COOP DESIGN RESEARCH

M SC. PROGRAM

NONHUMAN AGENCIES WHEN DESIGNING WITH ACTIVE MATTER

EXPLORING THE FEASIBILITIES OF MYCELIUM

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ABSTRACT

The Anthropocene is the current emergency state caused by the acceleration of human activity. We are living in an age in which the Earth has been absorbed by a system where the mass of human-made artifacts, identified as anthropomass, dominates the biomass. Our existence is saturated with objects that are considered essential in our everyday lives. However, its ubiquity inevitably leads to overlooking a fundamental question that goes beyond mere physical attributes: materiality.

Taking a step back from a human-centered discourse and observing closely the world in contemplation of an ontological shift, this research aims to uncover realities that lead to the question of how we can see what is hidden from our sight. From a theoretical perspective, it is by considering matter as an active entity, as a constant process of transformation rather than an inanimate solid, that a sustainable path towards collaboration between humans and nonhumans can be opened up. Materiality itself provides alternatives that reject the epistemological role of industrial design and bring processes that emerge from inner material structures. Through observation, assemblages themselves guide on how and what to look for, contributing to a more holistic and nuanced engagement with the agencies of active matter.

Considering that design is driven by materials, and science contributes to exploring design processes that are no longer imposed on the material but emerge from the material itself, the primary goal is to explore current transitional ways of thinking and producing where mycelium, as a selected encounter, enters the design process and cultivates a relationship between the designer and the material. Mycelium, commonly known as the root network of mushrooms, is a tool for this research to question the paradox between human agencies and material agencies. This fungal living organism is seen as an allegory that highlights the potential of posthuman design ideas, enhancing sustainable practices, and serving as a means to discuss the current human accelerated paradigm, which is not only bound to matter but to ways of living. Through the study of transitional objects, educational approaches, and commercial perspectives, this thesis contemplates design through the lens of anthropology, examining the challenges associated with the role of the designer.

Therefore, if we assume that nonorganic bodies also have a life, what does that mean for our design practices? How does this assumption shape our reflection on design practices? This research envisions the ways in which materials stimulate our imagination, embracing the consequences of unsustainable behaviors and challenging the temporalities of contemporary growth by questioning which alternative futures can be revealed through the use of mycelium in design.

Keywords: Ecology; Posthumanism; Active Matter; Mycelium; Designer