

Situating Sustainability

A Handbook of Contexts and Concepts

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Part III: Art as Research

PhosFATE

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Pekka Niskanen & Mohamed Sleiman Labat

In August 2019, Mohamed Sleiman Labat and Pekka Niskanen took part in the Imagining Godzilla project during Sleiman Labat's residency period at the Kone Foundation's Lauttasaari Manor. They went sailing for two days with a floating research platform, looking for evidence of the algae in the Baltic Sea. As it was late August, the blue-green algal blooms had almost disappeared and there was hardly a visible trace left of them. The micro-residency functioned as an opportunity for the PhosFATE-project to film and record above and under water. This was a unique opportunity to gather material for Sleiman Labat's and Niskanen's future video installation and a film. On the final day of the micro-residency, they gave a talk about their PhosFATE-project at the SOLU Space of the Bioart Society.

The PhosFATE-project addresses key issues of phosphorus pollution in the Baltic Sea and the exile of the Saharawi refugees living in southwest Algeria (Fiddian-Qasmiyeh 2011; Herz 2013, 371). The Saharawi refugee camps and the Baltic Sea region share the problems of phosphate fertilizers even though the consequences are very different. PhosFATE seeks to unfold the story of

this valuable mineral through interconnected layers: evoking understanding of ecological practices, the very food on our tables, world politics and economics, and the everyday stories we tell. The project involves special and unpaired connections: a sea whose bottom is turning into a desert (Vuorinen 2017, 19), and a desert deprived of its own phosphate yet blooming with thousands of family gardens planted by a community that never settled down to farm. An artist and researcher, Pekka Niskanen works and lives in Helsinki by the Baltic Sea. A poet and artist, Mohamed Sleiman Labat was born in a refugee camp in the Hamada desert in Algeria where he currently works as well.

The PhosFATE project began in Helsinki in July 2019 when Saharawi artist Mohamed Sleiman Labat was working as an artist in residency at the Lauttasaari Manor. The two artists collaborated for four months on a ‘laboratory phase’ of the project to explore the potential for art projects and artistic research. From July to October they used a Saharawi tent to collect information for the project and met researchers from different disciplines and research institutions.

Sleiman Labat brought a nomadic tent from the Hamada desert, designed and hand-sewn by the women in the Samara camp. The tent served as a space to interact with people from time to time. Sleiman Labat and Niskanen experimented with the tent at different events, using it as a moving sculpture and a space for people to discuss and share stories and poems as well as to simply experience the tent, a typical home for Sleiman Labat and his people. The PhosFATE nomad tent became a film and photography studio, a meeting place, and a public presentation forum for the project. The artists documented the tent and the meetings inside it for future parts of the project.

Many Saharawis have been forced out of their own land in the Western Sahara to the Hamada desert in Algerian Sahara due to the phosphate mines in Western Sahara. Morocco has taken over both the Saharawi homeland and their phosphate reserves. (Leite 2006, 13, 16). Phosphate from the Moroccan mines is used in Europe to fertilize fields and forests (Lécuyer 2014,

5-6). Eventually it will end up eutrophizing marine areas, including the Baltic Sea. Eutrophication is most evident in the form of cyanobacteria blooms (Kahiluoto et al. 2015, 4), especially in the summer, sometimes also as traces in the frozen sea (Olofsson et al. 2019, 12). The consequences of eutrophication are oxygen depletion and changes in the fish species and the marine ecosystem, besides the increased amount of cyanobacteria (Ahtiainen et al. 2014, 9). All these signs refer to the condition of the Saharawi as refugees. They are not a metaphor about it.

Climate change is affecting everyone, including the Saharawi, many of whom live in an almost uninhabitable place in the Hamada desert. As the global temperature rises, the conditions in the refugee camps become unsustainable for several months a year. Every year, unpredictable weather phenomena and rains destroy the clay buildings that have replaced the traditional Saharawi tents in the refugee camps. Currently, during the hottest months, there is a shortage of water and food, although the Saharawi have sought to establish small gardens in the middle of the desert to secure their food supply. The new generations of the Saharawi community are highly educated and know the principles of both permaculture and circular economy.

The European Union's trade policy contains contradictions that also concern the Saharawis. In January 2019, the EU signed a trade agreement with Morocco that includes vegetables and fishing products from the Western Sahara, even though Morocco conquered the area without the approval of the international community.ⁱ The European Court of Justice has ruled the agreement to be illegal. The court requires the legal agreement to have the consent of the Saharawis.ⁱⁱ Morocco holds more than 72% of the world's phosphate reserves.ⁱⁱⁱ Although Western Sahara phosphate is excluded from the trade agreement, it legitimates Morocco as one of the main phosphate producers for the European fertilizer industry. Phosphorus is an essential plant nutrient (Kaakinen 2016, 40). The EU trade agreement makes it practically impossible for the UN to hold a referendum on the Western Sahara in the future.

The PhosFATE-project also focuses on the problems of the mining industry in Northern Finland. In Finland, agriculture uses phosphorus from the Norwegian company Yara. The phosphorus for the fertilizer is processed from phosphate from the Finnish Siilinjärvi mine (Geissler 2018, 14). Yara is possibly expanding its mining operations in Finland to Sokli, in Savukoski municipality's phosphate deposits. The mining project and its continuation will be decided on in 2021. The noise and lighting of the mining area would disturb reindeer herding in the Kemi-Sompio reindeer herd. The Supreme Administrative Court dismissed the petitioner's appeal against the Sokli mine in 2017. The mine would significantly burden the river Kemi and the Baltic Sea with phosphorus emissions.^{iv} The Administrative Court's decision highlights the global conflicts between the mining industry and the interests of the indigenous people of Northern Europe. The mining industry in Finland too often ignores the natural balance of the local areas and traditional livelihoods such as reindeer herding. On the other hand, the growth of lichen that the reindeers eat has declined in Lapland, partly due to the land use and reindeer herding. Lichen only grows a few millimeters a year.^v

PhosFATE sheds light on the global environmental problems from which indigenous and ethnic groups have suffered for decades. Many of the nomadic communities that have been forced to settle down possess experiences, knowledge and stories that are important for our time. The global economy's dependence on raw materials benefits some of the world's population, but often overshadows the lives of minorities and their knowledges. Securing access to raw materials is important to Western societies. Quite often it forces populations out of their native areas. This can result to irreversible changes in the lifestyle of those groups to whom the colonized land belongs, as is the case with the Saharawis.

Sleiman Labat's and Niskanen's project will highlight at least two different areas of Saharawi knowledge: their knowledge of the desert and the new knowledge of the refugee camps. The Saharawi exile in refugee camps is a result of Western food production's dependency on

fertilizers. In the case of the Saharawi, on phosphates. The work discusses and explores phosphate mainly through Western knowledge, while the situation of Sahrawi refugees is told through their knowledge. The Saharawi artist Sleiman Labat has collected a video and audio archive of Saharawi life from the 1930s to the present day. The archive brings up the efforts of the Spanish colonial powers to incorporate the Saharawi into the colonial system before the World War II.

The post-colonial Saharawi have produced a new cultural narrative in refugee camps by practicing art, building permanent houses, and developing hydroponic agriculture. In hydroponic agriculture, barley plants receive nutrients from solutions, developing up to twice as fast as in traditional farming and using 90 percent less water.^{vi} These three activities form the key practices in the camps, besides the activities in some Western institutions such as schools, hospitals and libraries. All these elements mentioned above have become permanent structures in the new Saharawi narrative and for the Saharawi living in refugee camps.

ⁱ See online source: *EU-Morocco Agreement on the amendment of Protocols 1 and 4 to the Euro-Mediterranean Agreement (Resolution)*. Available at: http://www.europarl.europa.eu/doceo/document/TA-8-2019-0016_EN.html

ⁱⁱ See online source: *Preferential tariffs to help Western Sahara to develop*. Available at: <https://www.europarl.europa.eu/news/en/agenda/briefing/2019-01-14/9/preferential-tariffs-to-help-western-sahara-to-develop>

ⁱⁱⁱ See online source: Daneshgar, S. & Callegari, A. & Capodaglio, A. G. & Vaccari, D. 2018. The Potential Phosphorus Crisis: Resource Conservation and Possible Escape Technologies: A Review. *Resources*, 2018, 7(2), 37, pp. 1-22. Available at: <https://doi.org/10.3390/resources7020037>

^{iv} See online source: *Lannoiteyhtiö Yara laskee uudelleen Soklin kaivoksen kannattavuuden – jatkosta päätetään aikaisintaan vuonna 2021*. YLE 16.4.2019. Available at: <https://yle.fi/uutiset/3-10742598>

^v See online source: Saikkonen, T. & Vahtera, V. & Koponen, S. & Suominen, O. 2019. *Effects of reindeer grazing and recovery after cessation of grazing on the ground-dwelling spider assemblage in Finnish Lapland*. *PeerJ*. 2019 Jul 17;7:e7330. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6642629/>

^{vi} See online source: Anthem, P. 2019. How I grew barley in the desert. *World Food Programme Insight* 24.9.2019. Available at: <https://insight.wfp.org/innovation-in-the-desert-30f90f846ec0>