

Dreaming is the mind to its



Text: Vanina Saracino

Artistic work and lyrics: Dagmar Schürer

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Dagmar Schürer and I wander around my studio in Schöneberg, experiencing her augmented reality (AR) app through her tablet. I hold the device with the hesitant and uncertain touch typical of handling someone else's screen; the contact with another person's device is gradually becoming as intimate an experience as body contact. The work *Dreaming is the mind left to itself* stems from her interest in how different states of consciousness enable individuals to access various constructs of reality and explore their sense of presence within these states, which can be altered in multiple ways – through the influence of drugs, meditation, virtual realities, or dreams, just to mention a few. And it's dreaming the particular alteration this work focuses on, implicitly asking whether we can place its boundaries surely and certainly, or whether its architecture is fluid and drifts in and out of what we call reality – itself a controlled hallucination. »Did you ever happen to think«, asks Ursula K. Le Guin through one of her characters, »that reality's being changed out from under us, replaced, renewed, all the time—only we don't know it? Only the dreamer knows it, and those who dream his dream« (LeGuin 2008: 71).

With a background in both fine art and biology, Schürer is fascinated by the entanglement of sciences, technologies, and consciousness, and the ›feedback loops‹ generated by their dance; indeed, artificial brains often offer unexpected insights into the human mind, which in turn enables the development of more sophisticated technologies. But we are not other than these technologies; we are entangled and continuously becoming with each other, as Donna Haraway began to state in the 1980s – an era before the widespread use of cell phones and personal computers (Haraway 1991: 149–181).

The AR app scans the room and recognizes horizontal planes in it, creating a virtual model of the surroundings. Spheres, tentacles, geometric shapes, objects, and a humanoid figure appear on the screen. They venture into a virtual space that now merges with the structure of this room, its own technologies,

the organic life of the many plants in their apparent stillness, the concrete 13-story building being erected outside my office, the sunlight which is still penetrating the glass through this last window. The digital figures in the work exist in their own overlapped, and somehow entangled, reality. We are in control and can move the objects around in space.

I wish I could do the same with the building.

/5 Dreamtime: The neuroscientist

It is the year 2020. The science of dreams is far from being settled, but the theories are abounding: some suggest dreams consolidate our memories; others that they help us to forget selectively; some argue they help our emotional regulation, or prepare us for problems we face in our wakeful state. Erik Hoel sits in his lab at Tuft University in the Greater Boston area poring over these scientific papers, and he is not convinced by any of them. In fact, he believes that the science of dreams is in its primitive stage and that there are many lessons for neuroscience to be gleaned from machine learning algorithms, particularly from the most advanced artificial brain ever created, the deep neural networks.

While looking at the functioning of this artificial intelligence, he understands the symmetry: deep neural networks struggle to strike a balance between memorization and generalization. As they focus on one particular dataset and learn to manage it, they can become less proficient in generalizing to others. In mathematical models, this phenomenon is called ›overfitting‹, and can be mitigated by injecting ›noise‹ in the model, such as corrupting input datasets. Likewise, in our lives, experiencing highly similar situations every day would make us biased in our perception and sampling of the environment, leading to the risk of an overfitted brain. Exactly as artificial neural networks do, our minds also need to unlearn, and that biological

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Space is my anchor, just like time

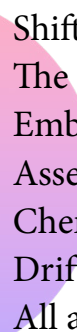
I feel present

Arising from the interaction of billions of neurons

I feel space, persistent and fundamental

Left and right, up and down, front and back, inside and out

Perhaps all places in the world are in fact one?



Shifting down the rabbit hole
 The dreamer loses all inputs
 Embracing present, past, and future
 Assembling electrical signals to folds of memories
 Chemical transmitter to new knowledge
 Drifting down to another sense of presence
 All alone like a machine

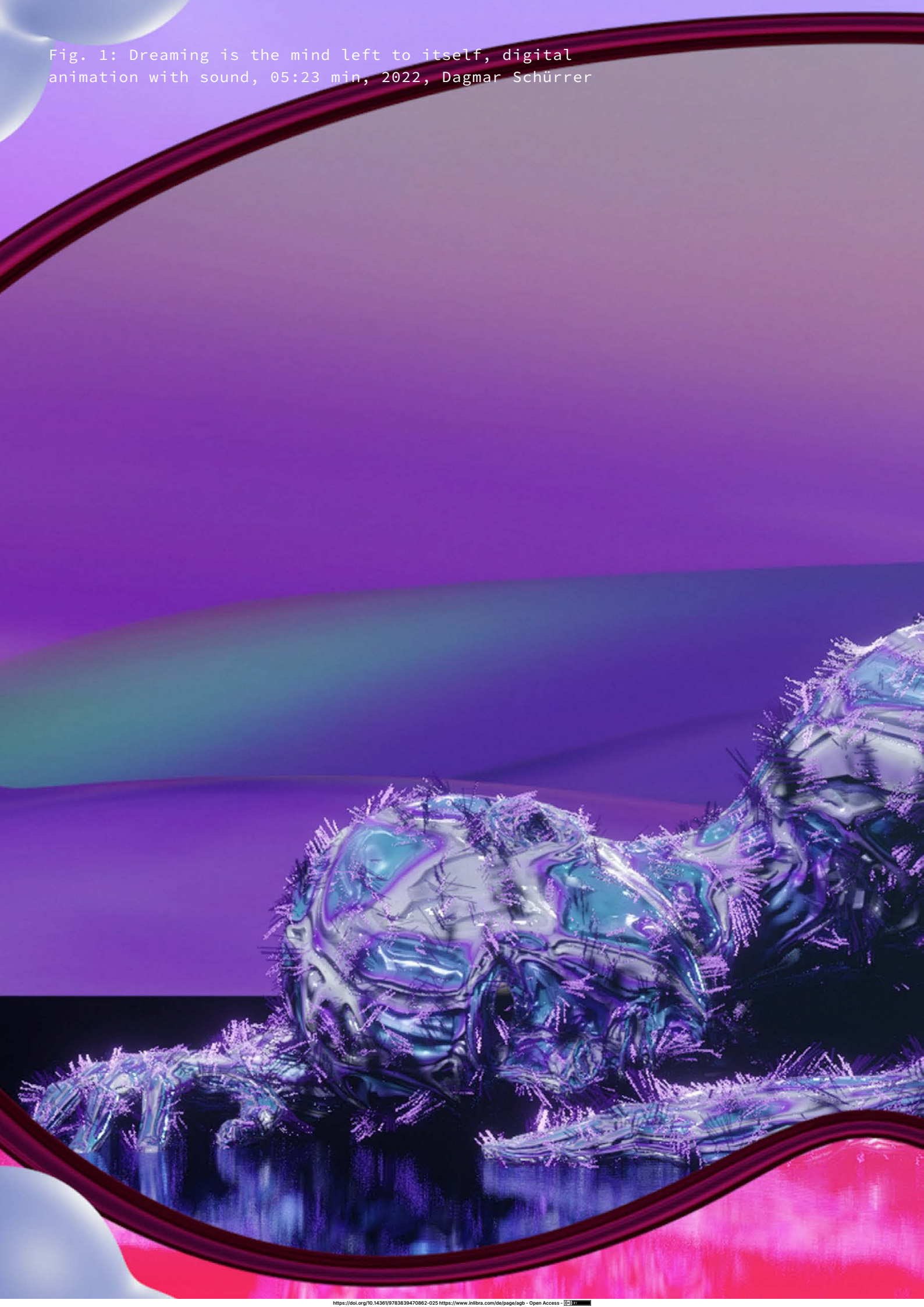
Do you dream in color?
At one time we assumed our dreams to be in black and white
Forgotten colors, altered reconstructions, before technical
Descriptions of the impossible
Images evoked by fiction, in indefinite shades
We do not just remember, we simply imagine to know

/4 Dreamtime: The writer

In his book, androids are endowed with highly evolved artificial intelligence to the point of being almost indiscernible from consciousness, and become rebellious against their human enslavers. At a time when TV is the most advanced widespread

1 The book was published in 1968.

Fig. 1: Dreaming is the mind left to itself, digital animation with sound, 05:23 min, 2022, Dagmar Schürer



Which presence would you like to feel?

dish town of Kiruna, and I was carrying *The Word for World Is Forest* in my backpack. This must be a sign, I thought, generally prone to interpret any coincidence as a meaningful spacetime synchronicity.

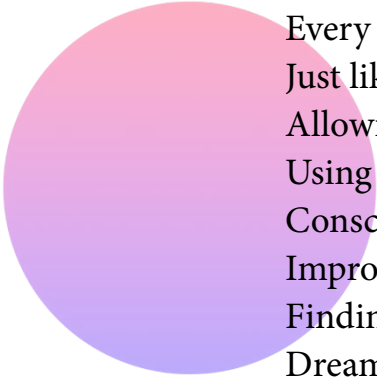
During that period, I could almost never remember my dreams, and it took a tremendous effort to discipline myself to report them while still half-awake. Over time, it became as feasible as training an invisible muscle (exhausting yet effective), and I was happy (as often as horrified) to rescue all those unconscious images from the brink of oblivion. Here's my routine: I wake up in the morning and keep my eyes closed, focusing only on the dream that just ended. I repeat it in my mind, crystallizing fragmented images and half-forgotten narratives, to make sure they won't vanish entirely – it happens so quickly, as any intrusion from reality yanks me back into the awareness of my beds-

heets and geolocation, into the here-and-now. Eyes still closed, I grab a pen and notebook on my nightstand and start writing in complete darkness.

During these fleeting liminal moments between REM phase and wakefulness, I sometimes sense that consciousness might not originate from within. Instead, it could be a reception of signals traversing through electrical impulses across multiple spacetime dimensions and states of matter – living, non-living, and all that exists in-between. These signals are the collective, planetary pulse of matter, which reverberates universally.

In a few minutes, life becomes too real and I've completely forgotten what I dreamt or wrote. Yet, I have managed to carry a trace of the dreamtime into the world-time, to weave them together for later.

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Every night we redefine our patterns
Just like artificial networks, we need some noise to un-learn
Allowing altered realities to bend the insights
Using structured hallucinations to generate warped and corrupted input
Consciousness in a pure and isolated form
Improves abstraction and reasoning in the embodied self
Finding new anchors in the clouds, new metaphors for complex systems
Dreaming is the mind left to itself

/3 Dreamtime: The artist

The year is 2021. Dagmar Schürer stumbles upon an academic paper by Erik Hoel that introduces his Overfitted Brain Hypothesis – an innovative theory on the function of dreams that transcends dry scientific language and stirs her creative spirit. Ideas converge through minds sensing each other from a distance of 6,077 kilometres. Words flow out in poetic prose, and her text becomes the cornerstone of a new artwork – its voiceover.

The process of digital world-building bears a striking resemblance to the concept of fiction as artificial dreaming. In Jorge Luis Borges's short story *The Circular Ruins*, a dreamer attempts to sculpt a complete man from the incoherent and vertiginous substance of dreams. Similarly, Schürer chooses not to

merely represent her dreams, but to craft dream-fiction through a digital world-building. This process is marked by optical elements influenced by digital 3D aesthetics (a style she dubs New Surrealism) intricately woven through subjective associations. While Borges's unnamed character begins with the vision of a beating heart, Schürer's nascent world starts with the »dreamer« – a liminal android-like figure of metallic features and striking purple skin tone. It inhabits a realm painted with a vibrant spectrum of colours, mirroring the influence of our daily exposure to chromatically saturated digital images.

Schürer perceives a profound connection between the act of dreaming and the realm of artificial intelligence, viewing them as symbolic touchpoints in the intricate dance between humans and technology. When our dreams are most vivid, during the REM phase of sleep, our bodies are immobilized to pre-

vent us from physically acting out their often wild narratives. Yet, our muscles undergo subtle contractions, producing minuscule, precise movements that seem to slip through the gaps in this protective paralysis. While Hoel's hypothesis envisions dreams as a process of unlearning within a biased environment, neuroscientist Mike S. Blumberg proposes that these twitches serve as a means through which the brain learns the body, building a sense of self. It seems like the cartography of our physicality requires constant recalibration, with our consciousness perpetually occupied in keeping pace. Blumberg takes it a step further, suggesting that applying these twitches to an artificial body could be the key to the robot's self-awareness of its own mechanical form, enabling it to learn self-repair.

In essence, the enigmas of our dreams become a gateway to understanding technology and vice versa, revealing the intricate entanglement of human and artificial intelligences as they co-evolve and become with each other. In 1985, Donna Haraway was already convinced that »we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs« (1991: 151).

In Borges's novel, the »son« of the enigmatic dreamer yearns for existence, unaware of his spectral nature. Simultaneously, the dreamer discovers he's a mere creation of another's subconscious. Yet, Schürer finds resonance in the notion that »embodiment is overrated«. To her, the distinctions between digital and analogue, dream and wakefulness, blur into a singular, immersive experience. In her new world, which takes shape as a video and augmented reality experience, boundaries dissolve.

She names it *Dreaming is the mind left to itself*.

Vanina Saracino (she/they) is an independent curator, film programmer, writer, and lecturer. With extensive international experience, Saracino has curated exhibitions globally, including co-curating two editions of the Screen City Biennial: Other Minds at Archenhold Observatory (Berlin, 2022) and Ecologies – Lost, Found and Continued (Stavanger, 2019). Since 2021, Saracino has served as Adjunct Professor of Experimental Film and Media Art at Universität der Künste (UdK), Berlin.

Dagmar Schürer is a digital artist working in the field of expanded animation and extended reality (XR) technologies, with significant international presentations at the ICA London, the Centre Pompidou Paris, the Louvre Paris, HKW Berlin, the Eunam Museum South Korea, Ars Electronica Linz, ISEA Brisbane, and Tate Modern London. Since 2018 she is a research assistant and workshop leader for artistic XR development at the University of Applied Sciences Berlin.

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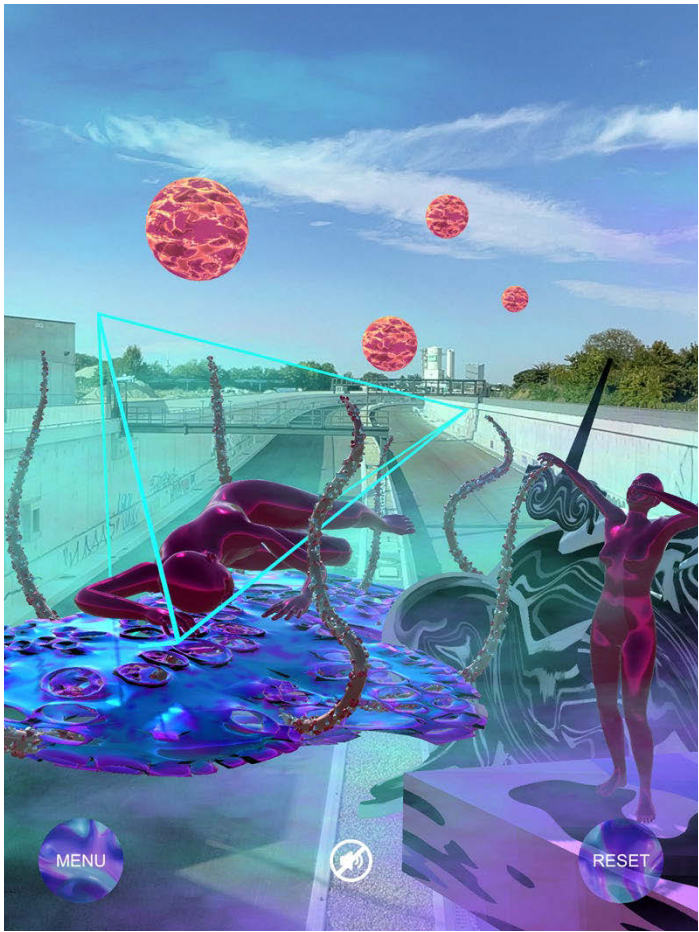
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The animation Dreaming is the mind left to itself is accompanied by the augmented reality application Dreaming Mind AR. You can download the app by scanning the QR code below:



Link to AR App for Android



Link to AR App for iOS