

Growing shoes

A close-up photograph of a person wearing a white lab coat, holding a pair of brown leather shoes. The shoes are held together by their soles, which are covered in a dense network of thin, light-colored roots. The person's hands are visible, with a ring on the left hand. In the foreground, there is a blurred object that appears to be a piece of wood or a tool. The background is out of focus, showing a bright, possibly indoor setting.

8 nov 2018

Foto: Leila Aerts, Research in Flanders 2017





95%



Rethinking High Fashion Shoes

Created by Cojak

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HoGent



PHASE 1

DESIGN A SUSTAINABLE SHOE.

SUSTAINABLE SHOE?

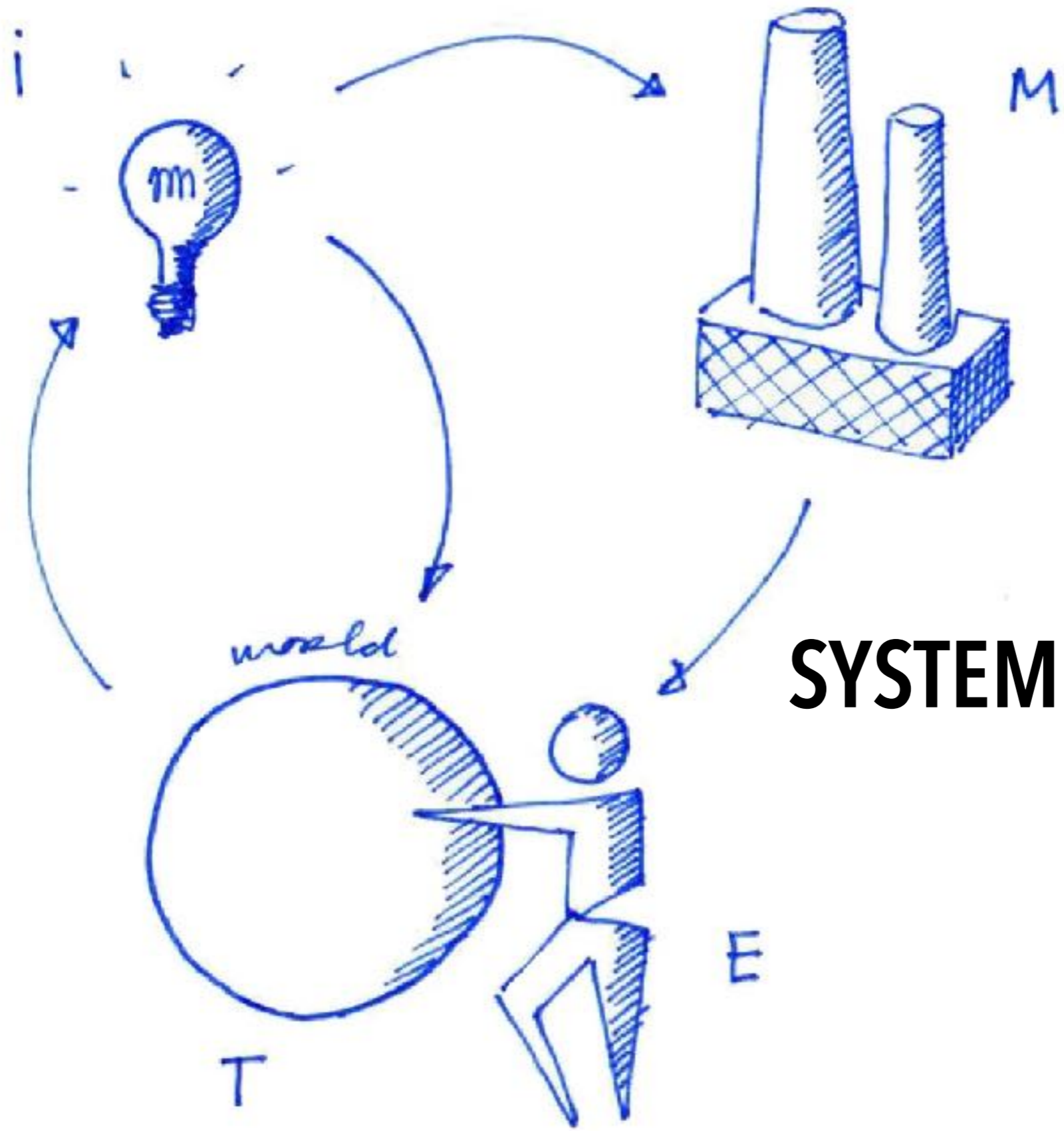


- LCA ?
- TOXICAL ASSEMBLY
- TOO MANY +- COMPONENTS
- DISASSEMBLE ?

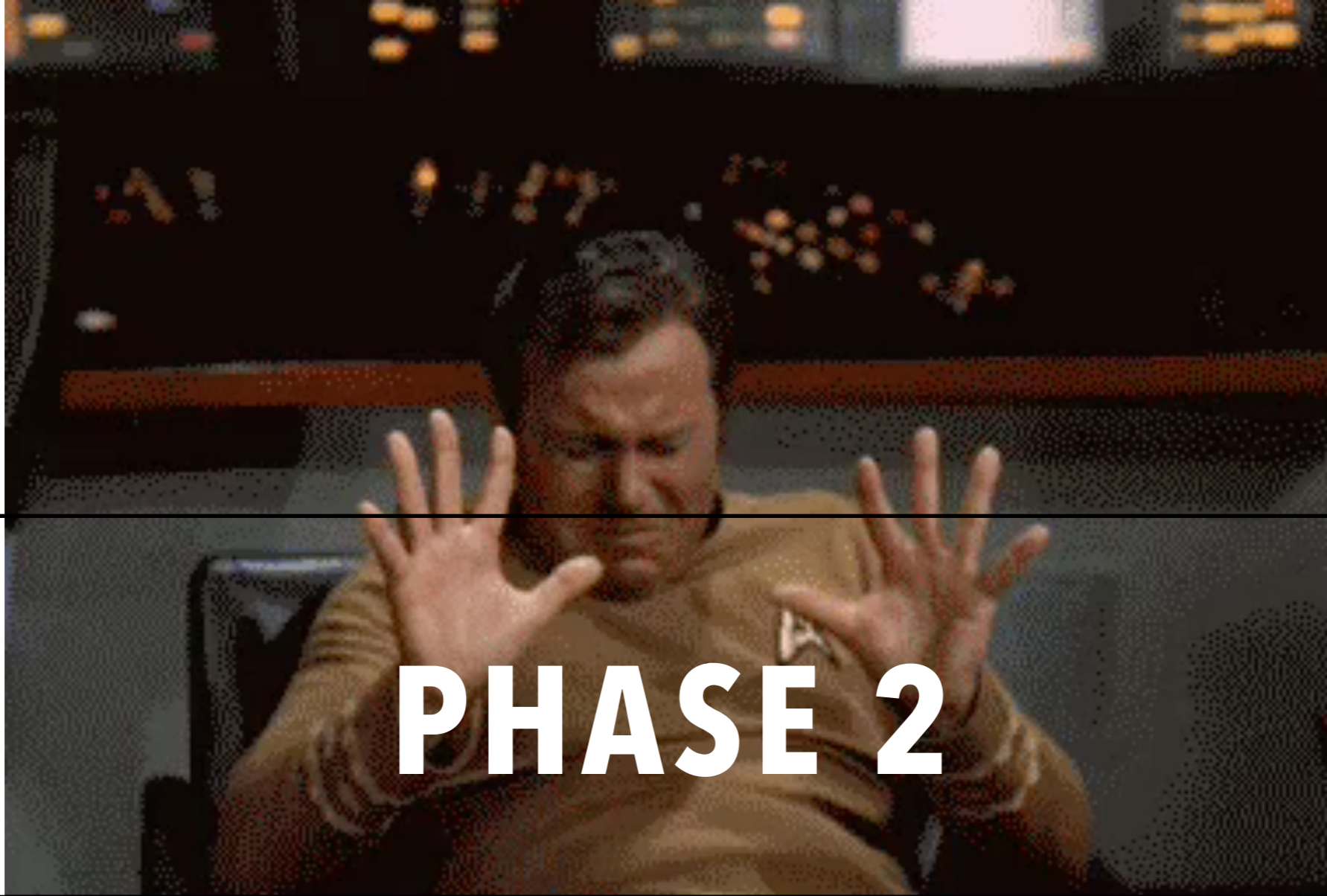


" WASTE IS DESIGN GONE WRONG "

- John Whittall -



SYSTEM THINKING



BECOME A SUSTAINABLE DESIGNER!

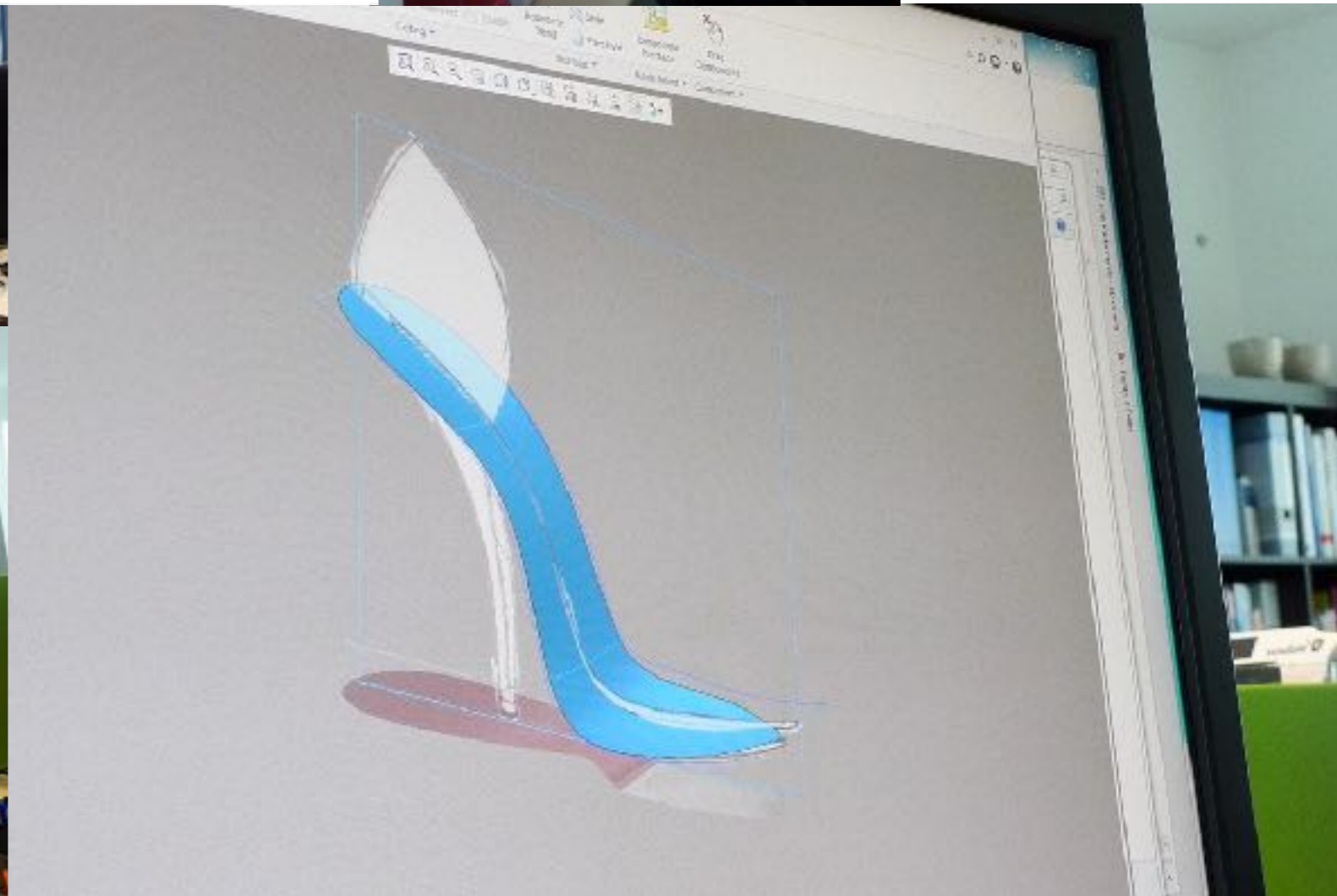
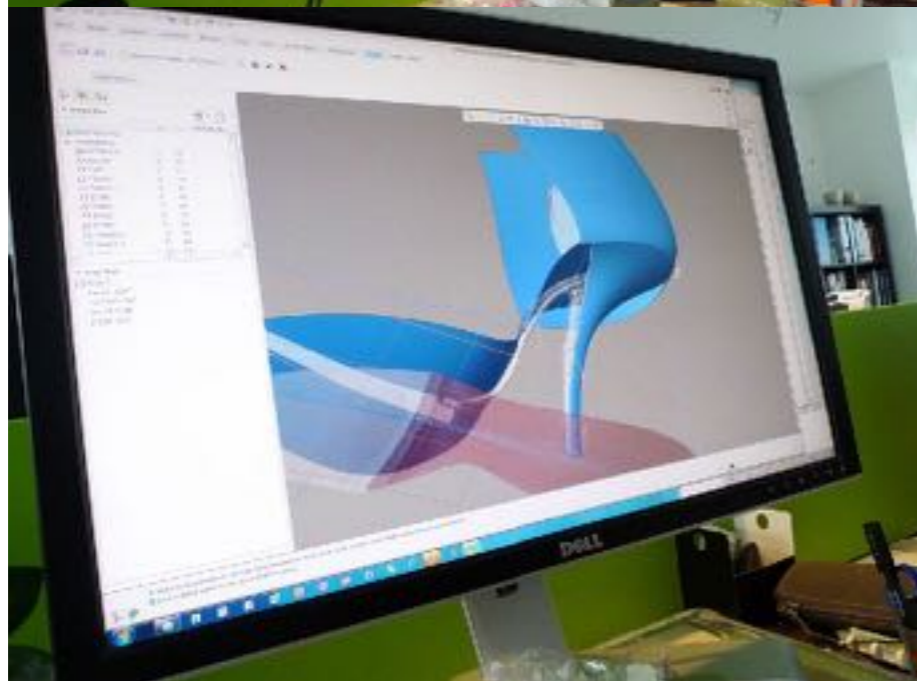
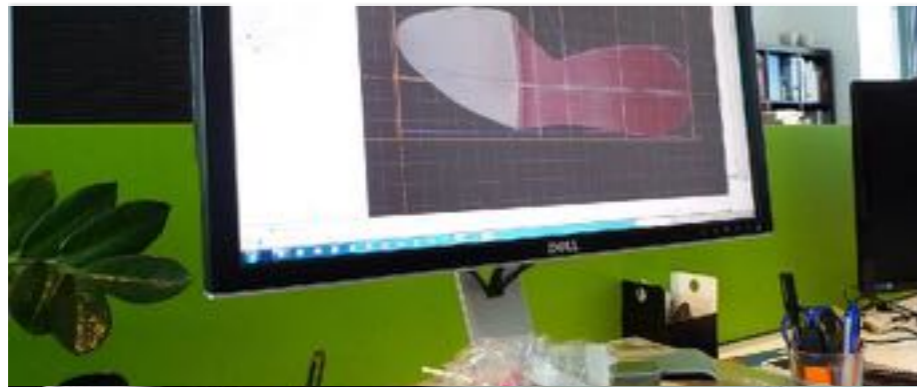
Learning From Experts



THE GOOD WAY

- 1. Design = Modular*
- 2. MaterialiSation = Zero Waste*
- 3. Shoe = Service*

=> HIGH IMPACT



JE SUIS ALICE




ALICE = BASE + UPPER + SERVICE



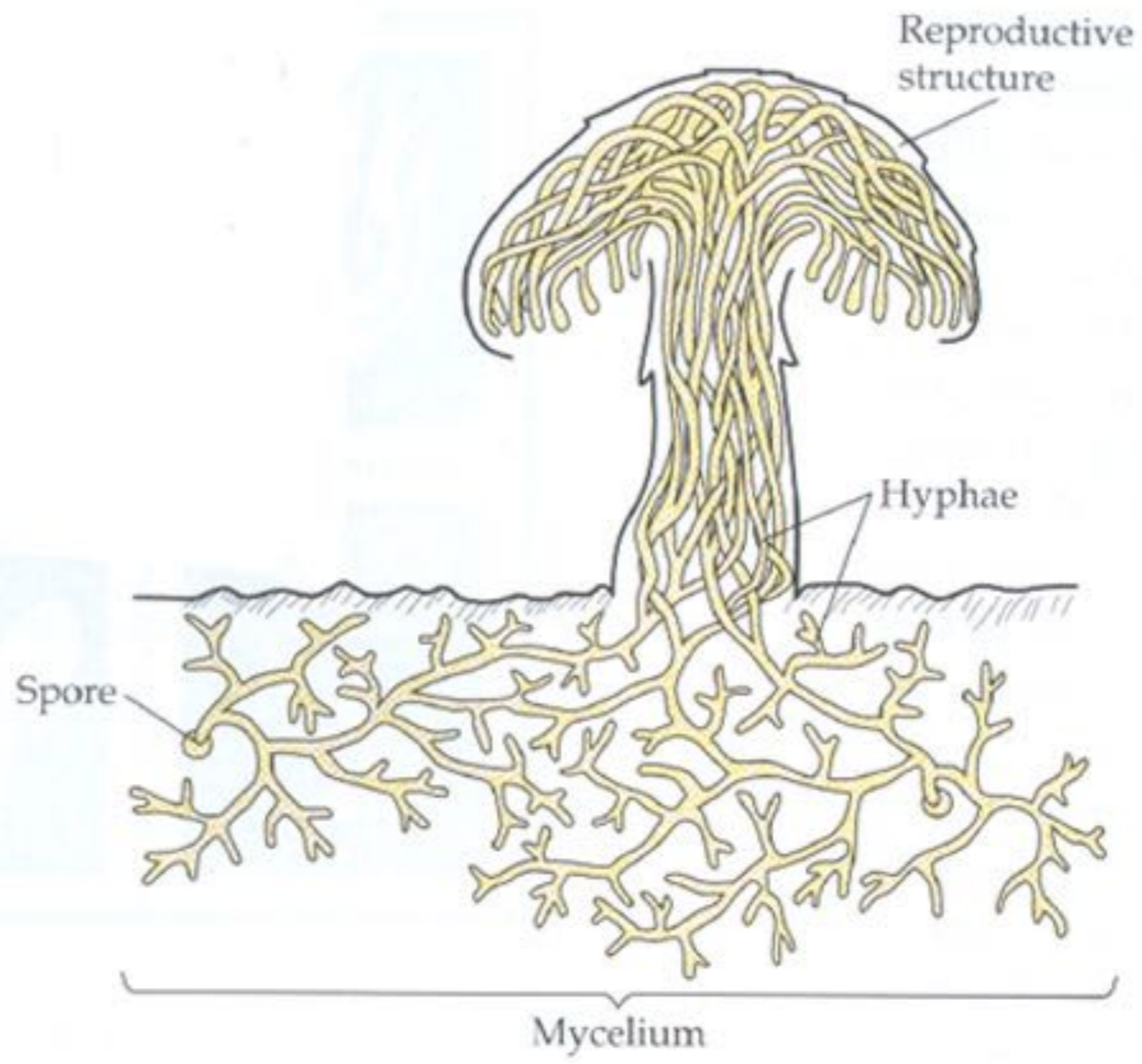
THE TOXIC PRICE OF LEATHER

By Sean Gallagher

 Pulitzer Center



MYCELIUM



Sels assembling & light

Compostable

Low cost & low energy

Hydrophobic

Flexible & Strong



PHASE 3

HOW TO GROW A SHOE?

Upper



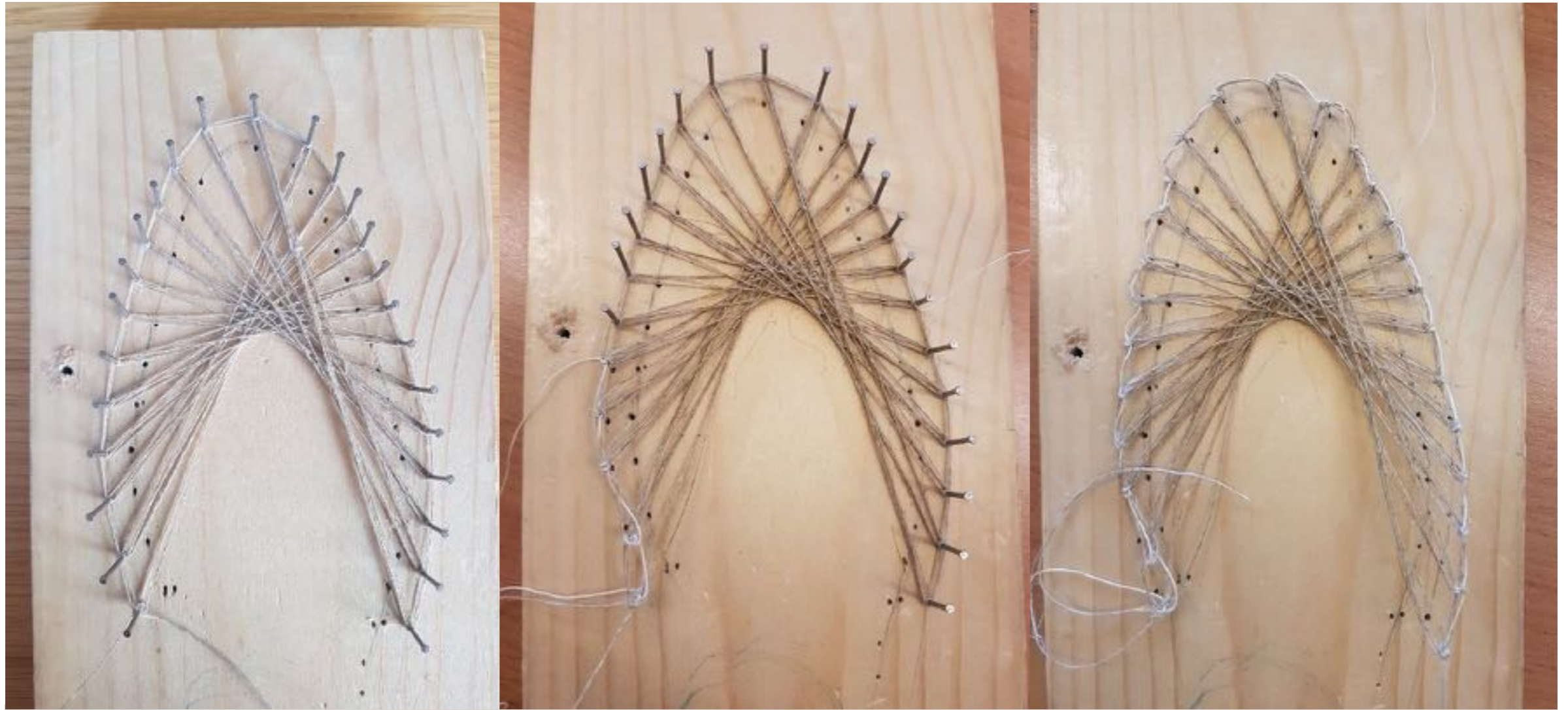
Sole

Sterile

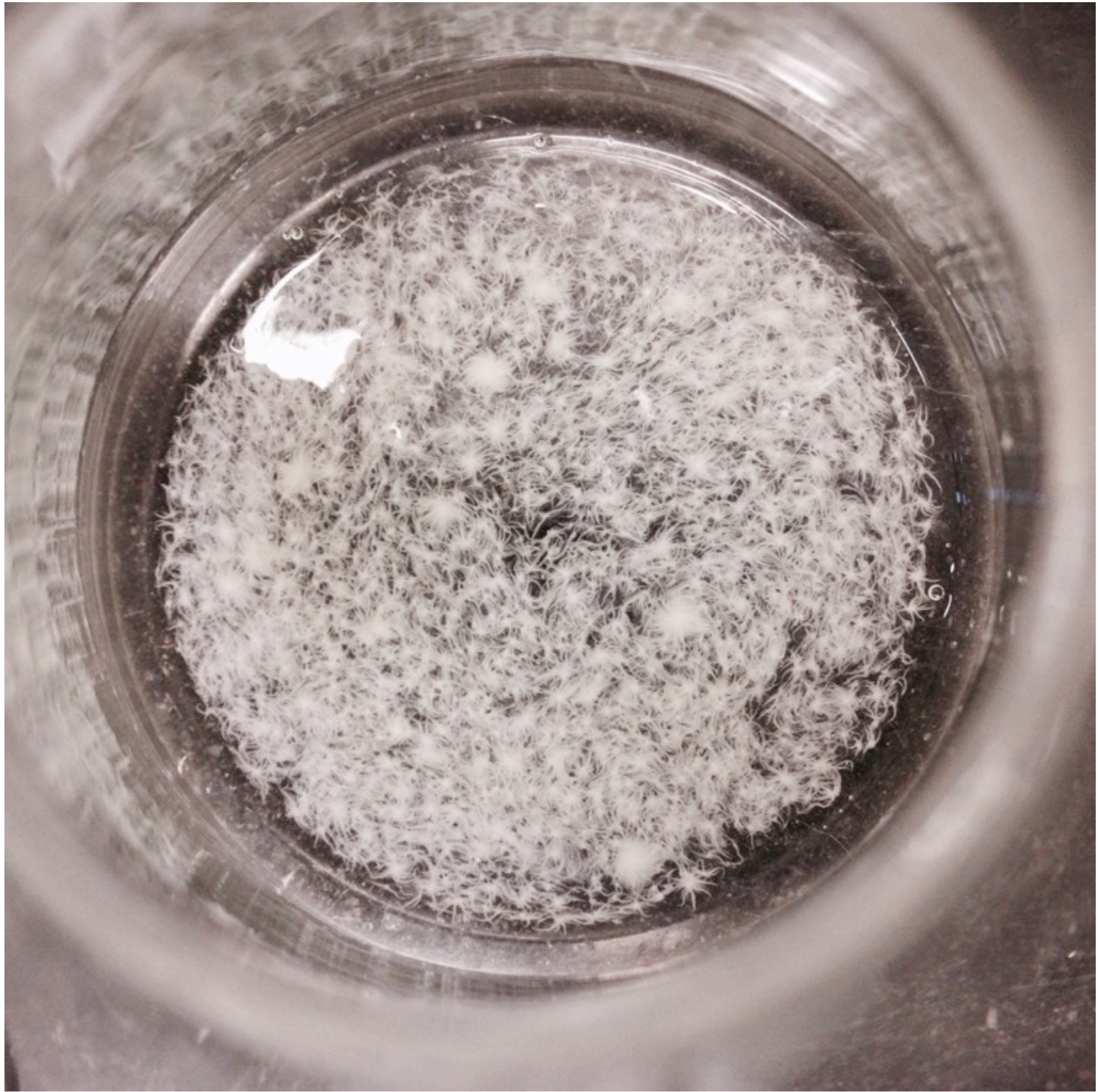


Uppers













Soles



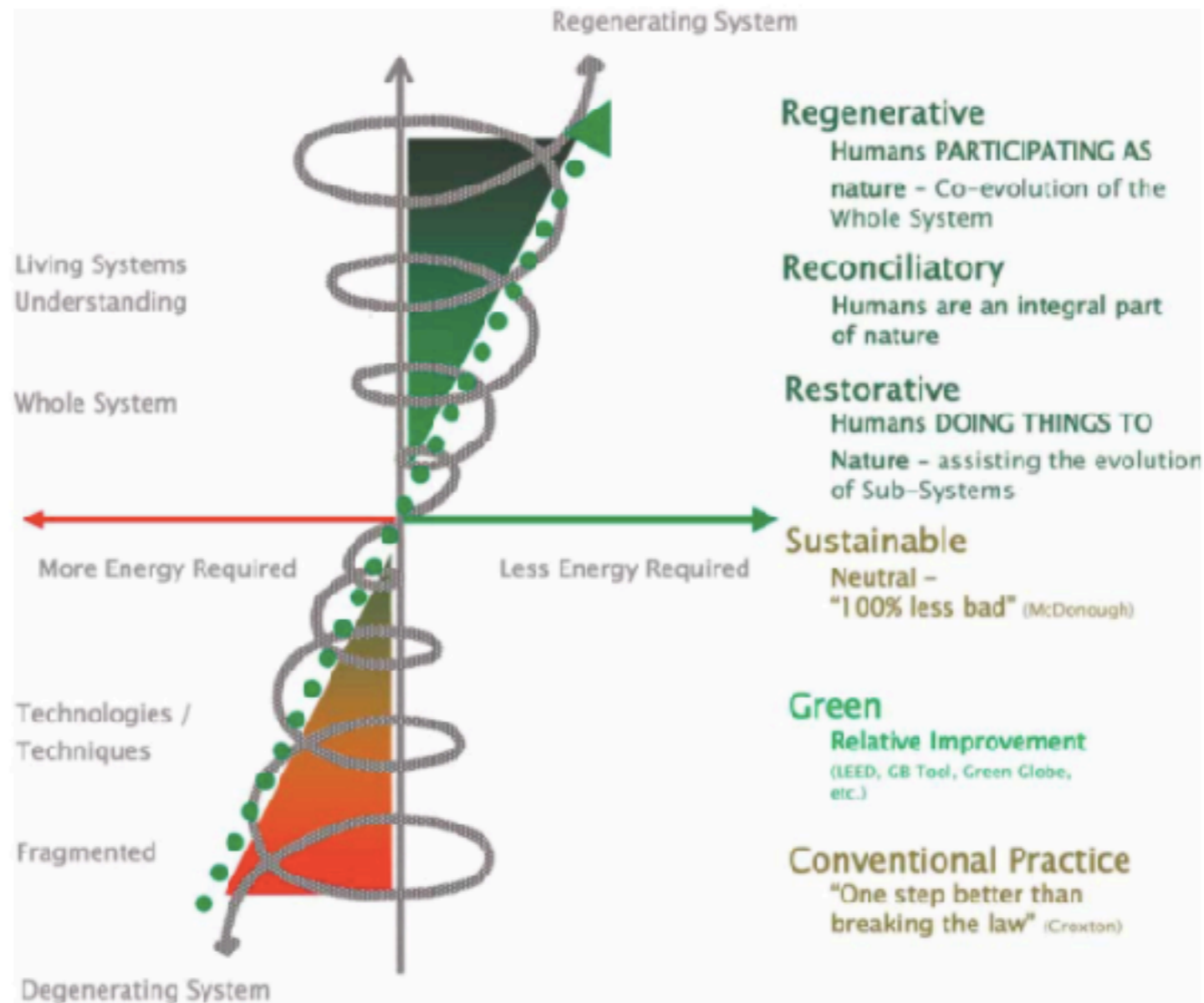




Uppers

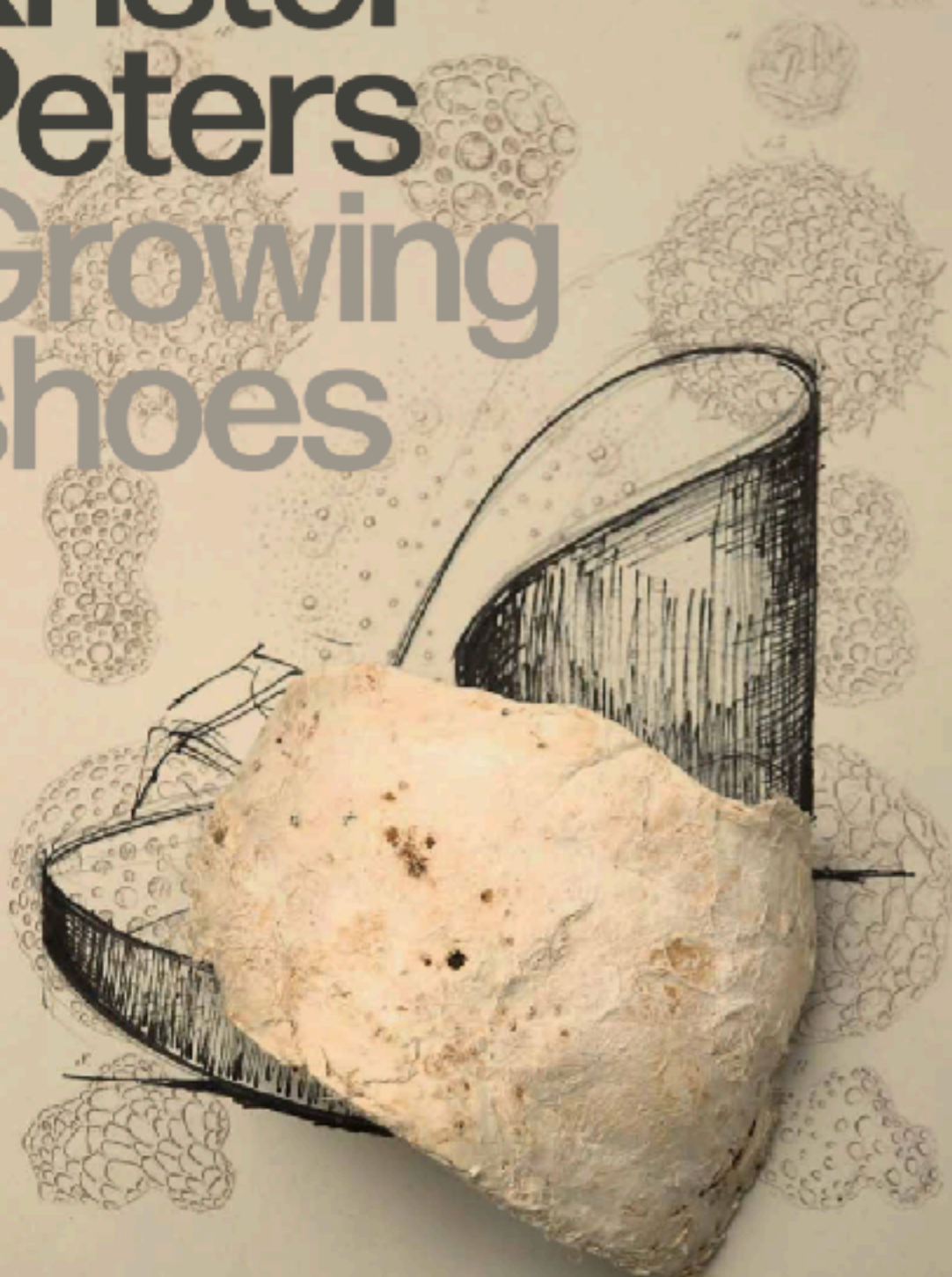
Sole

Sustainable => Regenerative



- Framework Of Reed Adapted By Wahl -

Kristel Peters Growing shoes



F-17 Collapsphere, F-11 C. Huxley, Miller, F-15 C. spinosa, HM

90 Design



Pagina 90 e in questa pagina sotto: schizzi di due modelli di scarpe con test di crescita del micelio del *Trametes Versicolor* (un fungo comune che cresce su tronchi e ceppi morti) mescolato a scorie di cotone.

Pagina 91 In alto: fase finale della messa in forma (con *Schizophyllum Comune* e paglino). In basso: componenti in 2D e

3D frutto delle ricerche sui materiali e sulle tecniche di crescita dei funghi in laboratorio. In questa pagina sopra e sotto a destra: studi di modellazione dei componenti della calzatura. Pagina a fronte: prototipo del modello di scarpa aperta con l'impiego del *Trametes Versicolor* mescolato a lino, cotone e canapa



Tutte le foto i materiali di progetto/
All photos and project materials © CCJPK

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Kristel Peters lavora come designer nel campo interdisciplinare del design, della ricerca e della didattica. Disegna collezioni di scarpe per i principali brand del settore, svolge attività di formazione presso le aziende di moda indirizzandole verso pratiche più sostenibili. Svolge attività di sperimentazione sui nuovi materiali. Insegna presso la School of Arts, KASK - HoGent e tiene seminari di progettazione di calzature sostenibili presso la Royd Academy of Den Hague e la Design School Kolding. **Kristel Peters** works in the interdisciplinary field of design, research and education. She designs shoe collections for brands, coaches fashion companies into more sustainable practices and her experiments broaden her knowledge of new materials. Furthermore, she is connected as an artistic teacher and researcher to the School of Arts, KASK - HoGent and gives workshops in sustainable shoe-design at, among others, the Royal Academy of Den Hague and at the Design School Kolding.
www.shoedesigner.be

Page 90 and this page below left: sketches of two shoe models with test growths of *Trametes Versicolor* (a common mycelium that grows on dead stumps and tree trunks) mixed with waste cotton.

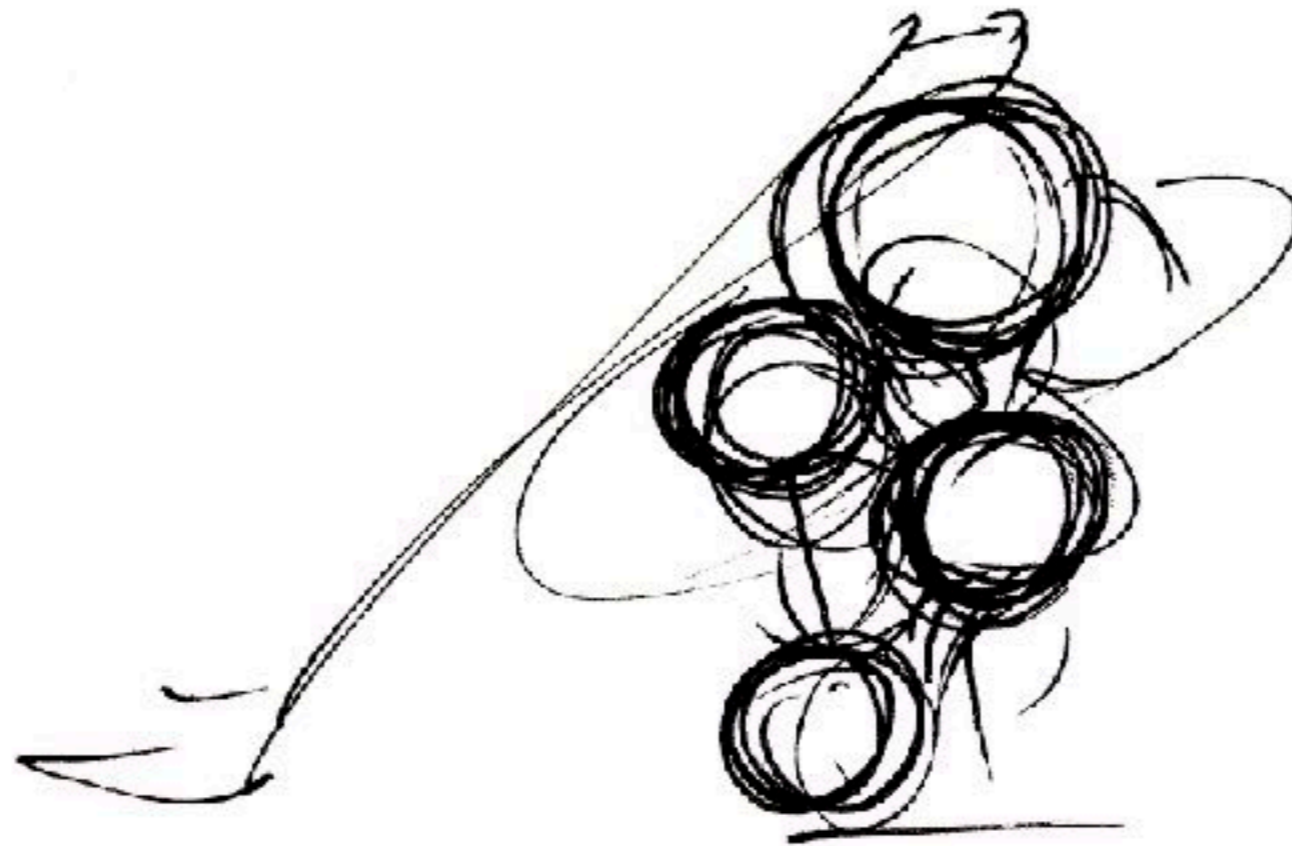
Page 91. Top: final phase of shoe shaping (with *Schizophyllum Comune* and paglino). Bottom: 2D and 3D samples produced

from research into materials and in-lab testing of fungi growth methods. This page, above and below right: footwear modelling studies. Opposite page: prototype of an open shoe using *Trametes Versicolor* mixed with linen, cotton and hemp

The image shows several petri dishes containing different types of mycelium. The central dish features a dark, fuzzy, circular mass of mycelium. Surrounding it are other dishes with lighter, more spread-out or textured mycelium in shades of yellow, orange, and grey. The text is overlaid on the central dish.

*Can
Mycelium
Save the
World?!*

DESIGN - WORKSHOPS - EDUCATION AND RESEARCH



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