

(wearable) technology
meets (fashion) design

ELISAVA

Eindhoven University of Technology

craftsmanship mass production customisation services

+ craftsmanship - mass production + customisation + services = ?

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ultra-personalised product service systems

ultra-personalised fashion

fashion to become a service, personalising clothing to the customer's body and style

3-D printed shoes

Troy Nachtigall



This Fits me

Leonie Tenthof van Noorden



iMiniSkirt

CuteCircuit





Zorgzame
Bedrijfskleding
Marina Toeters



GER Mood
Sweater
Kristin Neidlinger



WELL-BE
Kristi Kuusk and
Martijn ten Bhömer

connected health

constantly measuring and monitoring bodily parameters and behaviour







Caring Work Wear is a collection for employees of healthcare institutions that supports the body, prevents bacterial infections and gives a warning when the back is overburdened. The clothing includes posture sensors, gas sensors, a supportive under layer, futuristic pattern design and comfortable materials.

Personalisation in a product level digital material production



SLEM explores 3D printing shoes relationship to the foot of their owner. Their Soles and bode are develop to the weight and walk of the user making them comfortable and better for the feet. The hardness of the material is programmable allowing for not only the perfect fit, but also a great experience while being worn.

Digital industrial production is opening up thanks to (or with the help of) the “maker” DIY digital fabrication. Digital knitting, weaving and printing allow us to combine yarns, fibres or filaments with different material properties in different ways (structures) for each part of a garment. Thus widening the design and production space.

**Prinsjesdag is the day on which the reigning monarch of
The Netherlands (currently King Willem-Alexander)
addresses a joint session of the Dutch Senate and House of
Representatives in the Hall of Knights**

Personalisation on a system level generative design & fit



The GER MOOD SWEATER interprets emotion and displays excitement levels instantly with an illuminated collar. It is a whimsical approach to new forms of communication inspired by the body.

Algorithms allow the shape, design and finishing to be programmable and therefore modifiable in a way that still keeps the identity of the designer while the fitting to the customer's identity, moving body, and context of use



'This Fits Me' creates a fitted garment based on a 3D body scan of the customer. This customer can add a personal touch by customising the generative design of the garment. This way, the garment fits the body as well as the customer's identity.

Personalisation on a service level end user “programming”

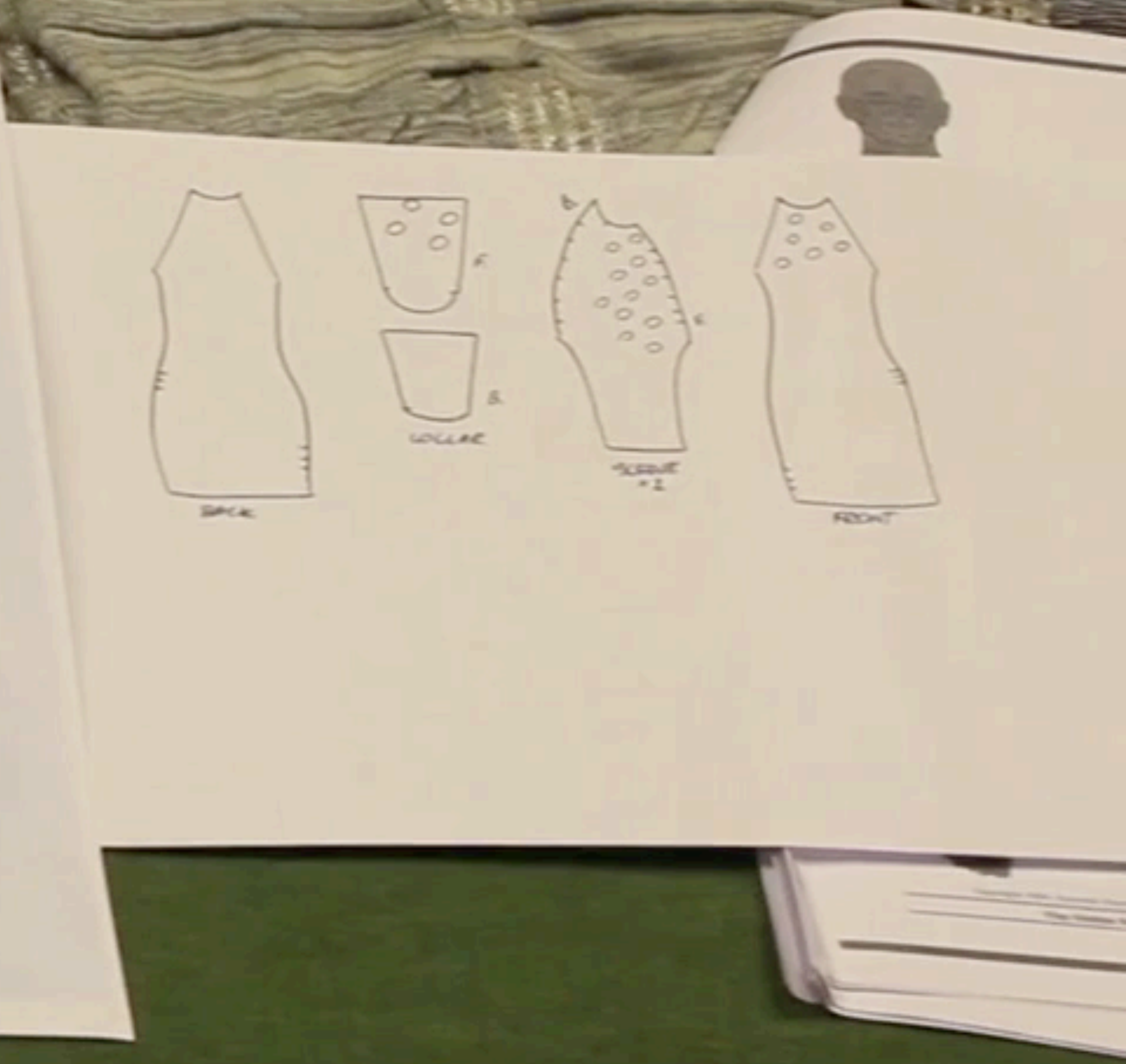
Control systems integrated in the textile will allow to add digital sensing and actuating capabilities enhancing its physical properties. “Self-programmed” behaviour and functionality will allow to create new applications by programming the mapping between digital functionality and physical interaction.

Well-Be is a self-care tool for well-being. Placed in a network, the vibration motors activate based on a pressure and touch applied to them or by software.



The iMiniSkirt lights up depending on which setting or display mode was chosen via the mobile app on your mobile phone. The app works via bluetooth and allows to fully customise your clothes with preset settings.







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ultra-personalised
product service systems



BB.Suit 0.2

ByBorre, TU/e, Eva de Laat, StudioFriso,
Daan Spangenberg Graphics, & WANT.




Kimbow

Eef Lubbers, Malou Beemer, & TU/e.



Phototrope

Philips, TU/e, Pauline van Dongen, &
Schoeller Textiles.



BB. SUIT.02

CREATING FUTURE PLATFORM



ultra-personalised
product service systems

thank you
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