

A Deserted Planet

Sarah Maske

“Beyond a critical point within a finite space, freedom diminishes as numbers increase. This is as true of humans in the finite space of a planetary ecosystem as it is of gas molecules in a sealed flask. The human question is not how many can possibly survive within the system, but what kind of existence is possible for those who do survive.”

-Pardot Kynes, First Planetologist of Arrakis

Frank Herbert, *Dune*, 1966.

A root and simultaneously a consequence of the increased appearance of dust and sandstorms is the expanding desertification of the Mesopotamian region.

Desertification is the process of degradation of the ground/soil in arid and semi-arid areas, which leads to the development of desert-like conditions. The causes are complex and multiple: interactions among climatic factors with high variability of precipitation, phases of drought and aridity, degradation and destruction of natural vegetation through deforestation, cultivation, overgrazing, and logging [2].

Unlike the natural formation of deserts through natural climate change, desertification sees the destruction of landscapes caused by human activity, leading to so-called man-made-deserts. According to the UN, 4.2 billion ha, that is 33% of the entire global surface, is currently in danger of desertification, 12% of which severely or very severely. Subsequently 65% of the worldwide cultivated surface is affected by soil degradation and progressive desertification [3]. Once it exceeds an ecosystem's capacity to regenerate, the excessive usage of the ecosystem's so-called resources leads to the loss of →diversity, which brings with it degradation and desertification [4]. This leads to abandoned regions from which human beings and animals have escaped, leaving only a blank desert.

The ongoing process of desertification matters in Tehran Platform's *Al Mashoof*, Sinem Dişli's *Sand in the Whirlwind* and Mahmoud Obaidi's *Turtles* on different layers. Both *Al Mashoof* and *Turtles* examine the loss of →biodiversity that foreruns the desertification of the marshlands between the Euphrates and Tigris. Obaidi highlights the disappearance of indigenous turtles, which went almost extinct after the marshlands were drained. The animals serve as a metaphor of the disappearing human population, a population of which Obaidi considers himself a member, belonging to this country that was destroyed by so many wars. The last couple of years have seen an initiative to bring back the marshlands. The project has been partially successful but the ecosystem as a whole will never be re-established.

Al Mashoof examines the erasure of the entire ecology of the Iranian marshlands of Hoor

Al Azim, and its effects on the local population and its culture, which was tightly connected to the marsh's water, to its reeds, and to fishing. Today practically none of these people are left in the region. With the vanishing diversity, leading to a vanishing robustness of ecosystems, the soil erodes and with it comes the formation of badlands, which provide a perfect contact surface for winds and other forms of extreme weather.

Sand in the Whirlwind represents the absurd concept of nation states with their imaginary borders and the actual flow of elemental powers in landscapes with no natural boundaries. Here winds blow freely from Syria to Turkey. The consequences of the agricultural industry around Şanlıurfa region, which introduced chemical fertilizer, monoculture, and with it stubble burning, lead to a deterioration of the soil that brought on a complete degradation of the area. This allows for the ideal landscapes for dust and sandstorm mobility since obstacles which normally hold the winds back have been removed.

The release mechanisms of desertification are manifold and in lake and river regions are commonly tied to illegal or inappropriate agriculture and anthropogenic water management systems.

The destruction of ecosystems is accepted collateral damage in an anthropogenic network which Sandstorm – And Then There Was Dust aims to calibrate.

Notes

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1 Herbert, Frank, *Dune*, (London: Hodder & Stoughton Ltd, 1966), 533.

2 Rüdiger Glaser, *Global Change* (Darmstadt: Primus Verlag, 2014), 53.

3 *Ibid.*

4 Wolf Dieter Blümel, *Wüsten*, Verlag Eugen Ulmer, Stuttgart, 2013, p. 59