The work *All to Sand Returns* (2022) is an audiovisual installation created by the duo open.circuit (Assunta Alegiani and Pedro Ferreira) that follows an abstract sci-fi narrative to speculate on the consequences of the rise of the sea level and global warming in a near future influenced by the growth of the computational networked world. As a thought experiment, this work imagines that computational societies have accelerated global warming and, as a result, have left earth’s surface flooded with sea water and reduced to sand, having forced humans to migrate underground and be permanently connected to the hyperverse system.

**Keywords:** Global Warming, Environment, Climate, Audiovisuals, Experimental Music, Analogue Film, Narrative, Sci-fi.
Speculations on Future Landscapes and Contemporary Anxieties

The audiovisual installation All to Sand Returns imagines a possible future landscape transformed by the computational society which has contributed to the acceleration of global warming. The work unfolds a narrative set in a near future where humans have migrated underground as the only chance to survive the environmental conditions caused by the rise of the sea level and temperatures. It is told from the perspective of a young underground inhabitant, born and raised, who has made her way to the surface illegally for the first time, to record images of the outside world with the use of an old analogue film camera. This camera is the only device left capable of capturing moving images that will not be analysed and controlled by the hyperverse, a computational system that governs and mediates all aspects of life in the underworld. In the hyperverse system, humans of the underworld experience a fully computational everyday life that takes place only in their minds through wearable quantum retinas. The underground not only provides shelter but also refuge from the environment's physicality, imposing a framework within which body and mind can be monitored and controlled at all times.

Accompanied by abstract visuals and electronic music, the narrator meditates on the environment that had led humanity to seek shelter underground and rely exclusively on the hyperverse system. She recounts the experience of visiting the surface for the first time, novel bodily sensations, such as heat from the sun, the wind's stroke on her skin, the smell of the ocean and the sound of the waves. A new awareness of her self and her body emerges. She inhabits a sense of being present, of actual and immediate environment — a new sensation for an underworld inhabitant whose experience is mediated and determined by the calculable quantum world of the hyperverse.

Repurposing Analogue Media and Analogue-Digital Media Hybrids

Originally shot on 16mm analogue film, All to Sand Returns was produced by reusing a hand-cranked analogue film camera during an 80 km hike on the Fishermen’s Trail along the coast of south-west Portugal. We repurposed three rolls of expired 16mm colour reversal film and applied handmade processes to create abstract visuals (Fig. 1). We hand-processed the film using a C-41 Developing Kit at the facilities of the artist-run film lab LaborBerlin. Among different treatments, the filmstrip was hand-painted and manipulated to create textures that would portray the imagined landscape altered by global warming. The aim was to induce affective sensations in the viewer such as the feeling of heat, the coolness of the sea or evoking the colours of sand and the ocean water. In addition, the work explores frame-by-frame animation through small hand-drawn animated
loops, directly drawn on the filmstrip, to emphasise certain points of the narrative. Finally, the analogue film was transferred to digital video to be further manipulated using video editing software, to blend and mix several video layers to create new visual possibilities.¹

The narrative was then developed alongside the video editing process to address current anxieties regarding climate change and the growth of the computational world, its societal impacts in recent years as well as its environmental consequences. The music was produced in live improvisation with DIY analogue synthesisers and a photo-cell sensitive to light (Fig. 2) that served as a sound generator.²

In addition to the music, sounds from the seaside, such as ocean waves, are used to accentuate the visuals. As a result, the music turns into an evolving ambient soundscape that shifts to techno

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1. The video was edited using the free/libre open-source software Shotcut but the work is also made available as an analogue 16mm film.
2. The music improvisation by open.circuit (Assunta alegiani and Pedro Ferreira) can be previewed here: https://www.youtube.com/watch?v=xFm4pXWbgvo.
rhythms in combination with the abstract moving images, where bits of representative imagery of the sea are juxtaposed with abstract colourful textures and noise.

**Environment, Space and Materiality**

*All to Sand Returns* aims to draw attention to contemporary environmental and societal problems, imagined to the extreme. Its narrative veers on the absurd to mirror our world where the hypervverse system stands for our current times pervaded by digital technologies with an increasingly virtual experience separated from the natural world.

As an audiovisual installation, the work runs in a loop on a screen that is embedded in a patch of sand on the ground of the installation space (Fig. 3). The installation blends the screen with sand to suggest the interconnection of raw materials and digital media, the latter’s dependency on rare minerals as well as its impermanence. The audience is free to walk through the sand, to transpose the protagonist’s experience of physicality through touch and movement in space. In short, the work invites reflection on climate change and the growth of the computational world.

*Figure 3: All to sand Returns installation model.*

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*All to Sand Returns online preview*  
[https://pedroferreira.net/moving-image/all-to-sand-returns](https://pedroferreira.net/moving-image/all-to-sand-returns)