THE ELECTRIC CORSET AND OTHER FUTURE HISTORIES

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BRADFORD TEXTILE SOCIETY
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Fashion topologies
computer network topologies

- Bus
- Star
- Ring
- Mesh
- Tree
- Hybrid
Modular physical circuits
Fashion: Functional clothing for the masses

- **Smart Textiles Markets 2016-2023 - Emerging Second Generation Smart Textiles: Sports, Health and Fashion**

This report provides coverage of how the following categories of materials are being used to fabricate commercially available smart textiles:

- Electrically conductive yarns and threads
- Conductive polymers
- Shape memory materials
- Color-changing materials
- Phase-changing materials
- Self-cleaning and antimicrobial materials
- Nanomaterials

This report contains detailed forecasts of volume (in square meters and units) and revenue (in $ millions), broken down by:

- End application
- Type of material
- Fabrication method

http://www.researchandmarkets.com/research/gjwp5s/smart_textiles
designing for ‘need’

<table>
<thead>
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<th>Ludwig Svensson</th>
<th>DuPont</th>
<th>Forster Rohner</th>
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</thead>
<tbody>
<tr>
<td>context</td>
<td>known</td>
<td>known</td>
<td>unknown</td>
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<tr>
<td>end user</td>
<td>business</td>
<td>service</td>
<td>individual</td>
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<tr>
<td>innovation level</td>
<td>machine level</td>
<td>fabrication level</td>
<td>unknown</td>
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<tr>
<td>matters of concern</td>
<td>controlled built environment</td>
<td>controlled human environment</td>
<td>dynamic socio-cultural environment</td>
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(smart) functional apparel

- **Firefighting**: Nomex® fiber carbonizes and thickens when exposed to the intense heat of a fire (DuPont).
(smart) functional fashion

Collaborators:
Tine M. Jensen, Fashion designer
Karin Eggert Hansen, Sewing

Project partners:
Forster Rohner and Alexandra Institutet
commercial projects still looking for consumer demand, developing conceptual proof of concept is too risky at scale.

The Levi’s ICD+ jacket was the world’s first commercial wearable electronics garment via d-sciencelab.be

conceptual projects might show proof of concept, but remain commercially unfeasible

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E-textile products as consumer electronics

if this is how we expect them to be, it’s the consumer electronic companies who will make wearables and e-textiles on the body a reality, because they already know about human communication

https://www.google.com/atap/project-jacquard/static/videos/jacquard-hero.webm
QUESTION.

How can we re-design the fashion innovation process to help increase feasibility and decrease risk?
Electric corset: benefits of designing for a modular system of dress

<table>
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<th>customer</th>
<th>brand</th>
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<td>control over self-expression</td>
<td>fashion cycles can be supported through changing elements of larger system of dress (collections)</td>
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<tr>
<td>control over functionality</td>
<td>Upgrades and new functions can be marketed separately</td>
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<tr>
<td>Streamlines care and maintenance needs</td>
<td>Supports development of care guidelines and quality management; facilitates sustainable approaches and branding</td>
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<td>Adoption can be incremental</td>
<td>Process innovation can be incremental/risk can be managed</td>
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Our aim is to demonstrate the wealth of historical artifacts and references available to designers of smart textiles and wearable technologies. The use of historical garments and accessories will illustrate dimensions and themes to support future wearables and innovative fashion and textile development, for example:

- functionality, wash-ability and maintenance
- layering and detailing for class and identity (modularity)
- loosely defined conceptual spaces between clothing and the body
- adornment as a site for creative product development
DR. SCOTT'S
Genuine Electric Belts
For Ladies and Gentlemen.

Generally the first week, more frequent the first day, and often even during the first hour they are worn, their wonder-working curative powers are felt.

The mind becomes active, the nervous sluggish circulation are stimulated, and the old-time health and good feeling come back. They are constructed on scientific principles, imparting an exhilarating, health-giving current to the whole system.

The celebrated Dr. W. A. Hasbrouck of New-York, formerly Surgeon-General of the U. S. Army, lately lectured upon this subject, and advised all medical men to make trial of these agencies, describing at the same time most remarkable cases he had made, even in cases which would have seemed hopeless.

PRICE $3.00 ON TRIAL.

Buy either Lady's or Gent's Belt on trial, post-paid, on receipt of $3.00, guaranteeing safe delivery. Simply send name, address, and size, and $3.00 by money-order or draft at our risk, or currency in registered letter. Address GEO. A. SCOTT, 322 Madison Avenue, New York.

Incorporated Electric Corsets, $1, $1.50, $2, and $3.

Electric Mass and Nerve Brush, $1.00, $2, $2.50, and $3.

Dr. Scott's Electric Flash Brush, $3.

Dr. Scott's Electric Tooth Brush, $1.
“During the sixteenth century sleeves were frequently detachable, as though...they were a sort of extended glove...”
“...Fastenings have their aesthetic importance. There are three kinds: the concealed, the visible, and the conspicuous....A visible fastening device shall have an aesthetic as well as a merely practical function. It must be ornamental as well as useful.”
“Fully clothed man carried seventy or more buttons, most of them useless…”

(Quote from Rudofsky, 1947: 120-121)

…”He has at his disposal two dozen pockets.”

(Image and quote Rudofsky, 1947: 120-121)
designing with smart textiles
Sarah Kettley
STAGE TWO – PRACTICAL AND CONCEPTUAL DEVELOPMENT
Many of the items have lost their stories along the way. Descriptive information remains, often put together by the curators.
In-between garments, occupying spaces on the body we don’t consider as separate concerns any more.
Detachable and replaceable garments and accessories.

Now rendered obsolete.
TOILES (SACRIFICIAL)
Pocket bags
Separate collars
Collar with capacitive pin
Detachable cuffs with interactions
Potential PhD project

Collaborations

Further funding options
REFERENCES

Background image: Pattern 1873 Museum of Costume Art, New York in Rudofsky 1947, p146


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