

TAKING SPACE

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As a media artist, I introduce a collaborative art project I've been working on since 2020 together with artists from Sweden, Germany, Austria, the Netherlands, and Aotearoa/New Zealand. It takes place on UpStage, an open source online platform for networked "cyberformance", initiated in 2003 by a group of women around Helen Varley Jamieson and Vicki Smith in Aotearoa/New Zealand.

From 2020 until 2024, we have been involved in the project "Mobilise/Demobilise", co-funded by the European Union Art Program "Creative Europe".

"Mobilise/Demobilise" deals with the problems of mobility in the age of climate crisis. The project addresses human mobility within the contemporary political and environmental context, and the impact of mobile technologies on human life and the environment. It is an artistic and discursive response to a world of increasing conflict, crisis, and emergency.

UpStage works intentionally with small files to be accessible to everybody around the globe. With simple graphic elements, text, sound, online drawing, and video we work together in real time – low tech and with irony. Our "cyberperformances" are often hybrid, with live online audiences and audiences in real spaces. The audience can interact via chat and sometimes influence the performance.

All our cyberperformances are research-based, sometimes we work together with scientists, philosophers, and theorists in all fields.

At the moment we are developing our next move: "Taking space". After the resources on earth are exploited, humankind looks to the stars. One of the UpStage developers works for NASA, and she drew our attention to their endeavors to mine the moon.

In 1972, NASA Geologist Harrison "Jack" Schmitt spent three Earth days experimenting on the moon, gathering up lunar rocks to take back home for analysis. That mission, 50 years ago, was the last time any person set foot on the lunar surface, the final triumph of NASA's Apollo program. Of the 12 men to have ever walked on the moon, Schmitt was the only one who was a trained scientist. He claimed that because fossil fuels were in limited supply and precipitating global warming, power should be generated cleanly through a nuclear fusion reaction between the isotopes deuterium and helium-3. Because ^3He is incredibly scarce on Earth, he looked to the Moon as the ideal source.

Mining the moon is ready to lift off by 2025. In 2019, European scientists announced plans to start mining the moon as early as 2025. The mission will be in charge of the European Space Agency in partnership with

ArianeGroup, and their aim is to extract "waste-free" nuclear energy to be worth trillions of dollars. NASA recently announced to operate a pilot processing plant for lunar resources by 2032, as part of its planned Artemis missions. They will also explore minerals and metals, including iron ore and rare earths.

But what will happen, when we take materials away from the moon? The moon is influencing the water, the tide, and the liquids on earth, and we ourselves consist of 70 - 95% of water. What will happen when we start to change the mass of the moon? How long will it take until the next environmental disaster takes place?

We already started littering the space around our planet. In 2022, the US Space Surveillance Network reported almost 26.000 artificial objects in orbit above the Earth, including around 5,500 operational satellites. These are just the objects large enough to be tracked. Defunct human-made objects in space are an increasing hazard to active satellites and spacecraft. Several spacecraft, crewed and uncrewed, have been damaged or destroyed by space debris already. It has been theorized that Earth's orbit could even become impassable if the risk of collision grows too high.

Below 2,000 km Earth-altitude, pieces of debris are already denser than meteoroids. Most are dust from rocket motors, surface erosion debris like paint flakes, frozen coolant from nuclear-powered satellites, junk from anti-sat weapon tests, or from collisions that happen more and more often, the more junk we put into space. And each collision causes more debris.

Is it curiosity that draws us to space? A sign of intelligence, the wish to learn about the unknown, an urge to understand the world and the universe and everything? Or is it greed, looking for new places to occupy, new treasures to hunt?

Are we going there to find enlightenment, knowledge, other species to meet, and new friends to expand our networks? Or will it be the same circuit of exploitation, slavery, and destruction? It is the same kind of people who colonized earth that are going to space now. Their thinking is shaped by a capitalist system, and they are mostly male. Will they do better this time?

For 100 years humans have made efforts to reach out to intelligent beings in space. We send radio signals and satellites, but nobody answers. Or maybe we don't understand the answers? Our quest for information has brought an enormous boost of technological inventions - from telephone to radio, fax up to the internet, and the World Wide Web. Now we are in communication with machines.

We sometimes forget, that there has been highly effective communication apart from our technologies, and some of them have not yet been explored. We still don't know how to communicate with whales or dolphins, we don't understand the complex communication of bees; we are just beginning to think about the communication system of mycelium, and there are probably many more communication systems on earth we have no clue of.

So how can we believe, that we will understand extraterrestrial civilizations? Will they be more intelligent than we are – and what is intelligence? When intelligence is defined as the ability to solve complex problems or make decisions with outcomes benefiting the actor and has evolved in lifeforms to adapt to diverse environments for their survival and reproduction - looking at the condition of the earth at the moment: are we really this intelligent? Intelligence is hard to define: Different lifeforms can have very different types of intelligence because they have different evolutionary roots and have adapted to different environments. So how can we think to be able to communicate with extraterrestrial intelligence, if we are even unable (and unwilling) to understand our terrestrial fellow creatures?

Our next series of cyberperformances will create imaginative scenarios of (im-)possible communication between humans and our neighbors in space.

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