## CONTENTS

Preface \hspace{0.5cm} \( \text{xiii} \)

**KEYNOTE STORIES**

- **The design of emotion**  
  \( G \ C \) Cupchik \hspace{0.5cm} \( \text{3} \)

- **From disgust to desire: how products elicit emotions**  
  \( P \ M \ A \) Desmet \hspace{0.5cm} \( \text{8} \)

- **Design expression and human experience: evolving design practice**  
  \( J \) Fulton Suri \hspace{0.5cm} \( \text{13} \)

- **The comprehension shift, HMI of the future - designers of the future**  
  \( M \) Robinson \hspace{0.5cm} \( \text{18} \)

**EXPERIENCE DRIVEN DESIGN**

- **Slightly pregnant**  
  \( D \) Formosa \hspace{0.5cm} \( \text{27} \)

- **Fit and hit: two experience driven design strategies and their application in real life**  
  \( M \) van Dijk, \( R \) Konings \hspace{0.5cm} \( \text{32} \)

- **Bridging the emotional gap**  
  \( L \) Crossley \hspace{0.5cm} \( \text{37} \)

- **Positive space**  
  \( R \) Givechi, \( V \ L \) Velázquez \hspace{0.5cm} \( \text{43} \)

- **Light, emotion and design**  
  \( P \ G \) Mead \hspace{0.5cm} \( \text{48} \)

- **Textile fields and workplace emotions**  
  \( J \) Mottram \hspace{0.5cm} \( \text{53} \)

- **From a socially intelligent robot concept to an ad: eliciting audience participation throughout the graphic design process**  
  \( A \) Bennett, \( S \) Restivo \hspace{0.5cm} \( \text{58} \)
The branded hotel: an educational experience
_E C R Hollis, P A Rodgers_

63

Emotive communication using mobile IC devices
_R Keller_

68

**GENERATIVE TOOLS**

Generative tools for context mapping: tuning the tools
_P J Stappers, E B-N Sanders_

77

Can personality categorisation inform the design of products and interfaces?
_M Goatman_

82

Gender designs: aspects of gender as found in the design of perfume bottles
_K Wellmann, R Bruder, K Oltersdorf_

87

How to create Linus’s blanket
_Y Kaizuka_

92

Science and design - two sides of creating a product experience
_N Eikelenberg, S Kalisvaart, M van der Zande, F Lefèber, H Ehlhardt_

98

Prospective design oriented towards customer pleasure
_A Cayol, P Bonhoure_

104

Communicating product experience
_L Henze, R Kahmann_

109

The use of images to elicit user needs for the design of playground equipment
_A Bruseberg, D McDonagh, P Wormald_

114

**EVALUATIVE TOOLS**

Researching users’ understanding of products: an on-line tool
_M Kälviäinen, H Miller_

121

Getting what you want, or wanting what you get? Beyond user centred design
_W Olphert, L Damodaran_

126
Contents

Making sense: using an experimental tool to explore the communication of jewellery
J Downs, J Wallace

Semiotic product analysis
A Opperud

Experiential design in a virtual character system for exploring mood dynamics and affective disorders
N Woolridge, D Kreindler, C J Lumsden

Emotional factors in design and their influence on purchase decisions
T Kristensen, G Gabrielsen

EMOTIVE EFFECTS OF VISUAL PROPERTIES

Using "visual/verbal interplay" to tap into collective memory and shared understanding
S M Hagan

Lyrical visual
F Holmes

Dynamic interactive aesthetics: facilitating affective input from the audience in the creative design process
A Bennett, R Eglash

Colour and emotion in design
S Baker

Colour, design and emotion
J Wilson, S Challis

Emotional responses to solid shape
J Willats

Colour preference and colour emotion
L-C Ou, M R Luo

Type, motion and emotion: a visual amplification of meaning
R B Stone, D P Alenquer, J Borisch

Animated emotion: human figure movement and viewer emotion
V Visch
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gone to the wild: using virtual reality for sensory stimulation</td>
<td>200</td>
</tr>
<tr>
<td><em>U Westergren, K Jonsson</em></td>
<td></td>
</tr>
<tr>
<td>The gourmet foodstuff: packaging our impulses</td>
<td>205</td>
</tr>
<tr>
<td><em>L C Throop</em></td>
<td></td>
</tr>
<tr>
<td>Emotions in action: a case in mobile visual communication</td>
<td>211</td>
</tr>
<tr>
<td><em>E Kurvinen</em></td>
<td></td>
</tr>
<tr>
<td>Shop image and interaction: the use of senses in consumption space</td>
<td>216</td>
</tr>
<tr>
<td><em>D Kooijman</em></td>
<td></td>
</tr>
<tr>
<td><strong>EMOTIVE EFFECTS OF THE OTHER SENSES</strong></td>
<td></td>
</tr>
<tr>
<td>Sensory interaction with materials</td>
<td>223</td>
</tr>
<tr>
<td><em>H Zuo, T Hope, M Jones, P Castle</em></td>
<td></td>
</tr>
<tr>
<td>Dreamy hands: exploring tactile aesthetics in design</td>
<td>228</td>
</tr>
<tr>
<td><em>M Sonneveld</em></td>
<td></td>
</tr>
<tr>
<td>Design of sensorial sporting goods: a user-centred approach</td>
<td>233</td>
</tr>
<tr>
<td><em>N Bouché</em></td>
<td></td>
</tr>
<tr>
<td>Compact disc cover design: transfer of musical style and emotional contents into graphical design</td>
<td>238</td>
</tr>
<tr>
<td><em>R van Egmond</em></td>
<td></td>
</tr>
<tr>
<td>The emotional townscape: designing amiable public places</td>
<td>243</td>
</tr>
<tr>
<td><em>N Beucker, R Bruder</em></td>
<td></td>
</tr>
<tr>
<td><strong>FROM DESIGN TO EMOTION</strong></td>
<td></td>
</tr>
<tr>
<td>An accessible framework of emotional experiences for new product conception</td>
<td>251</td>
</tr>
<tr>
<td><em>C DiSalvo, B Hanington, J Forlizzi</em></td>
<td></td>
</tr>
<tr>
<td>Mobile phone games: understanding the user experience</td>
<td>256</td>
</tr>
<tr>
<td><em>H Dixon, V A Mitchell, S D P Harker</em></td>
<td></td>
</tr>
<tr>
<td>Emotional intelligence in interactive systems</td>
<td>262</td>
</tr>
<tr>
<td><em>A De Angeli, G I Johnson</em></td>
<td></td>
</tr>
<tr>
<td>The use of social representations in product design</td>
<td>267</td>
</tr>
<tr>
<td><em>A J Taylor, V M Taylor</em></td>
<td></td>
</tr>
</tbody>
</table>
On the conceptualisation of emotions and subjective experience
T van Rompay, P Hekkert

Emotionally rich products: the effect of childhood heroes, comics and cartoon characters
O Demirbilek, B Sener

AFFECTIVE USABILITY

Feeling your way home: the use of haptic interfaces within cars to make safety pleasurable
S J Summerskill, J M Porter, G E Burnett

Measuring user satisfaction on the web: the stories people tell
C Dudek, G Lindgaard

Towards an understanding of pleasure in product design
S Porter, S Chhibber, J M Porter

Does usability = attractiveness?
M Maguire

Emotional response to food packaging
A Woodcock, G Torrens, D McDonagh

ATTACHMENT

A perspective on the person-product relationship: attachment and detachment
O Savaş

Design’s personal effects
F Candy

Designing consumer-product attachment
H N J Schifferstein, R Mugge, P Hekkert

More than meets the eye. Exploring opportunities for new products, which may aid us emotionally as well as physically
J Thompson
Meaningful product relationships
*K Battarbee, T Mattelmäki*

**PRODUCT CHARACTER**

Happy, cute and tough: can designers create a product personality that consumers understand?
*P Govers, P Hekkert, J P L Schoormans*

Brand and product integration for consumer recognition: a review
*E G Kefallonitis, P J Sackett*

Why a Porsche 911 is better than an Audi TT: methods for analysing the character of a product
*S Rutherford*

Branded GENES, designer JEANS, marketing DJINNS: the oxymorons of future shock?
*N V C Rao*

**DESIGN AND EMOTION: THEORETICAL AND ETHICAL ISSUES**

Body and soul: the ethics of designing for embodied perception
*A Aldrich*

From Aristotle to Damásio: towards a rhetoric on interaction
*J Branco, N Dias, M Ginoulliac, R A Branco, V Branco*

The total depravity of inanimate objects
*G Reavley*

See me, feel me, touch me: emotion in radio design
*A Yagou*

Beyond emotions in designing and designs: epistemological and practical issues
*T Love*

Towards a better world
*R R Gheerawo, C S Lebon*

The “in between” factors needed for tomorrow’s product creation
*G J van der Veen, M E Illman*
Questioning the validity of emotion in design: a critical examination of the multi-faceted conditions of its historical emergence  
D Patlar, A Kurtgözü

EMOTION IN DESIGN

When you feel, the brain blinks: an analysis of brain waves generated by various behaviours and creation/imagination  
S-H Lee

Introducing the student designer to the role of emotion in design  
H G Denton, D McDonagh, S Baker, P Wormald

The role of emotion in design reflection  
D K Hammer, I M M J Reymen

The development of empirical techniques for the investigation of design perception  
S E W Crothers, R B Clarke, J A I Montgomery

DESIGN AND EMOTION WORKSHOPS

Sleeping policemen: a workshop in cathexically affective design  
C de Groot, G Powell, B Hughes

Close encounters of the first kind: meet the material world  
M Sonneveld

The brand is the product: the product is the brand  
M van Dijk, J van Erp

Author Index

Subject Index