

Mutualism

The inevitable need of a mutualistic relationship between humans and non-humans

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ABSTRACT:

To face contemporary global challenges such as climate change it inevitably requires a more symbiotic relationship between human and non-human.

In order to proof this hypothesis it demands a systemic re-framing of the cause and effect relationships which influence the conditions of the earths ecosystem. As a first step this requires a deeper ecological awareness meaning that we have to realize that life on earth is only possible through the interaction and synergy between millions or even billions of different organisms that inhabit it. The goal is to incorporate existing knowledge about biological, physical, social, technological, cognitive as well as metaphysical systems in order to gain a systemic understanding about their interrelationships. This deep understanding of earth as an entity is supposed to set the base for novel architectural solutions addressing threads as climate change or the loss of biodiversity detached from human centred paradigms. This approach might provide a framework to avoid negative

feedback loops caused by the rapid growth of human development and ideally turn them into positive ones forming a mutualistic relationship between humans and their milieu.

The Potenziale exhibition is the first step in my research process to create a mutualistic relationship with our non-human environment and is supposed to demonstrate the beneficial properties of an often overlooked organism: Moss. It has, on the one hand, the capability of filtering Pollutants and fine particles from the air through its' high surface area and specific metabolism. At the same time it can regulate air humidity levels and in a larger scale even reduce soil degradation caused by erosion. Topics which become more and more relevant considering the constantly growing human settlements, the concomitant demand for food as well as rising global temperatures and extreme weather events caused by climate change. During my master thesis, where I investigated the large scale effects of erosion and water pollution in Kathmandu, I came to the insight that the way we design our environment can be directly linked to the way we affect it. I believe when we are re-designing existing patterns of inhabitation it is essential to include non-human partners in this process in order to mitigate the negative effects of human development on the biosphere. In this sense, Moss is only one of many possible organisms to develop a mutualistic relationship with, but no matter what organism, we deeply have to understand their properties and possible feedback loops on all scales to be able to create new patterns of mutualistic co-habitation with our non-human environment which is able to behave in a truly sustainable way.

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