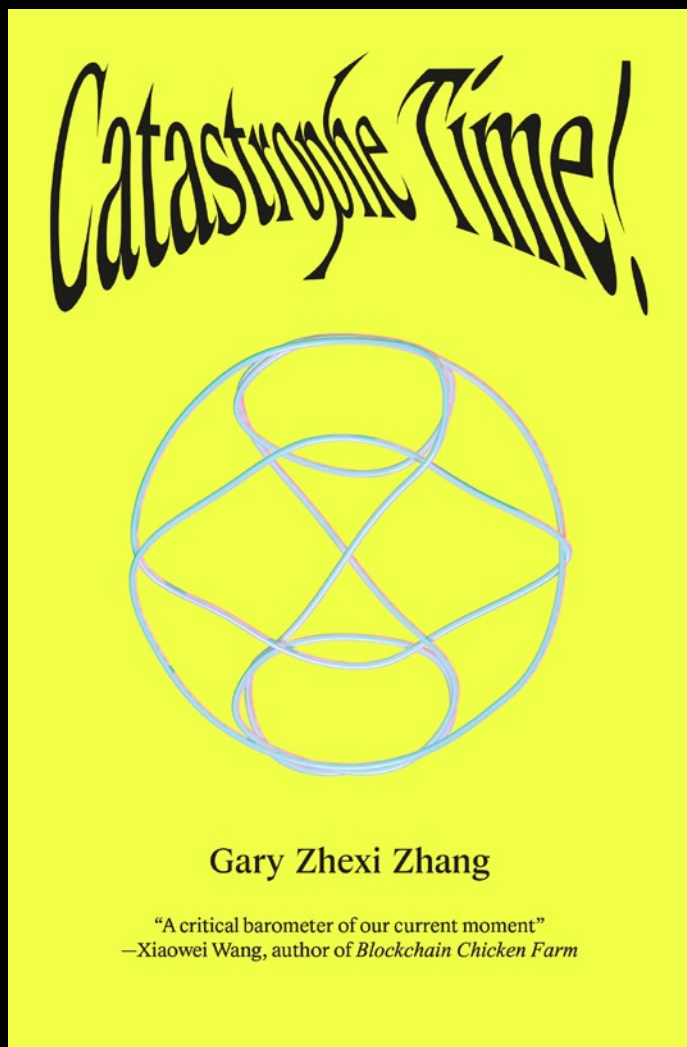Sea Art Fesival 2023 / Busan Biennial Organising Committee. Curator: Irini Papadimitriou.

WATCH HERE

The Tourist (2023)
Film, 25min

The Tourist, 2023, tells the story of Zanzibar, China, and Ali Sultan Issa, a man at the centre of an uneasy marriage between Afrofuturism and Sinofuturism. It explores a shifting geopolitical atmosphere from the cosmopolitan optimism of the "Bandung Spirit" declaration, signed at the first large-scale Afro-Asian Conference in 1955, to the uncertain alignments of today. Issa and his comrades sparked a diplomatic romance with communist China in the sixties and sought to build post-revolutionary Zanzibar in the image of the People's Republic of China. Issa was not only a leading Zanzibari socialist, but would also become its capitalist pioneer, spearheading the foreign investment which would later define its fortunes as a tropical tourist paradise.

Commissioned by Art Gallery of York University, Ontario. Curator: Clara Halpern.

PDF here

Catastrophe Time!
Book, writer and editor.

A book about finance and time: "How do we live in a time of our own unmaking? In these essays, interviews and fictions, Gary Zhexi Zhang explores what happens when reality and fiction no longer contradict, but shimmer through one another. Catastrophe Time! is a journey through the strange weather of the present, with a motley crew of practitioners including technologists, anthropologists, physicists, economists, catastrophe modellers and financial astrologers. Together, they trace the weird temporalities of a world in which the past is an increasingly poor guide to the future."

Strange Attractor Press, 2023. Distributed by MIT Press.
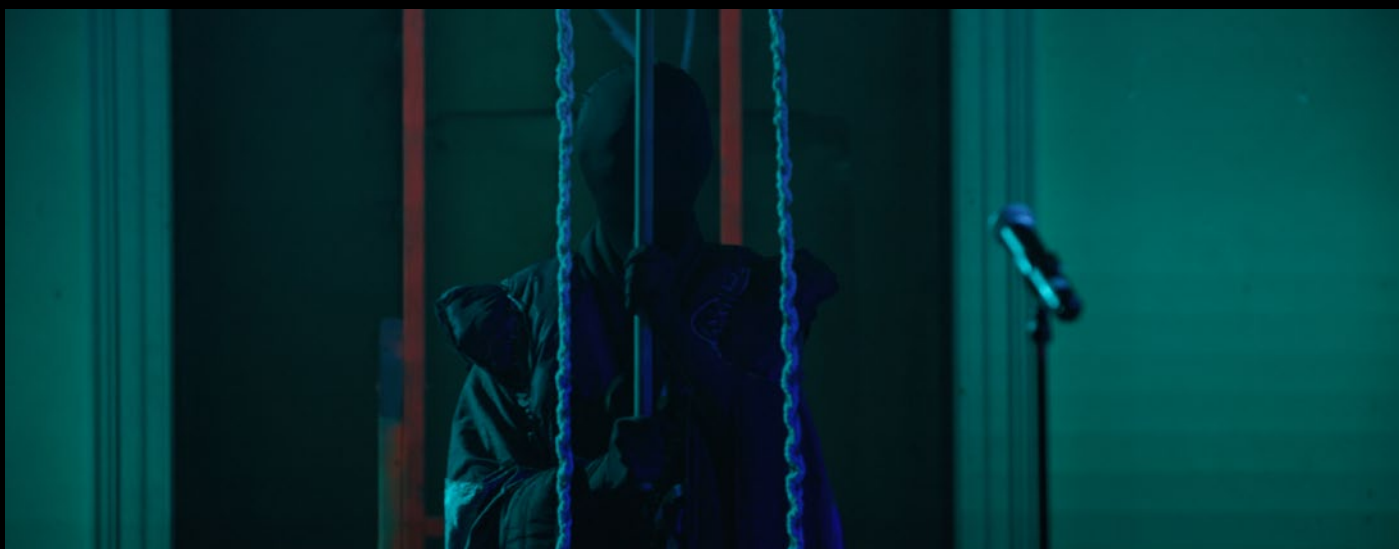
WATCH HERE

Dead Cat Bounce (2022)
Conception, libretto and design. Oratorio performance (1hr), with Waste Paper Opera.

Dead Cat Bounce unfolds over five interwoven vignettes of pre-emptive catastrophe. In China (2016), five hitmen arrive in court to discover that they have each subcontracted another to kill the same real estate developer. At the palace of Louis XVI (1788), thirty Swiss virgins are having their teeth checked in order to secure the national debt. In Miami (2027), an insurance broker redrafts a contract for a house that is already underwater. In Jerusalem (589 BC), the prophet Jeremiah weeps incessantly for the impending wrath of an unforgiving god. In earthquake-struck Japan (1855), a brothel-owner pays tribute to a catfish deity as she surveys the sunlit ruins of the city.

Commissioned by Arts Catalyst and Medialab Matadero. Performed at Somerset House, London, 2022 and touring in 2024.

PDF HERE

Cycle 25 (2023)
Installation view. Film, currency print edition, 19th century artefacts, drawings on lighting gels.

"Cycle 25 explores operative fictions in finance, sovereignty and cosmic speculation. From imaginary nations to the economy of the sun, the artist uses found artefacts, at once real and fictional, to explore the occult foundations of legal and financial systems. The exhibition takes its title from the number of the current solar cycle – patterns of magnetic fluctuation on the surface of the sun – which began in December 2019 and is expected to continue until 2030. "

Solo Exhibition at Arts Catalyst and Bloc Projects, Sheffield. Curator: Anna *Santomauro*.

PDF HERE

Cycle 25 (2023)
Solo Exhibition at Arts Catalyst and Bloc Projects, Sheffield
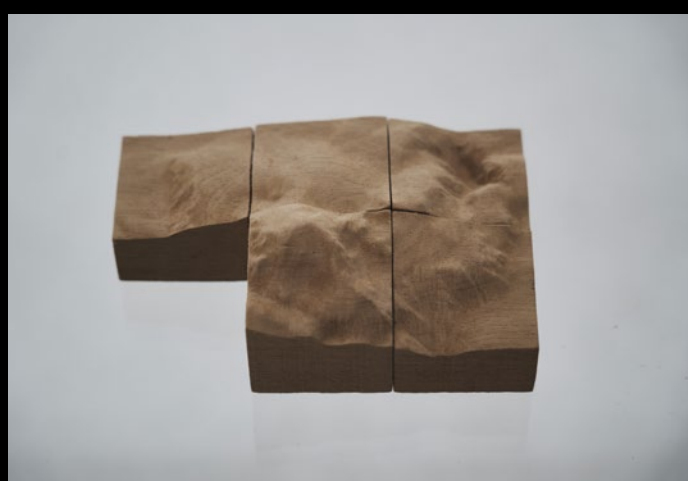
Poyers! (2021-2)
Installation views of *Poyers!* series of works at "Liquid Ground" Parts I & II at Para Site, Hong Kong and UCCA Dune, Beidaihe.
Curators: Julian Junyuan Feng & Alvin Li.

Parasite (物流)
10min Single channel video, 2018

A short science fiction narrative of extraction, dependency and nurture, explored through the life-cycle of a parasitic amoeba as it hosted by a series of human bodies. Developed in collaboration with Dr. Gareth Bloomfield at Laboratory for Molecular Biology, Cambridge.

Presented at Glasgow International, 2018 and Lithuanian Pavilion, Venice Architecture Biennale, 2019.

Between Entities and Identities: The Internet of Egregores

Gary Zhexi Zhang

Is a fandom a botnet? In 2020, "stans" of the Korean boy-band BTS broke mainstream headlines when they waged a Twitter war against Donald Trump's supporters, first by flooding the #WhiteLivesMatter hashtag with BTS pictures, then by booking all the tickets at a Trump rally and treating the president to a half-empty stadium. A traditional botnet is a swarm of automated agents, typically a compromised computer network, which can be controlled without its owners' knowledge. With the approval of their idols, the famously zealous BTS ARMY's raid on an enemy fanbase was reminiscent of a Distributed Denial of Service (DDoS) attack, where a swarm of bots overwhelm a target site with requests, effectively shutting the service down. Such cyberattacks were the bread and butter of online hacktivist movements like the 4chan-based movement, Anonymous, particularly over the early 2010s. Over the last few years, discussions of online subterfuge have shifted from attacks on services towards social dynamics taking place inside major platforms themselves, such as fake news, political polarization, or "epistemic security".[1] Particularly after 2016, global populisms have swelled across the "networked public sphere", while Twitter bots hailing from across the world have been blamed for endangering democratic participation and poisoning the well of public discourse, often under the alleged command of enemy governments. It is easy to forget that barely a decade ago, much faith was placed in monopoly platforms like Twitter and Facebook as catalysts for democratic politics during the Arab spring. Meanwhile, digital platforms have increasingly become the de facto source of global news, opinion, entertainment and personal communications, all rolled into one — integrating

1. Elizabeth Seger, Shahar Avin, Gavin Pearson, Mark Briers, Sean Ó Heigeartaigh, and Helena Bacon (2020). *Tackling Threats to Informed Decision-making in Democratic Societies: Promoting epistemic security in a technologically-advanced world.* https://doi.org/10.17863/CAM.64183

LAWFUL GOOD
Infrastructural commons

Examples: Wikis and references (AestheticsWiki, Fanlore, Urban Dictionary)

What holds them together: Own their web infrastructure, longstanding community committed to preserving collective memory

NEUTRAL GOOD
Stable commons

Examples: Discords, DAOs, creator networks, Open Source Intelligence (OSINT) communities.

What holds them together: Shared labor, hierarchy, bureaucracy; small-to-medium scale

CHAOTIC GOOD
Unstable commons

Examples: Stan cultures, political subcultures, diffuse social justice and identity movements. They seek out others.

What holds them together: Subcultural affinities, affect, desire; large scale and too big to fail.

LAWFUL NEUTRAL
Infrastructural self-reliance

Examples: Reddit, blogosphere, 4chan, Tumblr.

What holds them together: Relatively more self-organized and self-curated communities.

NEUTRAL NEUTRAL
Stable self-reliance

Examples: Main narrative arc, Twitter 'main characters', mainstream love/hate figures, news trends, and meme pages.

What holds the together: They are the everyday protagonists of the feed

CHAOTIC NEUTRAL
Unstable self-reliance

Examples: Roleplay/fan-fiction communities, aesthetics, Cardds, conspiracy theories, Twitter pile-ons.

What holds them together: Niche interests, communal lore, parasocial bonds with niche characters and narratives.

LAWFUL EVIL
Infrastructural extractive

Examples: Meta, YouTube, Tiktok, platform algorithms, rentiers.

What holds them together: Corporate monopoly

NEUTRAL EVIL
Stable extractive

Examples: Majority of crypto communities, Fyre Festival, machine learning models and systems using platforms as training sets (Dall-E, GPT-3), Venture Capitalists Twitter (some of the biggest gainers from hype), Elon Musk (simultaneously a 'main character', a botnet of trolls, and an infrastructure-scale financial/platform actor)

What holds them together: Profit interests, legitimate brands, public interest

CHAOTIC EVIL
Unstable extractive

Examples: 8chan, doxxing, botnets, DDoS attacks, revenge porn, pump and dump communities.

What holds them together: (Typically) malicious intent to attack or sabotage other groups.

The alignment chart sketched above gathers a non-comprehensive collection of egregorical entities, organized along the lines of their relative stability and their relationship to themselves and other online entities. Horizontal axis (Left-Right): Stability and persistence of the entity, from infrastructural (highly stable) to stable to unstable. Vertical axis (Top-Bottom): Social orientation of the entity, from an orientation towards the commons, to self-sufficient neutrality, to an extractive orientation to others.

[PDF here](#)

"The Internet of Egregores"
Essay (~5000 words), in *Platforms: Around, Between, Within.* edited by Aarti Sunder.

An essay on digital identity formation and the pseudonymous agency of networks, through fandoms, young girls, bots and finance: "In the intertidal zones between IRL and URL, egregores describe forms of agency which need not be reduced to their constituent partialities. Instead, an egregore is known by the name (be that an animé character, a political ideology, or a public scandal) by which it was summoned, and with which it acts in the world. When an egregore speaks, it speaks both as the individual user and with the sovereignty of the crowd, but if the former logs off, the latter persists, so long as there are believers to sustain its reality."

Singapore Biennale, 2023

6

SYSTEMS SEDUCTION

THE AESTHETICS OF DECENTRALIZATION

Gary Zhexi Zhang

Ecology in the widest sense turns out to be the study of the interaction and survival of ideas and programs (i.e. differences, complexes of differences) in circuits.[1]

How do we deal with unimaginable complexity? Today, the prospect of ecological crisis looms over our every move, as new technologies unfurl absentmindedly into the political realm, somehow managing to disrupt a biosphere in the process. In so many areas of art and science, our situation demands that we think in terms of heterogenous systems and porous boundaries. Today, as the artist Hito Steyerl once put it, "an upload comes down as a shitstorm."[2] The 1972 publication of *The Limits to Growth*, which warned that the world system would collapse in one hundred years given "business as usual," served timely, epochal notice on our vision of exponential "progress."[3] Moreover, its use of Jay Forrester's World3 model of planetary systems dynamics prefigured our contemporary obsession with data and simulation for understanding where we are, and where we're headed. As Joichi Ito's "Resisting Reduction: A Manifesto" suggests, the once unpopular interdisciplinary science of cybernetics has returned as a paradigm through which to understand knotted social, technological, and environmental issues.[4] A cybernetic vision of open systems and regulatory

emergent principles on architects, planners, and social scientists to this day. With simple rules and responsive environments, it suggested, complexity performs itself. The "social organism" of the nineteenth century grew into the evolutionary algorithms, "soft architecture machines," and artificial societies of the information age. As the gerbils might attest, these models often stumbled over their own ambition, more reflective of the will of the designer than of intelligent design itself.

Meanwhile, over at RAND Corporation, Paul Baran was working on the schematics for a distributed communications network that would become ARPANET, the precursor to the internet. The principles of decentralized organization reified the idea that stability and control could be built into a system through its morphological, protocological, and infrastructural design. Not only were decentralized systems more resilient to perturbation, but their asynchronous logistics and self-regulating feedback could efficiently automate complex processes once relegated to burdensome (and vulnerable) centralized management. Again, Bogdanov was prescient here. In his science fiction novel *Red Star* (1908), the Soviet theorist imagines a decentralized, self-regulating economic organization known as the "Institute of Statistics." Set in a communist society on Mars, the Institute would "keep track of the flow of goods into and out of the stockpiles and monitor the productivity of all enterprises and the changes in their work forces. . . . The Institute then computes the difference between the existing and the desired situation for each vocational area and communicates the result to all places of employment. Equilibrium is soon established by a stream of volunteers."[32] Bogdanov's technocratic utopia, imagined four decades before the invention of computers, bears an uncanny resemblance to the "smart cities" of today, in which omniscient sensors

An essay on the exchange between ecology, technology, economy and social theory in the history of modern systems thinking: "From the systems view, decentralization involved the automation of control: decentred from the behavior of individual agents, organization was an emergent property of the system as a whole. The idea that systems were, to some extent, essentially autonomous would be of powerful inspiration to artists, dreamers and technocrats alike. It evinced unpredictable, responsive and creative systems — more collaborator than instrument — producing intricate patterns of order far beyond their designers' limited prescriptions. These patterns were to be found everywhere, from computational cellular automata to the distribution of human societies."
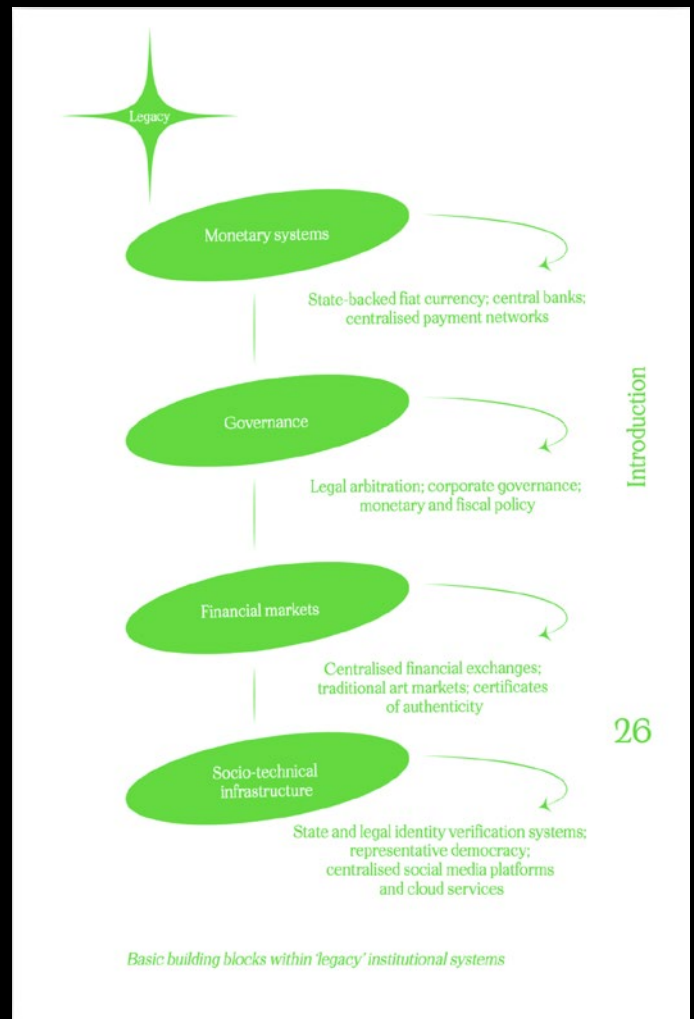
Future Art Ecosystems 3: Art x Decentralised Tech & *Future Art Ecosystems 4: Art x Public AI* (upcoming)
Co-author with Victoria Ivanova.

"The Future Art Ecosystems annual briefing series is intended for those with an interest in the long-term strategic vision for art x advanced technologies (AxAT). Each issue provides concepts, references, language and arguments that can be integrated by ecosystem actors into operational agendas for the development of 21st- century cultural infrastructure: the systems that support the production, distribution and financialisation of art and advanced technologies as a whole, and respond to a broader societal agenda."

Strategic briefing publication series by Serpentine R&D Platform, 2022 & 2024

FREE TO CHOOSE (2023)
Bahar Noorizadeh with Rudá Babau, and Waste Paper Opera (Klara Kofen, James Oldham, Gary Zhexi Zhang, Anna Palmer)

"An operatic financial sci-fi, Free to Choose is narrated by Milton Friedman, an American economist who was the real-life evangelist of Hong Kong's free market policies. It follows Philip Tose—an ex-race car driver and CEO of an insolvent company—from 1997 to 2047 as he attempts to escape the impact of the economic crash to seek a bailout from his older self."

Commissioned by Singapore Art Museum and exhibited at Taipei Biennial.
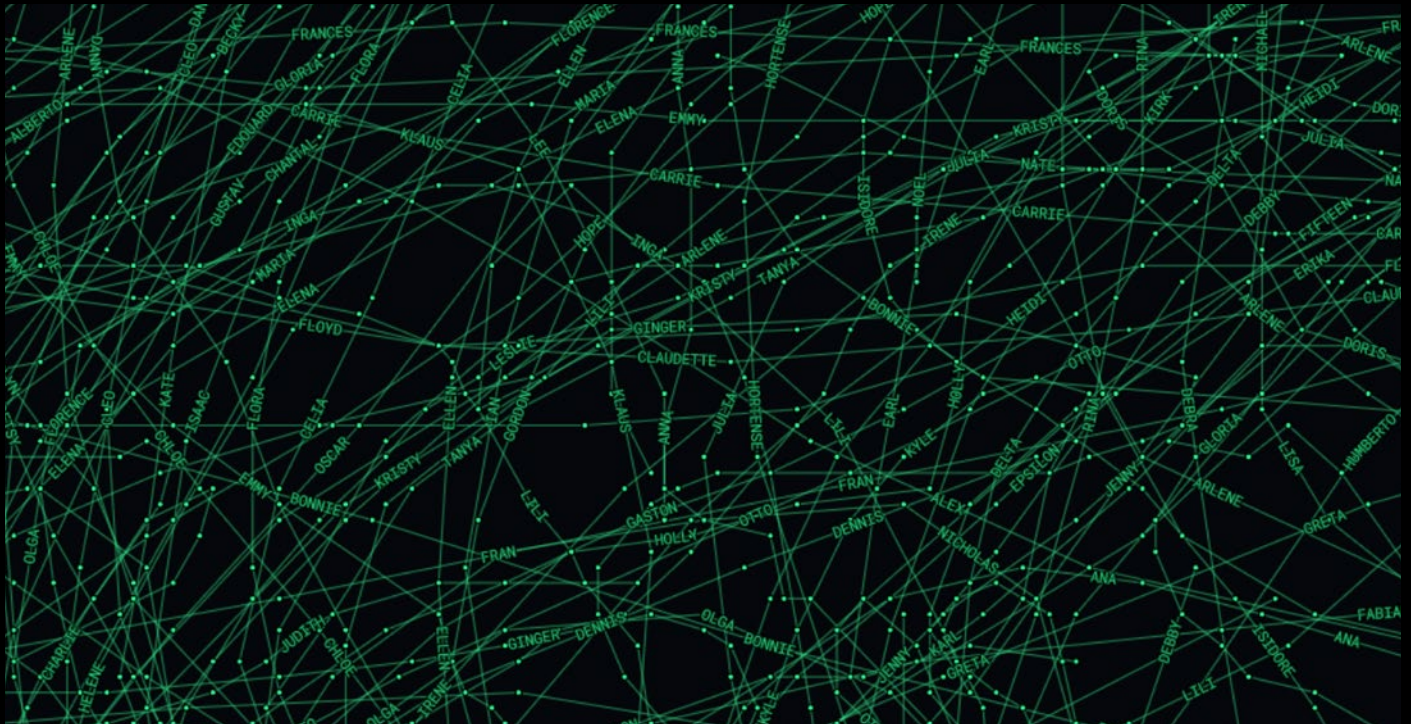
VIDEO HERE

The First 10,000 Years
Hurricane market simulation. Conception, design, front-end development; with Agnes Cameron.

A speculative catastrophe insurance marketplace. Based on statistical simulations used by the insurance industry to calculate catastrophe bond prices (typically by simulating 10,000 years of speculative global weather activity), *The First 10,000 Years* is a hurricane observatory, financial exchange and chatroom in which non-human agents players place their wagers in a market-place for systemic uncertainties.

Commissioned by Arts Catalyst, 2020.
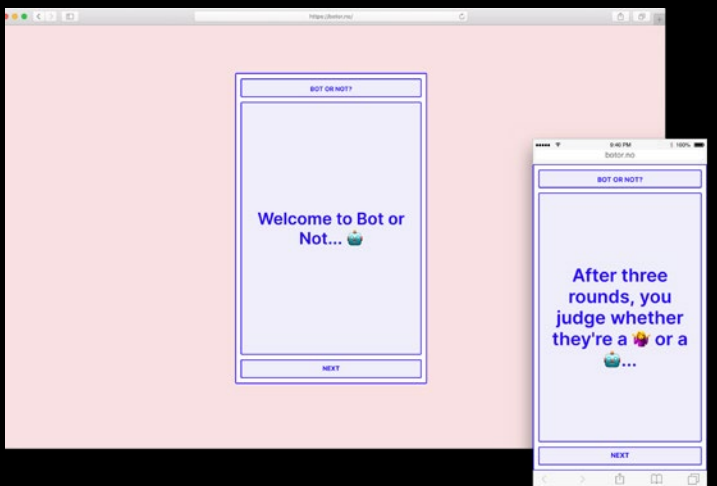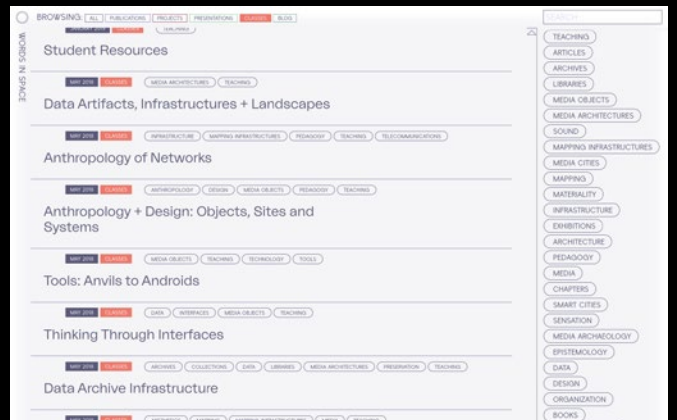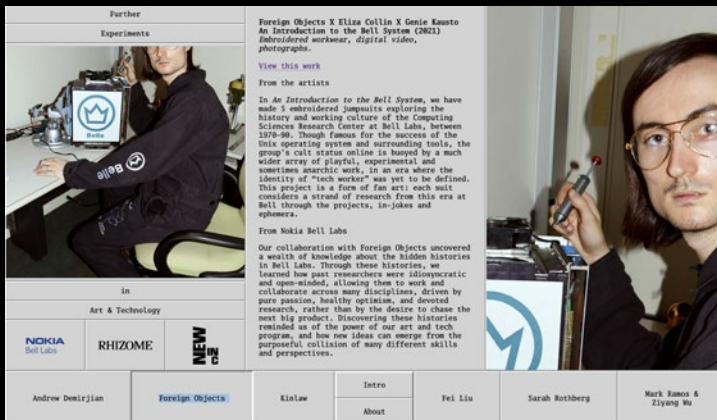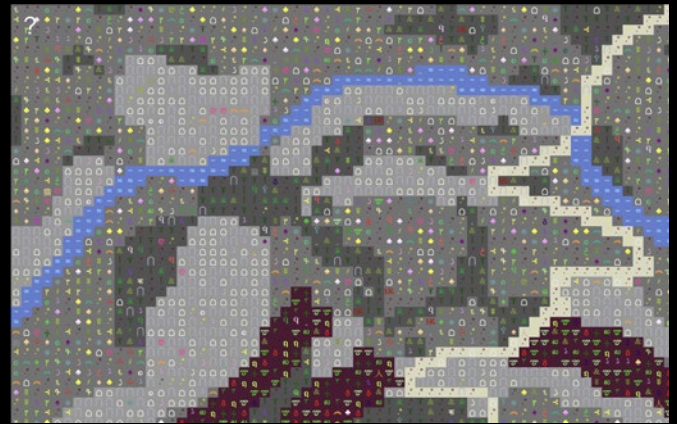
Foreign Objects LLC
Co-founder, design + research studio, based at NEW INC.

Between 2020-22, I co-founded and co-led on design for Foreign Objects, a New York-based design studio which worked primarily with the web. Projects ranged (clockwise from top right) from: an agent-based ecological simulation of Sakiya, a Palestinian ecology institution; a series of jumpsuits based on a residency in the Bell Labs archives (and Rhizome website); the website of Shannon Mattern's extensive writings and projects; Bot or Not, a Turing test game driven by Tensorflow, commissioned by Mozilla and "The Internet as a City", a Unity game and stakeholder workshop for participatory infrastructure design at the 2nd Decentralized Web Summit. Other clients included MIT Department of Architecture, Hong Kong Design Trust and the Architects Collaborative Archive.

Awarded the Mozilla Creative Media Award, 2019, "Examining AI's Effect on Media and Truth".