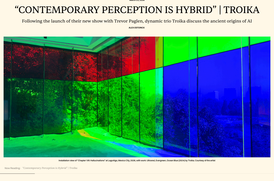
FEATURES

"CONTEMPORARY PERCEPTION IS HYBRID" | TROIKA

Following the launch of their new show with Trevor Paglen, dynamic trio Troika discuss the ancient origins of AI

Kate Mothes



Installation view of 'Chapter VII: Hallucinations', at Lagoa Marina City, with artwork Atlantis Emerging, Ocean Blue (detail) by Troika, Courtesy of the artist

Home Reading / Contemporary Photography in Context / Troika

"Chapter VII: Hallucinations", a new exhibition of works by Troika and Trevor Paglen, is at LagoAzul, Mexico City, until May 31, 2026

Installation view of 'Chapter VII: Hallucinations', at Lagoa Marina City, with artwork Atlantis Emerging and Atlantis Emerging II (Arctic Ice Edition), Ocean Blue (detail) by Troika, Courtesy of the artist

Alex Estorick: It's hard not to observe an increase in interdisciplinary, including digital, approaches by artists working today. As Troika, you cross fertile different literacies, including speculative design. How do your different training feed your collaboration and help you to generate such diverse outputs?

Conny Freyer: Our process moves across media because contemporary perception is hybrid. Minerals pulled from the ground run our digital lives, while we photograph waterfalls and turn them into NFTs. Our work, like contemporary change, fragmented truth worlds — these phenomena exist in any single medium. As artists, we allow the question to dictate the form, rather than committing to a medium or disciplinary silo.

> The different training we have each undertaken across photography, filmmaking, speculative design, and visual language are tools that initially expanded our vocabulary and now enrich our process. They allow us to approach a question from multiple registers: conceptual, spatial, temporal, and material.

Our collaboration functions as a testing ground where these different literacies overlap and unravel one another. They might inform understanding of how a system behaves — specifically, filmmaking might shape how time unfolds, while photography might define questions of framing and mediation, and what role the image plays in shaping a viewer's perspective. Each of these disciplines alone defines the work. Rather, we draw on them to construct artworks that investigate how reality is structured and perceived.

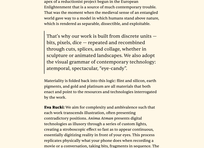
Troika, *Immersion* (detail), Courtesy of the artist, Photo: Jonas Ingvarsson

AE: Your work considers the entanglement of "the material and the virtual worlds" and how technology alters humanity's relation to nature. How do you manage to address such all-encompassing questions while sustaining the coherence of a particular genre?

CF: We don't try to represent totality. Instead, we focus on precise perceptual interventions and personal experiences. In *Anima Atmos* (2024), for instance, technological mediation shapes ancient atmospheric phenomena that escape human temporal perception.

> The gesture is simple but its implications are vast, unsettling the hierarchy that places human consciousness at the center.

In our project series **Univerrage**, salt operates as a narrative agent that connects geology, computation, and the historical entanglement of humankind and technology. By concentrating on one material or phenomenon, wider relationships become legible. Each work is a variation on the underlying question: how do the tools we invent reorganize the world we perceive?



Troika, *Univerrage* (Cracklings), Courtesy of the artist, Photo: Jonas Ingvarsson

Sebastian Noel: Coherence in our work derives from an aesthetic language rooted in a conceptual stance — we try to embody the logic of the digital machine, which we see as the apex of a reductionist project begun in the European Enlightenment, and which has caused contemporary troubles. That was the moment when the medieval sense of an entangled world gave way to a model in which humans stand above nature, which is rendered as separable, dissectible, and exploitable.

> That's why our work is built from discrete units — bits, pixels, dice — repeated and recombined through cuts, splices, and collage, whether in sculpture or animated landscapes. We also adopt the visual grammar of contemporary technology: atomized, spectacular, "eye-candy."

Materiality is folded back into this logic: flint and silicon, earth pigments, and gold and platinum are all materials that both underlie the resources and resources and technologies interrogated by the world.

Ewa Bucki: We aim for complexity and ambiguous such that each work transcends illustration, often presenting contradictory positions. *Anima Atmos* presents digital technologies as illusory through a series of custom lights, creating a stroboscopic effect so fast as to appear continuous, mimicking the flicker of a fire or candle flame. The work replicates physically what your phone does when recording a movie or a conversation, taking bits, fragments in sequence. The plants' motion is then both illusory in one sense and real in another, inviting the viewer to re-evaluate their understanding of agency and the possibility of consciousness in our microclimate.

Our dice works (*Life and Death of an Algorithm* (2024) and *Reality is not always probable* (ongoing)) are based on early mechanical computers, like the Antikythera, and on technologies that aim at creating the conditions in which to witness emergent phenomena, which we consider to be the basis of consciousness, sentience, and even life. The works are made by hand, computing the dice one by one, to express complexity unfolding at the limits of explainability.

Troika, *Reality is not always probable* (detail) (2024) in view as part of "Hot Metal", at Lagos Foundation, Nauplia, Gr., Photography by Yiol, Courtesy of the artist

AE: What determines your choice of medium for a given work and where do you know that you've found the right resonant frequency?

CF: Sometimes the choice of medium emerges from a physical encounter. Holding a piece of ice that is a million years old, so that matter, a piece of flint — an ancient tool — now becomes aware of how vision, perception, and time break into facets. Sometimes it emerges from a conceptual question we want to ask. When we translate digital geneticality back into natural matter, we are not being nostalgic but rather tracing continuity.

> We know that the "resonant frequency" is right when the material reveals that what appears virtual is anchored in geological time.

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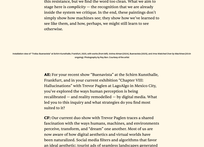

Troika, *Life and Death of an Algorithm* (2024) in view as part of "Incarnation" at Kerameikos Kunsthalle, Frankfurt, 2024, Photography by Rey Ruiz, Courtesy of the artist

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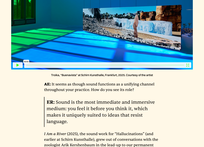
Installation view of "Trinity Boundaries" at Kerameikos Kunsthalle, Frankfurt, 2024, with artwork Atlantis Emerging, Ocean Blue (detail), Photography by Rey Ruiz, Courtesy of the artist

Painting becomes a way of entering the phenomenological space of the machine. It is not about the fantasy of seeing like a machine, but about how much labor and care it takes to fake that fantasy. Tiny shifts in hue and edge betray the work it takes to sustain the illusion of autonomy.

Our practice often circles around the politics of technological vision, and how the camera, drone, and algorithm render the natural world. In these paintings, the pixel grid becomes a blind spot that mirrors the technical limits of machine vision and simplification. As humans divide color into samples, an economy divides forces into zones. That same logic also surfaces in ecological extraction.

But if the grid is the emblem of this brutality, the act of painting it by hand becomes a counter-gesture: a slow, physical way to resist that or embodies what technology abstracts. It's temptingly to call this resistance, but we find the word too clean. What we aim to stage here is complicity — the recognition that we are already implicated in the machine we hate. The work doesn't pretend to simply show how machines see; they show how we've learned to see like them, and how, perhaps, we might still learn to see otherwise.



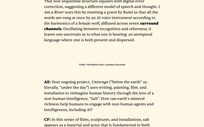
Installation view of "Trinity Boundaries" at Kerameikos Kunsthalle, Frankfurt, 2024, with artwork Atlantis Emerging, Ocean Blue (detail), Photography by Rey Ruiz, Courtesy of the artist

AE: For your recent show "Barnacles" at the Schirn Kunsthalle, Frankfurt, and in your current exhibition 'Chapter VII: Hallucinations' with Trevor Paglen at LagoAzul in Mexico City, you've explored the ways human perception is being reorganized by machine vision and AI. In your work Atlantis, What tool you to this inquiry into machine vision, AI, and human perception?

"Hallucinations" is an attempt at a speculative shift in subjectivity: what if we imagine ourselves inside the perceptual field of an artificial intelligence (AI), not anthropomorphizing it, but asking: what does it see? What does it filter? What does it ignore? In this exhibition, we propose that human and machine perception is structured by training sets and matrices of probability. To inhabit that space imaginatively is to experience a world decomposed into signal, contrast, and correlation.

We have previously experimented at the Langen Foundation through our window installation, Ulvesrad, *Evergreen, Ocean Blue* (2024), which transformed the museum's windows into green, and blue window film the cinematic logic of digital imaging. People moving through the space were effectively inside the eye of a machine, immersed in the additive color model that underpins screen-based vision.

> Imagining this interiority is not about projecting human emotion onto code, but about recognizing that machine perception now co-constructs reality. To step inside that logic, even briefly, reveals how profoundly our own perception has already been reformated.



Installation view of "Hot Metal", at Lagos Foundation, Nauplia, Gr., 2024, with artwork, *Univerrage*, Ocean Blue (detail), Photography by Yiol, Courtesy of the artist

ER: This thinking extends to *Barnacles* (2025), a film initially made for Kunsthalle Schirn with curator Deidda Gunsch. In the film, a robotic creature dances violently to the notes of a shapeshifting landscape/backdrop constructed from "corrupt" libraries drawn from game engines, movie VFX, and 3D visualization software.

The robot's choreography reads like a parody of our own compulsive gestures — clicking, scrolling, swiping in pursuit of the "most beautiful view" — while the landscapes feel uncanrily familiar, as though drawn from collective memory rather than any singular geography. They are less about the environment itself than about the *desire for* environment.

These vistas hover in an ambiguous zone of belonging: are they ours, downloaded from the endless stream of perfect beaches, nurseries, and mountain views? Are they the machine's? Or are they the result of a new, shared imaginary forming between the two?

ER: This opens up the possibility of a spectrum of consciousness, a continuum of intelligences, and shared ecologies. It suggests that machine vision can be reframed as understand directly in all its physicality. "Hallucinations" modeled us to weave installation, painting, sculpture, and sound into a coherent environment to create complex associations between different bodies of work, while offering plural readings that operate on both an intellectual and a visceral, felt level.

Troika, *Teamwork*" at Schirn Kunsthalle, Frankfurt, 2025, Courtesy of the artist

AE: It seems as though sound functions as a unifying channel throughout your practice. How do you see its role?

ER: Sound is the most immediate and immersive medium: you feel it before you think it, which makes it uniquely suited to ideas that resist language.

I Am a River (2025), the sound work for "Hallucinations" (and earlier at Schirn Kunsthalle), grew out of conversations with the zoologist Arik Kershenbaum in the lead up to our permanent work at the University of Cambridge, *Third Nature* (2024). Arik, who studies animal communication, described to us how wolf packs communicate over vast distances by howling in unison through cues, with each harmonic carrying its own component, so that even if pacts are masked by wind or distance, the overall sense still arrives.

That non-sequential structure equates with digital error correction, suggesting a different model of speech and thought. *I Am a River* tests this by rewriting a poem by Rumi so that all the words are sung at once by us. At twice instrumental speed, the harmonics of a female wolf, different across seven **surround** speakers, fall into place and become intelligible. The work leaves one uncertain as to what one is hearing: an atemporal language where one is both present and dispersed.

Troika, *Teamwork*" at Schirn Kunsthalle, Frankfurt, 2025, Courtesy of the artist

AE: Your ongoing project, *Univerrage* ("Below the earth" in Greek), literally "under the day" I note in Greek painting, this was a foundation intelligence "hum" that underpinned the rise of a modern intelligence "hum". How can machine vision and human intelligence learn to engage with non-human agents and intelligences, including AI?

CF: In this series of films, sculptures, and installations, salt appears as a material and actor that is fundamental to both geology and digital systems.

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> When you consider that silicon chips are derived from flint or quartz, while batteries and circuits depend on rare metals, AI becomes legible as geology reorganized into logic and code. Rather than being futuristic, non-human intelligence is ancient, prompting humility and situating technological systems within terrestrial time.

SN: *Untertage* fictionalizes the history of humankind and its relationship to technology from the point of view of "Salt", an alchemical stand-in for all the minerals extracted to make our technologies. Salt is a hive intelligence: a Machiavellian entity that manipulates humans into digging minerals out of the ground and building technologies to eradicate organic life.

Salt is crystalline, orderly, inorganic; it preserves bodies, dries out water, and arrests life. It gave humans the first tool with which to excavate minerals, the flint axe, which is also tied to early mining. *Untertage* proposes a coherent but radically alternative history of technology in which humans are not central agents, but the instruments of minerals.

Troika, (Still from) *Buenavista*, 2025. Courtesy of the artist

AE: Your recent work, *Dream Baby Dream* (2025), used generative AI to explore the convergence of technological optimism, ecological collapse, and the aesthetics of power. The resultant imagery parodies the seamlessness of old Apple or Microsoft wallpapers which you describe as a "global, shared hallucination" of an "ambient ideology". What approach do you take to emerging technologies and how have you managed to integrate them into your practice?

CF: An approach of lived contradiction. In *Dream Baby Dream*, the generative AI produces landscapes — images of seamless skies and idealized horizons that once promised technological transcendence, an ambient ideology smoothing over the material costs of extraction and ecological degradation.

> By working from within the tool, we reveal its aesthetic defaults and ideological assumptions. The goal is not to illustrate critique but to expose how technological optimism and ecological collapse can coexist within the same visual language.

SN: People are often familiar with the ideas of existing biases in training sets used for facial recognition. Similar biases exist within photographic databases of natural environments, where exotic landscapes are heavily over-represented: scenes of sand dunes, remote desert, snowy landscapes in remote locations, white arctic sceneries — many of these locations express a human fantasy for an aestheticized and untouched nature.

Installation view of "Chapter VIII: Hallucinations" at LagoAlgo, Mexico City, 2026, with work: *Buenavista* (2025). Photography by Alejandro Ramirez Orozco. Courtesy of the artist

AE: We'd love to hear about any forthcoming projects you might currently be preparing for. How is 2026 shaping up for Troika?

Troika: We are bringing out a new book, *Third Nature*, with 15 researchers, writers, and curators contributing essays that are shaped by their individual practices.

> The book explores the cultural construction of nature, diasporic, and multispecies belonging, and how we inhabit and co-produce ***hybrid ecologies*** shaped by computation and climate.

The book is conceived as an expanded site of our living artwork *Third Nature* in Cambridge and is meant not as documentation but as a way for the artwork to expand laterally across disciplines, voices, and pages. We are also working on a sculpture project with the Fraunhofer Institute in Germany and will be part of several exhibitions including ***"Das kalte Herz" ("The Cold Heart")*** at Kunstmuseum Stuttgart.

Troika is a London-based contemporary art group formed in 2003 by Eva Rucki, Conny Freyer, and Sebastien Noel. Working across media including sculpture, film, installation, and painting, their work contemplates humanity's experiences and attitudes towards new technologies and how these transform our understanding and relationships to nature, each other, and the wider world. Their artworks seek to reveal our experience of the living world and understanding of human and non-human life, consciousness, and agency. In this context their interest focuses on forms of life, artificial intelligence, algorithmic data, and virtual and physical representation systems. In 2019, Troika started a research project together with biologists, neuroscientists, the British Antarctic Survey, and physicists from Cambridge University that culminated in the group's permanent outdoor installation *Third Nature* that opened to the public in 2024. Troika's work is part of the permanent collections of M+, Hong Kong; V&A, London; The Art Institute of Chicago; MoMA, New York; Colleccción Jumex, Mexico City; and Centre Pompidou, Paris.

Alex Estorick is the Founding Editor of *Right Click Save*.

"Chapter VIII: Hallucinations", a new exhibition of works by Troika and Trevor Paglen, is at LagoAlgo, Mexico City, until May 31, 2026

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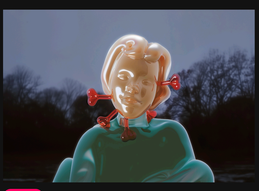

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