

Contents

- 1 Emotions and Design Methodologies 1**
- 2 Design as Evolutionary Discipline 5**
 - 2.1 What Design Is 5
 - 2.2 Craftsmanship, Industrial Design, Design 6
 - 2.3 A Model for Design 10
- 3 Emotions and Design 11**
 - 3.1 Emotional System 11
 - 3.2 Some Examples 18
 - 3.2.1 Cars 18
 - 3.2.2 Home Appliances and Care 19
 - 3.2.3 Health Care Environments 20
 - 3.2.4 Services 22
- 4 Perception and Emotions 25**
 - 4.1 The Ramachandran Principles 26
 - 4.1.1 Peak Shift 26
 - 4.1.2 Perceptual Grouping and Binding 28
 - 4.1.3 Contrast 30
 - 4.1.4 Isolation 30
 - 4.1.5 Perceptual Problem Solving 32
 - 4.1.6 Symmetry 33
 - 4.1.7 Generic ViewPoint 35
 - 4.1.8 Repetition, Rhythm, Orderliness 38
 - 4.1.9 Balance 38

5	Metaphors and Design	41
5.1	The Neo Cortex	41
5.2	Stereotypes and Metaphors	42
5.2.1	Basic Metaphors	43
5.2.2	Embedded Scripts	46
5.2.3	The Myths	48
5.2.4	Neo Cortex Metaphors	51
5.3	An Example	56
5.3.1	Analysis of Handles	56
5.3.2	Synthesis of a Handle	60
6	The Design Process	63
6.1	Is Design Moving Toward a Science?	63
6.2	A Possible Design Method	66
6.2.1	An Example	67
6.2.2	Some Warnings	70
6.3	The Evidence of Responsibility	71
7	Case Studies	75
7.1	A First Experience in a Children Hospital	75
7.2	Emotional Design in Health Care Environments	77
7.2.1	Before Accessing the Istituto dei Tumori	78
7.2.2	Information and Wayfinding	78
7.2.3	Waiting Rooms, Visits, Examinations, Therapies in the Breast Radiology Department	79
7.2.4	Check Out	80
7.3	Observing and Modelling Human Behaviour to Design Services in the Transportation Systems	82
7.3.1	The Goal and the Constraints	82
7.3.2	Observation	84
7.3.3	Interpretation	86
7.3.4	Some Proposals	88
8	Future Developments	91
8.1	Measuring Emotions	91
8.1.1	Kansei Engineering	93
8.1.2	Face Expressions, Postures	94
8.1.3	Physiologic Parameters Sensors	96
8.2	Emotional Interaction Design	97
	References	101
	Name Index	105
	Subject Index	107

<http://www.springer.com/978-3-319-02800-2>

The Neuroscientific Basis of Successful Design

How Emotions and Perceptions Matter

Maiocchi, M.

2015, XIV, 108 p. 80 illus., Softcover

ISBN: 978-3-319-02800-2