

# FUNGUTOPIA WORKSHOP – GROW IT YOURSELF DESIGN

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## ABSTRACT

“FUNGUTOPIA is the design of a social and ecological utopia based on urban mushroom cultivation”. The Project FUNGUTOPIA is a design | research in process.

The workshop will work with and about the material of fungal mycelium. We will learn how to cultivate oyster mushrooms with simple kitchen tools and let them grow in self-build forms. To understand how to work with the living material of fungi, we will discuss their properties and characteristics and the potential of mushrooms as building material, recyclers, food and medicine.

Apart from the hands-on-approach the workshops goal is also to discuss questions about “design in process”: How is our understanding of design changing when we start thinking about lifecycles of creation, use and decay? How can we take the material serious as agency in the design process? How could we truly co-design with the “other” – be it human or non-human?

## DESCRIPTION

### FUNGUTOPIA WORKSHOP



Figure 1: Fungutopia Station, DMY Berlin 2011

### WORKSHOP: GROWING MYCELIUM

For the workshop we will use simple kitchen tools like a pressure cooker and work with oyster-mushrooms. First we will build simple shapes from different materials, that can be later filled with the substrate, on which the mycelium will grow. Every participant can take his or her own growing shape at home later on. In a second step we will learn how mushrooms are cultivated in general and how the easiest form of cultivating oyster mushrooms on straw and wood-pallets is working. While we will fill the build shapes we will talk about different uses of the material and concepts that could best adapt the properties of the material. In the end, we will enjoy a simple meal with healthy and delicious mushrooms for lunch together. We will use the lunch

time also to discuss the topics of design in process and designing with living material.

## TIMETABLE

9:30h Start – Introduction of the topics.

10:00h Building shapes from different materials.

11:00h Introduction in the cultivation of oyster-mushrooms. Preparing the substrate to fill the shapes.

12:00h Filling the shapes. Preparation of the lunch.

13:00h Lunch with mushrooms. Discussion.

## PARTICIPATION

Please bring (clean) material for building shapes and/or found shapes that could be filled with the mycelium.

Sign in for the workshop at: [mail@makeandthink.de](mailto:mail@makeandthink.de)



Figure 2: Mycelium Form, 2011



Figure 3: Workshop 2012



Figure 4: Workshop 2012

## BACKGROUND INFORMATION

### FUNGUTOPIA – THE PROJECT

The project FUNGUTOPIA is a design | research in process. It investigates the potential of mushrooms as food, medicine, recycling-system and material.

On a first level, the project is a design-research-experiment that uses the living material of fungal mycelium to grow designs. In this term it is an experiment with (new) modes of working with living, growing materials and the aesthetics they create.

On a second level it is a community-design-experiment that works on the basis of an open source term of design, that involves people on different stages of the design-process and works with the idea of an utopia as a motor for real change.

On a third level it is an educational-design-experiment, that uses design as a tool to explore the field of mycology in an amateur-sense, forming an alternative to the exclusive world of science.

On a fourth level, the project is a design-research-experiment exploring the potential of design in process. The hypothesis is, that the properties of the growing, material of fungal mycelium could serve as role-model for a design in process, as an idea of permeable design term, in which the material as well as the user are taken serious as agencies.

### THE THREE ECOLOGIES

“It seems essential to me that we organize new micro-political and micro-social practices, new solidarities, a new gentleness, while at the same time applying new aesthetic and analytical practices to the formations of the unconscious. If social and political practices are to be set back on their feet, we need to work for humanity, rather than simply for a permanent re-equilibration of the capitalist semiotic universe.” (Guattari, 1989)

In his book “The three ecologies” Félix Guattari explores the term of ecology (Guattari, 2008). He explains, that the notion of an ecology understood as pure nature is quite short-sighted and that we should

indeed think of a mental, social and surrounding/natural ecology, that is completely entangled. Following this thought one can not hope to solve any ecological problem without taking all three ecologies into account. Guattari is also quite convinced, that the arts are one of the few fields that are able to think and act in a way that is dealing transversal with the contemporary ecological crisis.

### MUSHROOM GROWING KIT

The MUSHroom is a prototype for an open source growing kit for mushrooms. It is a tool to grow mushrooms of different kinds at home and to grow mycelium material.

By building a mushroom growing kit using mostly fablab equipment and open source hardware, an indoor greenhouse for the special needs of mushroom cultivation was created. This should not only serve to control humidity and temperature for different kinds of mushrooms and allow the cultivation of rare species at home for fresh digestion, but should also create a kind of display. It is an attempt to establish an urban “Grow It Yourself” - attitude, working against the general perception of mushrooms as being something somehow awkward, growing only in dark, moldy cellars.

Interested participants of the workshop will get a brief introduction and a step-by-step guide to build their own MUSHroom at home.

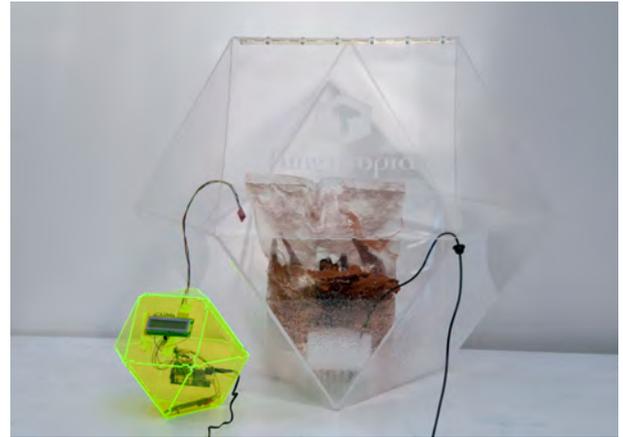


Figure 5: MUSHroom, 2011-2012

### REFERENCING

Links:

<http://www.makeandthink.de/fungutopia/>

Guattari, Félix and Chris Turner (Translator) 1989.  
“The Three Ecologies.” in: *New Formations* No. 8,  
1989.

Guattari, Félix 2008. *The Three Ecologies*. London:  
Bloomsbury.