

# *Smart Second Skin for Sentient Beings*

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LONDON COLLEGE OF FASHION

**ISAS**

INSTITUTE FOR ANALYTICAL SCIENCES  
Dortmund and Berlin

Science Fashion Lab® France Germany





# Fluidifying perception

to develop the art of '*scentsory perception*' through the relationship between:

- intelligent clothing

*less stress dress™*

- scent

*the aroma rainbow*

- the human body

*strings of emotion*

- wellness

*impact of smell on  
mental & physical health*



- health

*diagnosis & analgesic  
assistance*

- communication

*new learning tool*

- security

*detection & nutrition*

- sex & procreation

*wonder of pheromones*

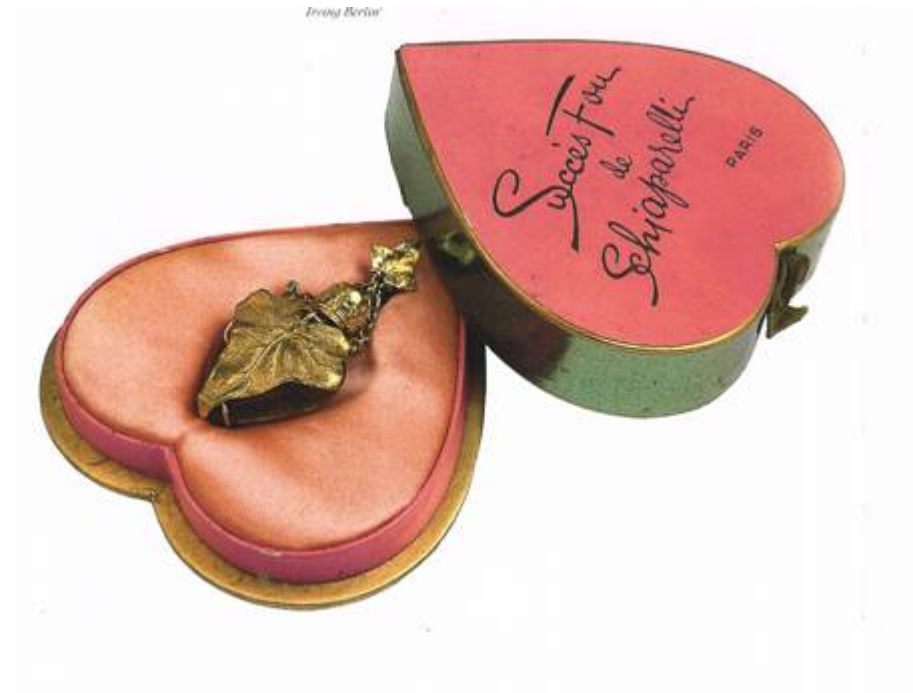
# Scent with compliments

computer scent-output:

- CD players
- website, games, gadgets
- shower heads
- environmental fragrancing

non computerised:

- microencapsulation
  - vitamin-enhanced fabrics
  - anti-stress fibre
  - anti-cellulite fibre
- aromatic jewellery
- portable 'pods'
- buddhist clocks



Schiaparelli glass flacon pin 1950

# Emotional membrane

- mimic human body, senses & scent glands
- enhanced response to respiratory rhythms
- heart = *pump*  
veins = *IV tubes*
- body sensors = *"senso-cells"*
- porous membrane  
*nano nozzles*



- influence emotions through the delivery of subtle smell molecules
- create unique odorants from an inbuilt recipe membrane
- use of sensors to detect vital signs
- new 'osmo' communication system

# Re-cabling Fashion

## scent palette

- deliver benefit chemicals in controlled ways that respond to:
- personal needs
  - scent
  - deodorant
  - medicine

## environment

- repellent
- maintenance
- protection
- repair



- pulse minute scent molecules as *the message*

- no odour pollution ('white smell')

- nano machine development emulates capillary forces

- Professor Manz pioneer of microfluidic chips and  $\mu$ TAS *Micro Total Analysis Systems* (ISAS Germany)

# Aura 'smell bubble'

- deliver 'scentsations' on demand:

- energise on the run

- alert, stimulate & educate the mind

- help with mental fatigue

- alleviate anxiety

- boost self-esteem



- balance & equalise the spirit

- soothe, calm and relax

- trigger & store a memory

- excite & arouse

- reduce fear

- relieve irritation

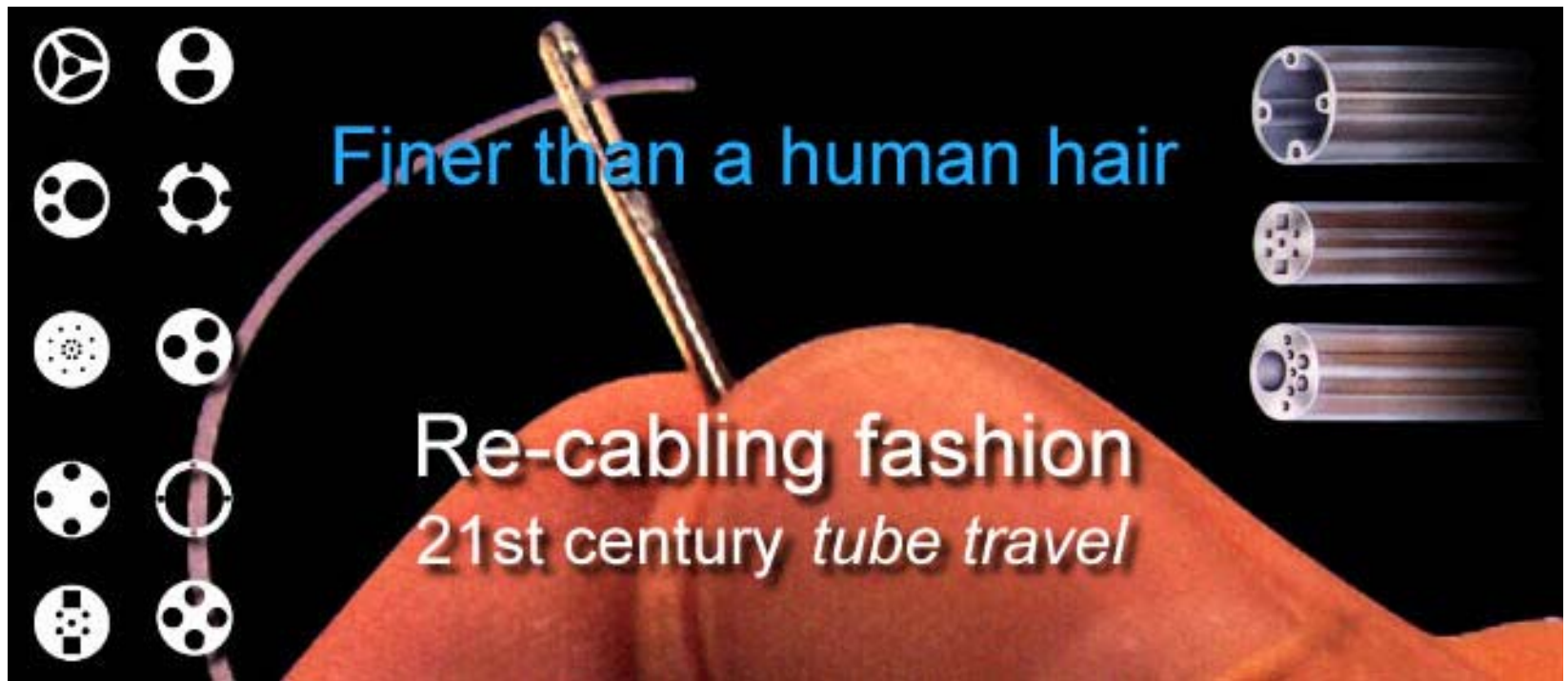
- enhance the imagination

- prevent allergy

# Party 'nose' graph



# Channel tunnel technologies



embed multi-lumen tubing in fabric that rivals nature's own capillaries

Love is in the air . . .



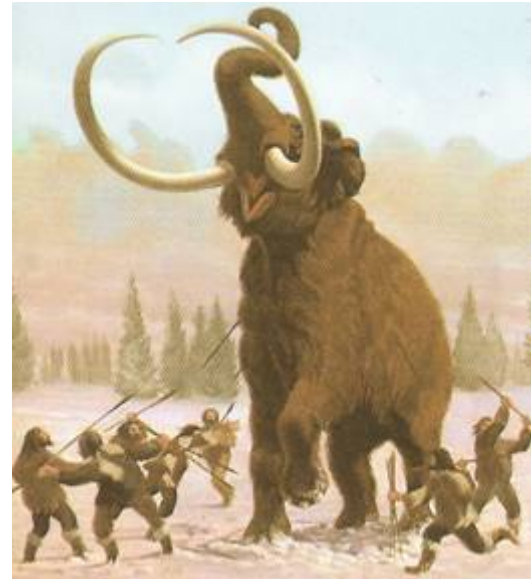
There's something about you that makes me sweat



# 'new data senses'

going back to our roots with biotechnology

- prehistoric people relied greatly on what we under use – smell, touch, colour and light - which kept them alive
- now we can re-learn to rely on what we under use
- awaken the body and brain



# Molecule Spy



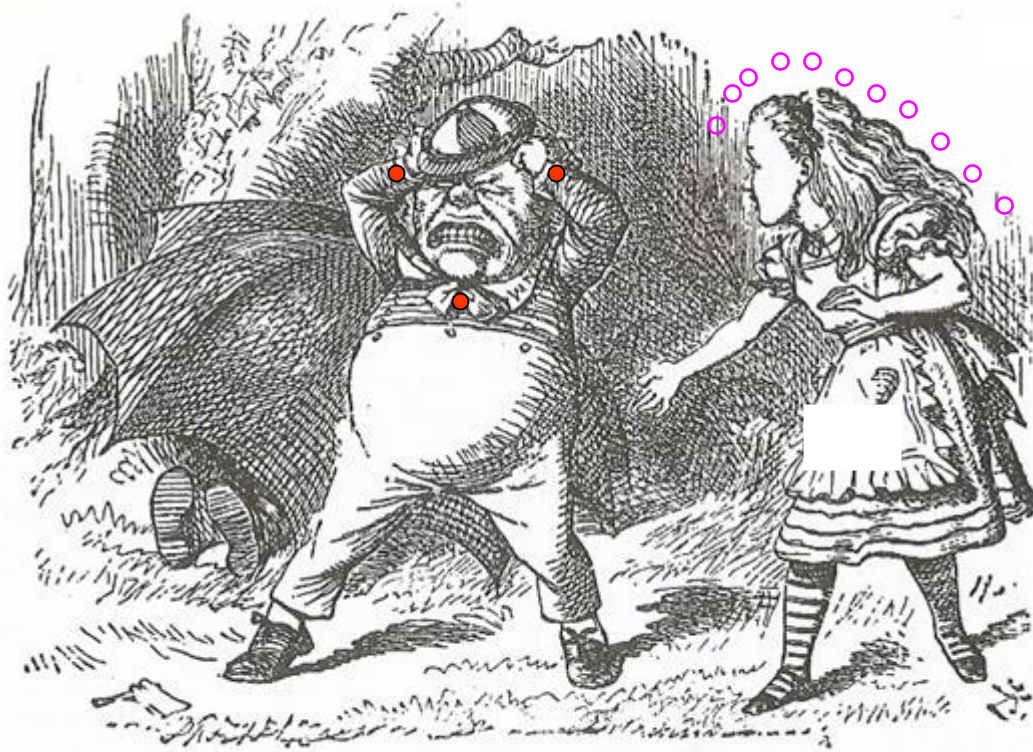
diag\*nose





# shields us from a bad mood

detects stress  
through  
physiological  
sensors



creates  
personal  
*'smell bubble'*

determines which appropriate scent from embedded smell palette

enhance the beauty of  
life between two people  
(or life on your own)

carrier of personal  
chemicals in controlled  
ways responding to  
needs

the reinvention of the 'new data senses' is  
nology

THE VERY END



*me!*

no need to car

ALICE