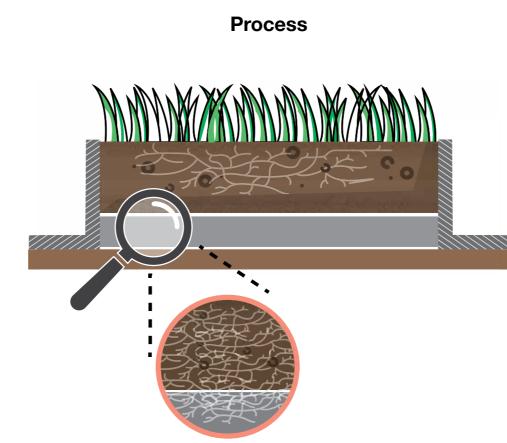


Growing a Durable yet Delicate Biocomposite Textile

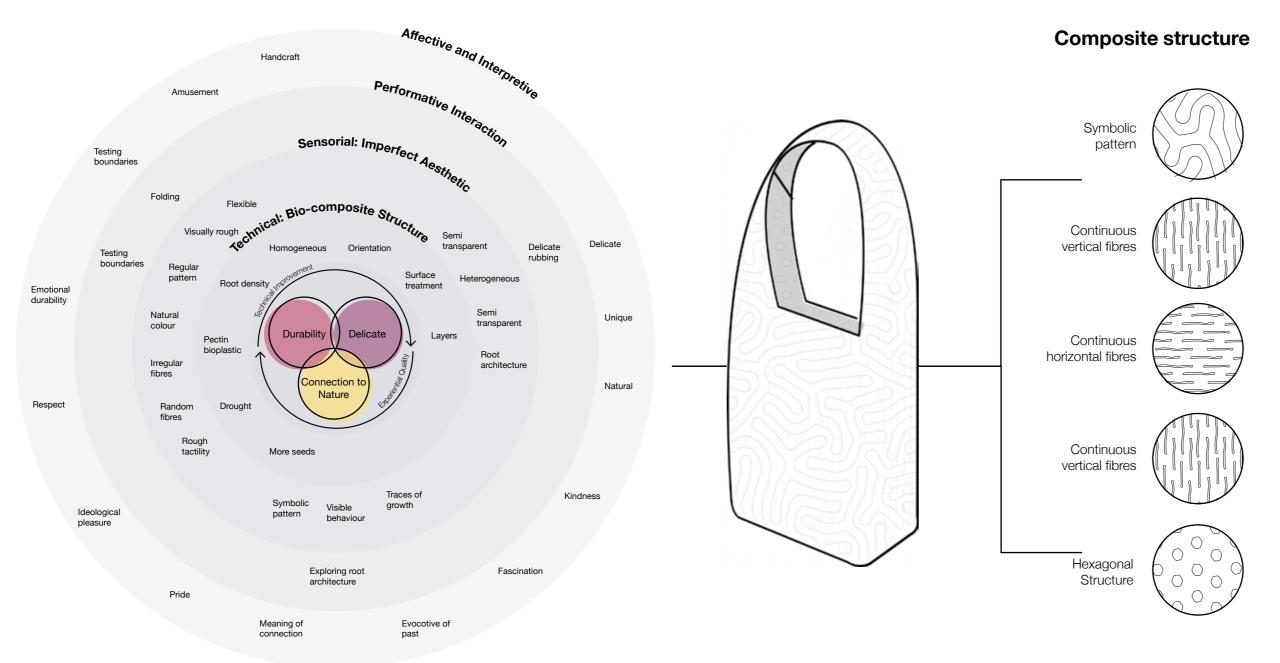
Growing design is an emerging new design approach at the confluence of materials science, biology, arts and design. It challenges current industrial consumption and production because it offers the opportunity to co-create with nature and shift the paradigm of production towards more sustainable solutions.

Diana Scherer is an artist exploring the creation of a novel material by utilising the natural processes of the growth of a living organism. She has created a material called Interwoven, which is made of plant roots. So far, plant roots have not yet been used for the production of a material. In contrast to comparable textiles made from natural fibres, the material itself weaves. Producing itself through the search of the plant for nutrients and water.



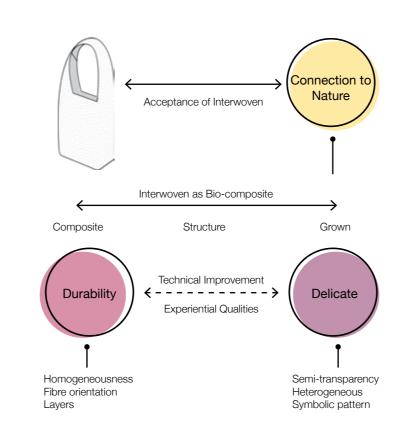


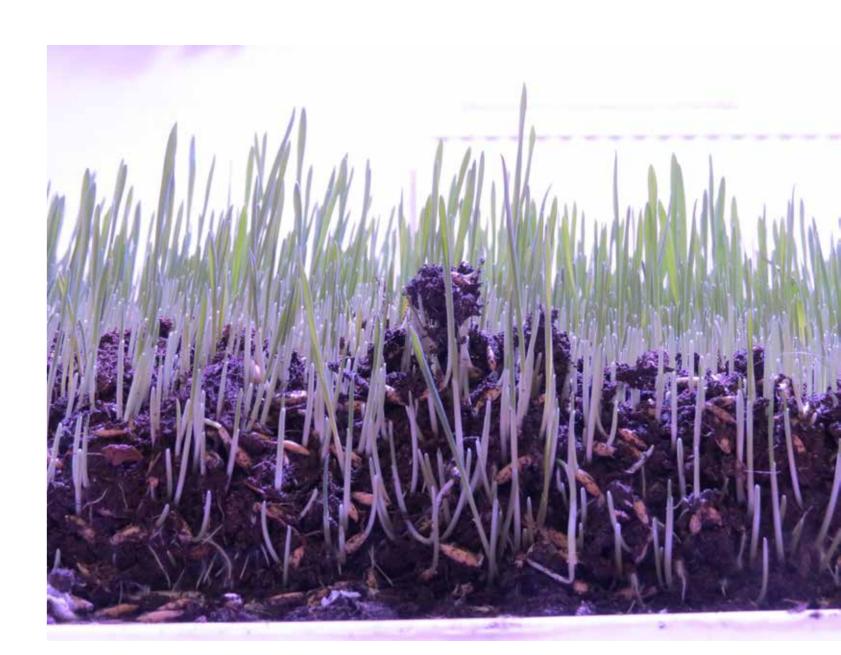
Mapping Materials Experience



Final Material Demonstrator

This project explored different methods to improving the strength of Interwoven as a bio-composite, while assessing its technical and experiential properties. In its current state Interwoven is limited in its functional use because of the technical characteristics of the roots being weak. Therefore it was required the strength be improved as an aspect of durability. Apart from the technical challenges presented, there are also challenges with peoples perception of new emerging grown materials as they trigger uncertainty in peoples perceptions. Experiential characterisation and technical characterisation was conducted on the material interwoven so that both may be utilised towards finding a meaningful application as a textile.





Damienmarc Ford
Interwoven: Growing a durable yet delicate
composite textile
17 Dec 2019
DFI

Committee

Company

Dr. Elvin Karana
Dr. Marieke Sonneveld
Diana Scherer

